Haier Biomedical
Intelligent Protection of Life Science

GENERAL CATALOGUE

● Headquarter ● Global warehouse ● Training center ● Global subsidiary ● Manufacturing base

USA
UK Netherlands
Qingdao
Beijing ●
China
India ●
Nigeria Dubai
Singapore

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Haier Biomedical
International

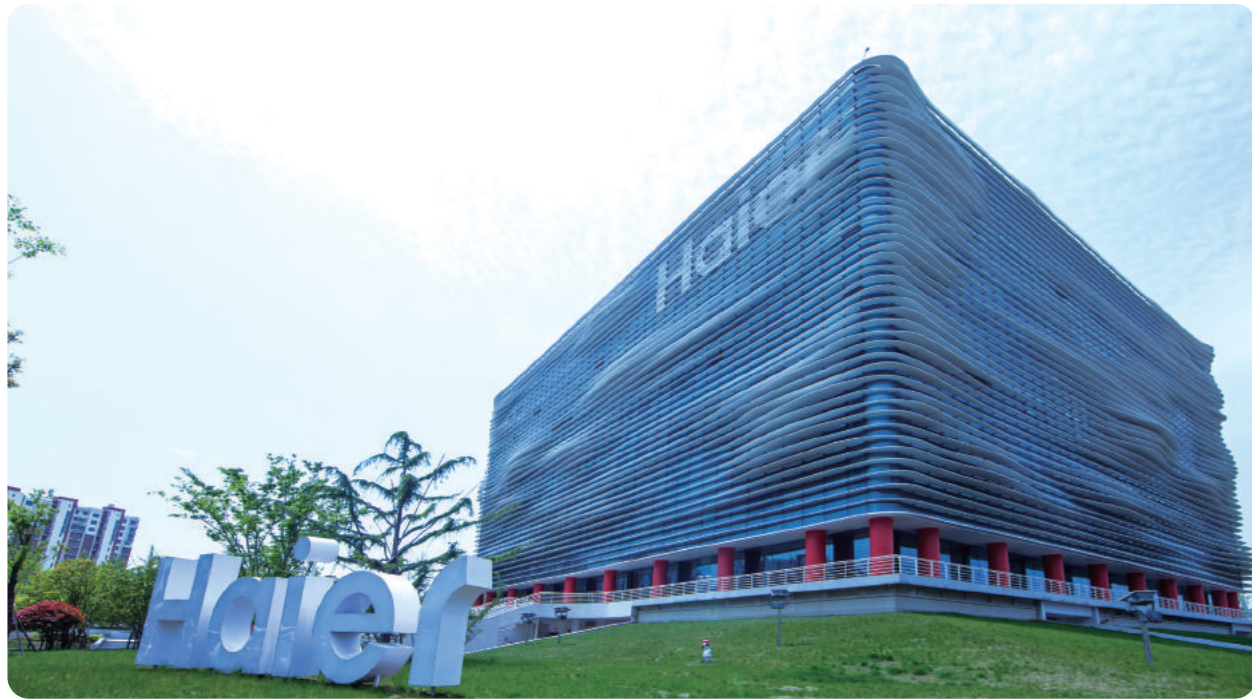Haier Biomedical
International

@haiermedicalint

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International

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Established in Qingdao, China in 1984, the Haier Group is a world-leading provider of solutions for a better life. With ongoing and sustainable innovation and entrepreneurship, Haier always upholds the principle of "prioritizing people's value". In September 2005, Mr. Zhang Ruimin, Chairman of the Board and CEO of Haier Group, proposed the Rendanheyi Management Model, whose contemporary features, universality and social characteristics have achieved trans-industry and trans-culture fusion and replication. Focusing on user experience and keeping abreast of the times, Haier has experienced six strategic stages: brand building strategy, diversification strategy, internationalization strategy, global branding strategy, networking strategy and ecosystem brand strategy, growing from the once collectively owned small factory on the verge of bankruptcy into an ecosystem that leads the world in the IoT era. As the world's first and only IoT ecosystem brand, Haier has been included on the list of BrandZ Most Valuable Global Brands for three consecutive years and listed in "The World's 500 Most Influential Brands" of the World Brand Lab for 17 years straight. Haier serves over 1 billion families in 160 countries or regions around the world. To date, Haier has successfully floated three listed companies (Haier Smart Home, Haier Biomedical, INKON Life), five large-scale higtech enterprises and 37 medium-sized high-tech companies. Moreover, the Group has established 10+N innovation ecosystems, 28 industrial parks, 122 manufacturing centers, 108 marketing centers and 240,000 sales networks globally.

The Haier Group owns several ecosystem brands and new acquisitions, including Haier, Casarte, Leader, GE Appliances, Fisher & Paykel, AQUA, Candy, COSMOPlat, THREE-WINGED BIRD, Ririshun, Yingkang Life, Haina Cloud, HCH and Haier Brothers as key examples.

Haier has topped Global Major Appliances Brand Rankings by Euromonitor International for 12 consecutive years. The Group's subsidiary Haier Smart Home is among the list of Fortune's Global 500 and World's Most Admired Companies and Forbes' World's 2,000 Largest Public Companies. The COS- MOPlat industrial Internet platform under the Haier Group has topped the cross-sector and cross-field industrial internet platforms of the Ministry of Industry and Information Technology of the People's Republic of China for two years straight. The company was named a leader in Industrial IoT platforms by Forrester and was designated by ISO, IEEE, and IEC, the three major international standard organizations, to lead the drafting of international standards for mass customization models.

Upholding the vision of "creating new growth engine in the era of IoT with the Rendanheyi Model", Haier is committed to working with its world-class ecosystem partners to continuously build and upscale the brand, scenario brand and ecosystem brand, and to set up IoT ecosystems in clothing, food, accommodation, travel, health, elderly care, biomedicine and education, and to tailor personalized smart life for users around the globe.

10+N R&D Centers   **108** Marketing Centers   **28** Industrial Parks   **122** Factories   **160+** Countries or Regions

Haier Biomedical was founded to focus on the design, manufacturing, marketing and sales of low temperature storage equipment for biomedical samples. In 2019, the company successfully listed on the Shanghai Stock Exchange Science and Technology Innovation Board. Expanding more broadly within life science applications, Haier Biomedical utilizes digital technology within its new generation IoT-enabled products to provide comprehensive, customer-centric solutions for common challenges within applications such as blood supply management, vaccine delivery programmes, biobanks, biological sample management, reagent storage and pharmaceutical supply chain.

After more than ten years of development, Haier Biomedical has more than 700 patents. Haier Biomedical's aerospace medical cold storage refrigerators have been carried on the Shenzhou spacecraft into space multiple times, and the ULT freezers have been carried on the research vessel, Xuelong, supporting the Antarctic scientific research programme. Haier Biomedical also assisted in the development of the Chinese Bone Marrow Bank, National Gene Bank and many national strategic support projects.

In 2018 a series of Smart solutions were launched - U-Blood, U-Vaccine, U-Biobank and U-Reagent and U-Lab, these solutions are based on Haier Biomedical's IoT expertise and the core technology advantages in the biomedical cold chain.

The U-Blood solution is based on IoT-enabled blood refrigerators, linking blood collection, blood delivery and clinical blood use settings to ensure in real-time the traceability of blood information from "blood donor" to "blood user". This solution upgrades the users to a model which speeds up blood type matching and blood delivery times, reduces reagent usage, and costs and achieves zero blood wastage, providing better value and better patient outcomes and care.

The U-Vaccine solution is based on the IoT-enabled vaccine refrigerators, providing transparent end-to-end management of vaccines, ensuring vaccine safety and improving vaccination efficiency, security and reliability from manufacturer to inoculation.

Haier Biomedical built the first ecological solution for safe vaccine storage including solar-powered vaccine refrigerators, to effectively ensure the safety of children's vaccination in countries along the Belt and Road and emerging economies, including hard to reach areas due to lack of infrastructure and or access to a sustainable electricity supply. As the first company to be selected into the World Health Organization PQS procurement catalogue, Haier Biomedical has been cooperating with the WHO organization and other internationally recognized NGO's to safeguard the health of 200 million children worldwide.
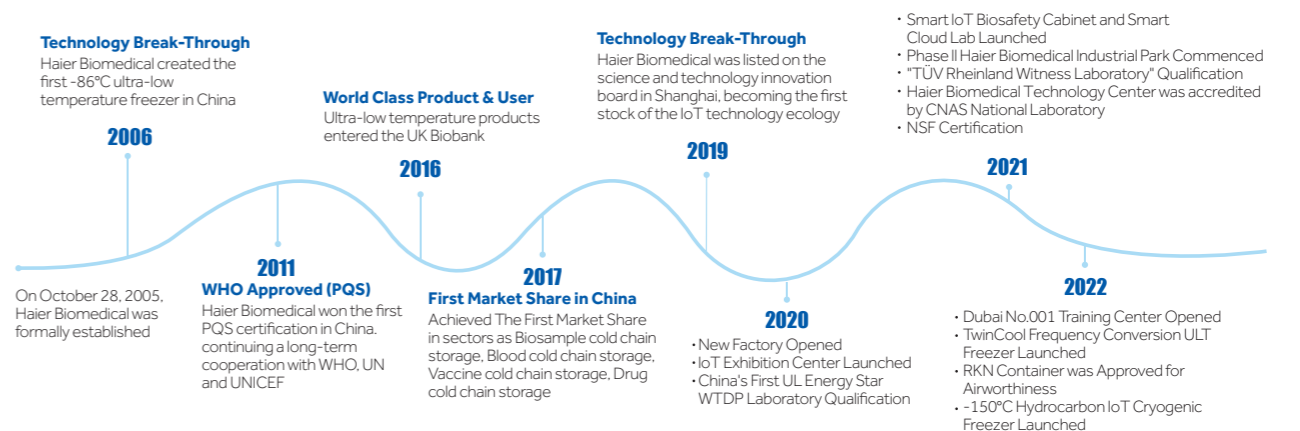
IoT-enabled ultra-low temperature freezers are used with the U-Biobank software solution which links sample collection, storage and application scenarios to achieve efficient sample management, precise sample positioning, one-click access and fully traceable data for compliance.

The U-Reagent solution solves a common and significant problem of 'loss' within reagent management, enabling zero wastage of pharmaceutical reagents, quick inventory and real-time information, creating efficient and more cost-effective reagent supply chain management.

Haier Biomedical is a corporate and socially responsible organization to its stakeholders and the world at large and through product innovations, solar-powered products and world-leading energy-saving refrigeration technologies it provides environmentally-friendly products to over 150 countries.

Utilizing IoT solutions within manufacturing, Haier Biomedical can monitor and control, in real-time, complex automated processes. This delivers significant benefits in terms of energy conservation, facility and resource management, production flow monitoring and inventory management to quality control, packaging, logistics and supply chain optimization. It ensures its manufacturing operations, technological developments and supply chain and customers collectively support sustainable business practices.

Haier Biomedical Development Stages:

Technology Break-Through
Haier Biomedical created the first -86℃ ultra-low temperature freezer in China

2006

On October 28, 2005, Haier Biomedical was formally established

2011
WHO Approved (PQS)
Haier Biomedical won the first PQS certification in China, continuing a long-term cooperation with WHO, UN and UNICEF

World Class Product & User
Ultra-low temperature products entered the UK Biobank

2016

2017
First Market Share in China
Achieved The First Market Share in sectors as Biosample cold chain storage, Blood cold chain storage, Vaccine cold chain storage, Drug cold chain storage

Technology Break-Through
Haier Biomedical was listed on the science and technology innovation board in Shanghai, becoming the first stock of the IoT technology ecology

2019

2020
• New Factory Opened
• IoT Exhibition Center Launched
• China's First UL Energy Star WTDP Laboratory Qualification

• Smart IoT Biosafety Cabinet and Smart Cloud Lab Launched
• Phase II Haier Biomedical Industrial Park Commenced
• "TÜV Rheinland Witness Laboratory" Qualification
• Haier Biomedical Technology Center was accredited by CNAS National Laboratory
• NSF Certification

2021

2022
• Dubai No.001 Training Center Opened
• TwinCool Frequency Conversion ULT Freezer Launched
• RKN Container was Approved for Airworthiness
• -150℃ Hydrocarbon IoT Cryogenic Freezer Launched

CONTENT

Haier Biomedical
Intelligent Protection of Life Science

-150°C
Cryo Freezer

Cryo Freezer

-150°C Cryo Freezer

A mechanical cryogenic freezer is used for the long-term cryopreservation of samples such as cell cultures, tissue samples, bacteria, viruses and non-biological products such as electronics. Applications include cord blood preservation, biobanks, reproductive procedures, blood banks, life science research, biomedical engineering and fisheries. Mechanical cryopreservation is a safe alternative to LN2 and can reduce or eliminate the reliance on LN2, reducing safety concerns.

Energy Efficient Hydrocarbon Refrigeration

• Includes specialist industrial compressor, hydrocarbon refrigerant,dual-compressors 4-stage cascade refrigeration system, which delivers excellent energy-efficiencies
• Energy-efficient fan design with intelligent start/stop

Environmentally Friendly

• **100%** HC refrigerant truly environmentally-friendly refrigeration system with zero global warming potential (GWP)
• LBA polyurethane foam has low GWP and is significantly lower than most HFCs commonly used, offering better environmental protection

Superior Uniformity

The temperature **uniformity is ±5°C** with the setting temperature of -150°C

Low Noise

Noise-reduction features and noise reduction design lowers to noise to 55 dB (A)

Safe, Secure and Reliable

Multiple alarms, including high and low temperature, power failure, door ajar, hot condenser, low battery, sensor error, and high ambient temperature. The standard ambient temperature ranges from 10°C to 32°C. The pressure state of the system can be automatically adjusted by the pressure controller to prevent the pressure from being too high to effect the freezer operation.

Specifications

	Model		DW-150W209	DW-150W209A
Technical Data	Cabinet Type		Chest	Chest
	Climate Class		N	N
	Cooling Type		Direct cooling	Direct cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level (dB(A))		55	55
Performance	Cooling Performance (°C)		-150	-150
	Temperature Range (°C)		-140~-150	-140 ~-150
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LCD
Electrical Data	Power Supply (V/Hz)		220~240/50	208~230/60
	Power (W)		1600	1850
	Max Power Draw (W)		1750	2000
	Electrical Current (A)		10	12
Dimensions	Capacity (L/Cu.Ft)		209/7.4	209/7.4
	Net/Gross Weight	kg	260/295	260/295
		lbs	573.2/650.4	573.2/650.4
	Interior Dimension (W*D*H)	mm	667*462*677	667*462*677
		in	26.3*18.2*26.7	26.3*18.2*26.7
	Exterior Dimension (W*D*H)	mm	1650*860*1010	1650*860*1010
		in	65.0*33.9*39.8	65.0*33.9*39.8
	Packing Dimension (W*D*H)	mm	1810*940*1190	1810*940*1190
		in	71.3*37.0*46.9	71.3*37.0*46.9
	Container load (20'/40'/40'H)		6/13/13	6/13/13
Functions	High/Low Temperature		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	High/Low Voltage		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
	Start-up Delay		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y/1	Y/1
	Shelves/Inner Doors		-/2	-/2
	USB Interface		Y	Y
	Remote Alarm		Y	Y
	5V Power Supply Port		Y	Y
	Temperature Chart Recorder		Optional	Optional
	RS232/485 Port		NA/Standard	NA/Standard
	CO2 Backup System		N/A	N/A
	LN2 Backup System (Built-in/External)		Optional/Optional	Optional
	Freezing Rack		DCJ-10-A (SUS304), Quantity: 12 DCJ-12-A (SUS304), Quantity: 12	/
Other	Certification		CE	UL

Product appearance and specifications are subject to change without notice

Haier Biomedical
Intelligent Protection of Life Science

TwinCool

Salvum Ultimate

TwinCool

TwinCool Frequency Conversion ULT Freezer

TwinCool TwinCool Frequency Conversion ULT Freezer

Product Advantages
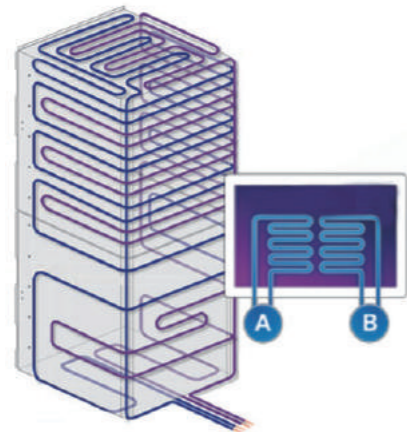
Dual refrigeration system for optimal reliability and security

Two independent hydrocarbon (HC) refrigeration systems, each can maintain -80°C ensuring the safety of stored samples

Environmental Protection

Environmentally friendly hydrocarbon refrigerant and LBA foam material

World-leading Energy Saving Refrigeration Technology

Intelligent frequency conversion technology and HC refrigeration system delivers a 50% reduction in energy usage when compared to traditional HFC refrigeration systems

Optional IoT System

The optional IoT monitors the operating status of the equipment in real time. Equipped with multiple alarm functions and a self-diagnostics system to identify and warn users to ensure sample safety

Ergonomic Design

Low Noise Design

Optimised systems and noise-reducing cabinet design lower noise out to 42dB for a quieter working experience

Large loading capacity

Maximum Capacity: 600 boxes (2 inch boxes with 10*10 configuration) 60,000 samples can be stored

Adjustable Sample Loading Tray (Optional)

The adjustable height sample load tray provides users with a convenient place to hold samples while opening and accessing storage compartments

Intelligent Control

10.1-inch high-performance touch screen, sensitive touch operation.
Using the optional IoT module, users can check the real-time operating status from an App

Ergonomic design
Document holder for easy storage of documents

High quality door opening experience

The ergonomic chamfer design of the handle ensures smooth operation and maximum durability
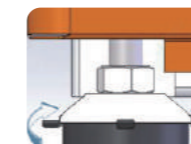
Adjustable feet
For easy positioning and levelling

Magnetic filter screen
Filter screen is easy to clean

Microcomputer control

Microcontroller with 10.1 inch LCD touch screen displays temperature and other important data. Temperature display precision is 0.1℃

Multiple alarms

Including high/low temperature alarm, sensor error alarm, hot condensor alarm, power failure alarm, low battery alarm, door ajar alarm, high ambient temperature alarm, etc

Multiple safety lock

Standard mechanical lock, optional electromagnetic lock
Optional fingerprint lock and NFC for optimal security and access

Networking function
Equipped with RS485 interface to connect multiple freezers

DW-86L828BPST

TwinCool Frequency Conversion ULT Freezer

Temperature Curve

Temperature Cool Down Curve

Temperature (°C)

Time (min)

— 3rd centre
— amb temp

Stability Curve

Temperature (°C)

Time (min)

— ave temp
— 1st center temp
— 2nd left outer temp
— 2nd right inner temp
— 3rd center temp
— 1st left inner temp
— 1st right outer temp
— 2nd center temp
— 3rd left inner temp
— 3rd right outer temp

Temperature Recovery Curve

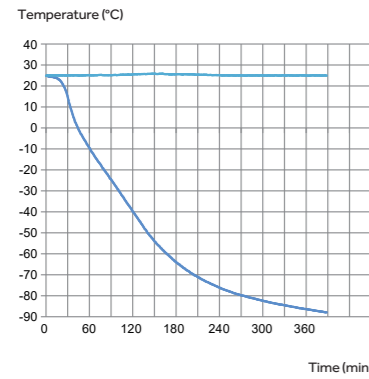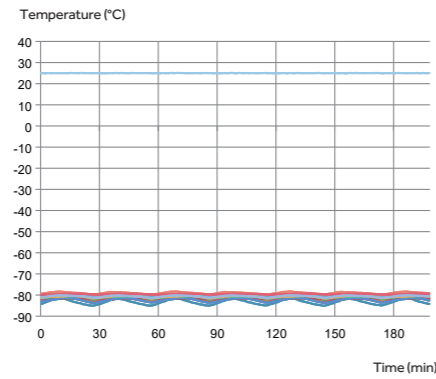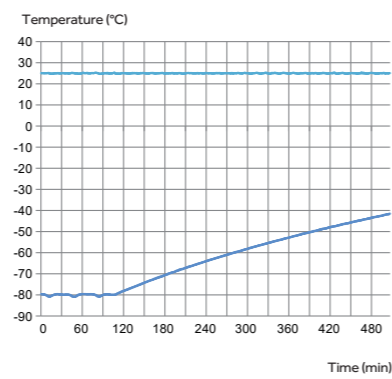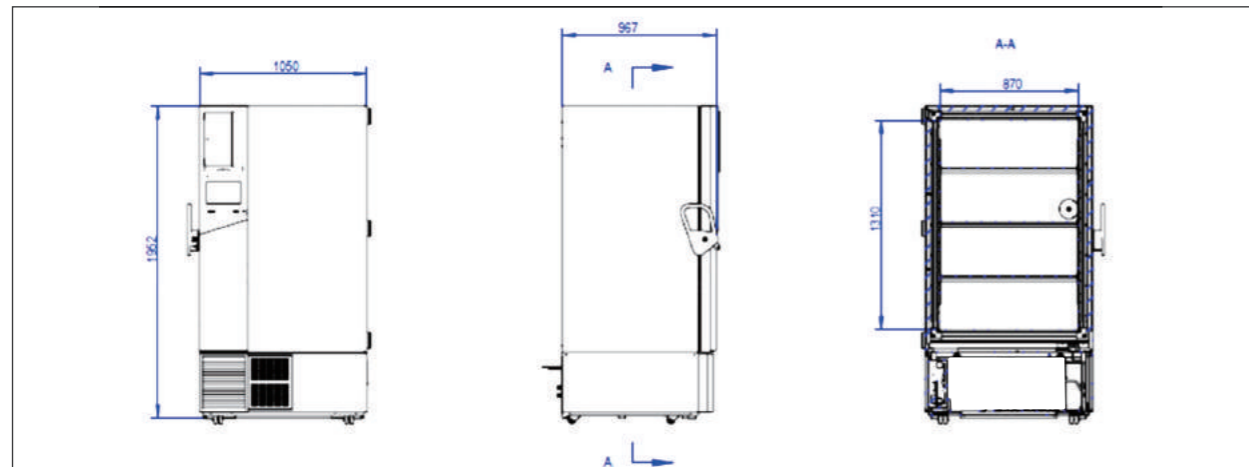Temperature (°C)

Time (min)

— 3rd centra
— amb temp

Product Dimensions

Specifications

	Model	DW-86L578BPST	DW-86L728BPST	DW-86L828BPST
Technical Data	Cabinet Type	Upright	Upright	Upright
	Climate Class	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual
	Refrigerant	HC	HC	HC
	Sound Level (dB(A))	42	42	42
Performance	Cooling Performance (°C)	-86	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor
	Display	LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)	100~230/50/60Hz	100~230/50/60Hz	100~230/50/60Hz
	Power (W)	710	710	720
	Max Power Draw (W)	1100	1100	1400
	Electrical Current (A)	10.4	10.4	13
	Power Consumption (kWh/24h) (set -80°C at 25°C abient)	7.0	8.4	10.4
Dimensions	Capacity (L/Cu.Ft)	578/20.4	728/25.7	828/29.2
	Net/Gross Weight (approx) kg	325/355	350/385	380/410
	Net/Gross Weight (approx) lbs	716.5/782.6	771.6/848.8	837.7/914.9
	Interior Dimension (W*D*H) mm	620*716*1310	766*716*1310	870*716*1310
	Interior Dimension (W*D*H) in	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6
	Exterior Dimension (W*D*H) mm	895*998*1980	1046*998*1980	1145*998*1980
	Exterior Dimension (W*D*H) in	35.2*39.3*78.0	41.2*39.3*78.0	45.1*39.3*78.0
	Packing Dimension (W*D*H) mm	950*1055*2150	1100*1105*2150	1190*1045*2150
	Packing Dimension (W*D*H) in	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6
	Cabinet Width (without handle and hinge) mm	800	946	1050
	Container Load (20'/40'/40'H)	12/24/24	10/20/20	8/20/20
Functions	High/Low Temperature	Y	Y	Y
	Hot Condenser	Y	Y	Y
	Power Failure	Y	Y	Y
	High/Low Voltage	Y	Y	Y
	Sensor Error	Y	Y	Y
	Low Battery	Y	Y	Y
	High Ambient Temperature	Y	Y	Y
	Door Ajar	Y	Y	Y
	Start-up Delay	Y	Y	Y
Accessories	Caster	Y	Y	Y
	Foot	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2
	Shelves/ Inner Doors	3/4	3/4	3/4
	USB Interface	Y	Y	Y
	Remote Alarm	Y	Y	Y
	5V Power Supply Port	Y	Y	Y
	Temperature Chart Recorder	Optional	Optional	Optional
	RS232/485 Port	NA/Standard	NA/Standard	NA/Standard
	CO2 Backup System	Optional	Optional	Optional
	LN2 Backup System	Optional	Optional	Optional
Certifications	CE	Y	Y	Y
	UL	Y	Y	Y

TwinCool
ULT Freezer

TwinCool ULT Freezer

Scope of Application

The TwinCool ULT freezer can be used for the storage and protection of valuable samples which require strict and continuous storage conditions, designed to operate even in the event of a compressor failure. Suitable for viruses, pathogens, blood cells and other biological sample cold storage applications found within hospitals, disease control, research institutions and biomedical engineering. Also used to store special materials and other products within electronics and chemicals industries.

Advanced Hardware System

Smart Full-size Touch Screen

10-inch touch screen with state-of-art user interface design, coupled with sample management system provides optimal user experience.

A Dual independent refrigeration systems for maximum sample safety

The dual refrigeration systems run independently and alternately, both reaching -80°C, such that if one system fails the other will maintain temperature to ensure sample storage safety.

Optional IOT & Sample Management System (Professional Edition)

Simplified Sample Management Experience

Barcode scanner for simple, effortless and precise identification. Input and retrieve your samples with higher precision and efficiency

B High speed refrigeration system for faster pull down and temperature recovery after door opening

Utilizing auto-cascade hydrocarbon (HC) refrigeration technology to deliver fast temperature pull down. From an ambient of 25°C it takes just 180 minutes to reach -80°C. It provides a quick temperature recovery after door opening, with the internal temperatures returning to -75°C within 1 minute, guaranteeing safety of samples.

Wireless Monitoring Connectivity

Check the real-time operating status via mobile phones or palmtop, simple and reliable

C World-leading energy saving refrigeration technology

The HC refrigeration technology coupled with superinsulation, which increases the insulation efficiency by 30%, and a cabinet designed to reduce heat loss ensures an energy efficient freezer. The 578L model has a power consumption of 11 kWh/day and is certified by The National Quality Certification Center for Energy Saving and Environmental Protection.

Friendly Design

Safe and secure

Equipped with key lock, padlock and optional electromagnetic lock, with optional fingerprint lock, providing multiple safeguards for sample safety

Cloud data storage available

Store hundreds of millions of scientific research and sample information in the cloud server

Low noise design, reducing the noise down to 53dB

Special noise-reduction design plus super silent compressor technology and energy-saving fan, considerably lowers noise level

Optimized insulation

Double foaming for both inner and outer doors and five-layer sealing design and optimized super-thick VIP thermal insulation technology, extends temperature holdover time during power failure and increases insulation efficiency by 30%

Specifications

	Model	DW-86L578ST	DW-86L578SAT	DW-86L728ST	DW-86L728SAT
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Climate Class	N	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC
	Sound Level (dB(A))	53 / 52	53	50 / 53	53
Performance	Cooling Performance (°C)	-86	-86	-86	-86
	Temperature Range (°C)	-40～-86	-40～-86	-40～-86	-40～-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LCD Touchscreen	LCD Touchscreen	LCD Touchscreen	LCD Touchscreen
Electrical Data	Power Supply (V/Hz)	220～240/50 / 120/60	208～230/60	208～230/50 / 120/60	208～230/60
	Electrical Current (A)	10 / 18	10	10 / 18	10
	Power Consumption (kWh/24h)	12 / 10	10	12 / 11	12
Construction	Capacity (L/Cu.Ft)	578/20.4	578/20.4	728/25.7	728/25.7
	Net/Gross Weight (approx) kg	325/355	325/355	350/385	350/385
	Net/Gross Weight (approx) lbs	716.5/782.6	716.5/782.6	771.6/848.8	771.6/848.8
	Interior Dimension (W*D*H) mm	620*716*1310	620*716*1310	766*716*1310	766*716*1310
	Interior Dimension (W*D*H) in	24.4*28.2*51.6	24.4*28.2*51.6	30.2*28.2*51.6	30.2*28.2*51.6
	Exterior Dimension (W*D*H) mm	895*998*1980	895*998*1980	1046*998*1980	1046*998*1980
	Exterior Dimension (W*D*H) in	35.4*39.3*78.0	35.4*39.3*78.0	41.2*39.3*78.0	41.2*39.3*78.0
	Packing Dimension (W*D*H) mm	950*1055*2150	950*1055*2150	1100*1105*2150	1100*1105*2150
	Packing Dimension (W*D*H) in	37.4*41.5*84.6	37.4*41.5*84.6	43.3*43.5*84.6	43.3*43.5*84.6
Loading Quantities	Container Load (20'/40'/40'H)	12/24/24	12/24/24	10/20/20	10/20/20
Alarms	High/Low Temperature	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	High/Low Voltage	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	High Ambient Temperature	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2	Y/2
	Shelves/Inner Doors	3/4	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y
	Remote Alarm (Dry contacts)	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
	Temperature Recorder	Optional	Optional	Optional	Optional
	RS485 Port	Y	Y	Y	Y
	CO$_2$ Backup System	Optional	Optional	Optional	Optional
	LN$_2$ Backup System	Optional	Optional	Optional	Optional
Certifications	CE	Y /	/	Y /	/
	UL	/ Y	Y	/ Y	Y
	ENERGY STAR	Y Y	Y	Y Y	Y

Product appearance and specifications are subject to change without notice

The TwinCool ultra-low temperature freezer of Haier Biomedical provides the highest level of protection for your valuable samples.

DW-86L578S

Safer by Design

Haier Biomedical's ultra low temperature freezers with intelligent TwinCool technology are designed to provide optimal cabinet reliability, longevity, efficiency and sample protection. This super efficient technology also improves the energy efficiency of our third generation ULT freezers and leads the way in terms of product innovation.

Intelligent TwinCool Refrigeration System

Two independent refrigeration systems are designed to ensure optimal reliability, longevity and efficiency. Depending on the load demands and ambient conditions, one or both refrigeration systems will operate on demand, ensuring the samples are fully protected under the worst possible condition.

Maximum Sample Security

TwinCool system means extra insurance for temperature. Each independent refrigeration system can maintain -80°C separately.
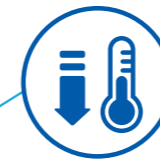
Fast Cabinet Pull Down

Fast and efficient cabinet pulldown, it usually takes an average of three hours to reach -80°C at 25°C ambient. This means the temperature recovery after door opening is excellent ensuring the stored samples are not exposed to undesirable temperatures.
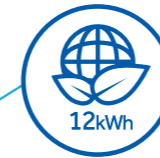
Maximum Energy Efficiency

The TwinCool ultra-low temperature system operates with 12 kWh/day.

World-leading Energy Saving Refrigeration Technology

The Haier hydrocarbon refrigeration technology uses less than 50% energy compared to traditional CFC refrigerants to reduce the operating cost. The refrigerants do not contain fluorine or chlorine giving it a GWP value of just three, which is better for the environment.

Reduced Running Costs

VIP thermal insulation system is designed to significantly reduce heat gain and operating cost.

TwinCool ULT Freezer

Energy Saving Refrigeration
High efficiency cooling fans and compressors, combined with hydrocarbon refrigerants, ensure energy savings and long-term sample security

Pressure Equalisation Port
Heated Pressure Equalization Port allows users to re-open the main door quickly when entering
Adopts chromium plating, rust-proof

USB Interface
Enables users to download historical temperature data for compliance/auditing purposes

Multilayered Sealing Structure
Multilayered gaskets decrease heat loss and guarantee excellent warm up times in the event of a power failure

Improved Handle Design
Lockable handle safeguards your precious samples. A padlock can also be added for extra sample safety

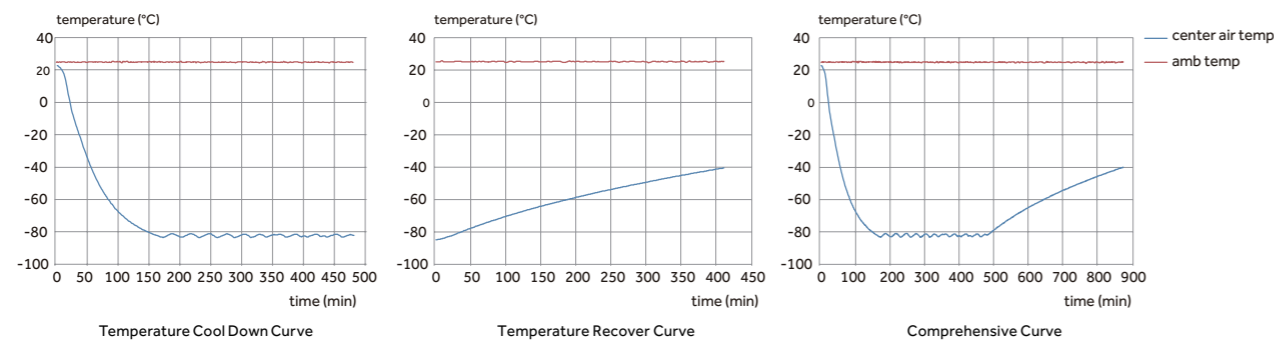**Multi-level Alarms**
Alarm functions include high, low temperature, sensor error, power failure, high ambient, clean filter and door ajar

DW-86L578S

DW-86L578S | TYPICAL PERFORMANCE CHARACTERISTICS AT 25°C AMBIENT

Temperature Cool Down Curve

Temperature Recover Curve

Comprehensive Curve

— center air temp
— amb temp

Specifications

	Model		DW-86L578S	DW-86L728S
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		N	N
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level (dB(A))		53	50
Performance	Cooling Performance (°C)		-86	-86
	Temperature Range (°C)		-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply (V/Hz)		220～240/50	220～240/50
	Electrical Current (A)		10	10
	Power Consumption (kWh/24h)		12	12
Construction	Capacity (L/Cu.Ft)		578/20.4	728/25.7
	Net/Gross Weight (approx)	kg	325/355	350/385
		lbs	716.5/782.6	771.6/848.8
	Interior Dimension (W*D*H)	mm	620*716*1310	766*716*1310
		in	24.4*28.2*51.6	30.2*28.2*51.6
	Exterior Dimension (W*D*H)	mm	895*998*1980	1046*998*1980
		in	35.4*39.3*78.0	41.2*39.3*78.0
	Packing Dimension (W*D*H)	mm	950*1055*2150	1100*1105*2150
		in	37.4*41.5*84.6	43.3*43.5*84.6
Loading Quantities	Container load (20'/40'/40'H)		12/24/24	10/20/20
Alarms	High/Low Temperature		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y/2	Y/2
	Shelves/Inner doors		3/4	3/4
	USB Interface		Y	Y
	Remote Alarm (Dry contacts)		Y	Y
	5V Power Supply Port		Y	Y
	Temperature Recorder		Optional	Optional
	RS485		Y	Y
	CO_2 Backup System		Optional	Optional
	LN_2 Backup System		Optional	Optional
Certifications	CE		Y	Y
	ENERGY STAR		Y	Y

S suffix - Dual independent refrigeration systems
Product appearance and specifications are subject to change without notice

Haier Biomedical
Intelligent Protection of Life Science

Frequency Conversion ULT Freezer
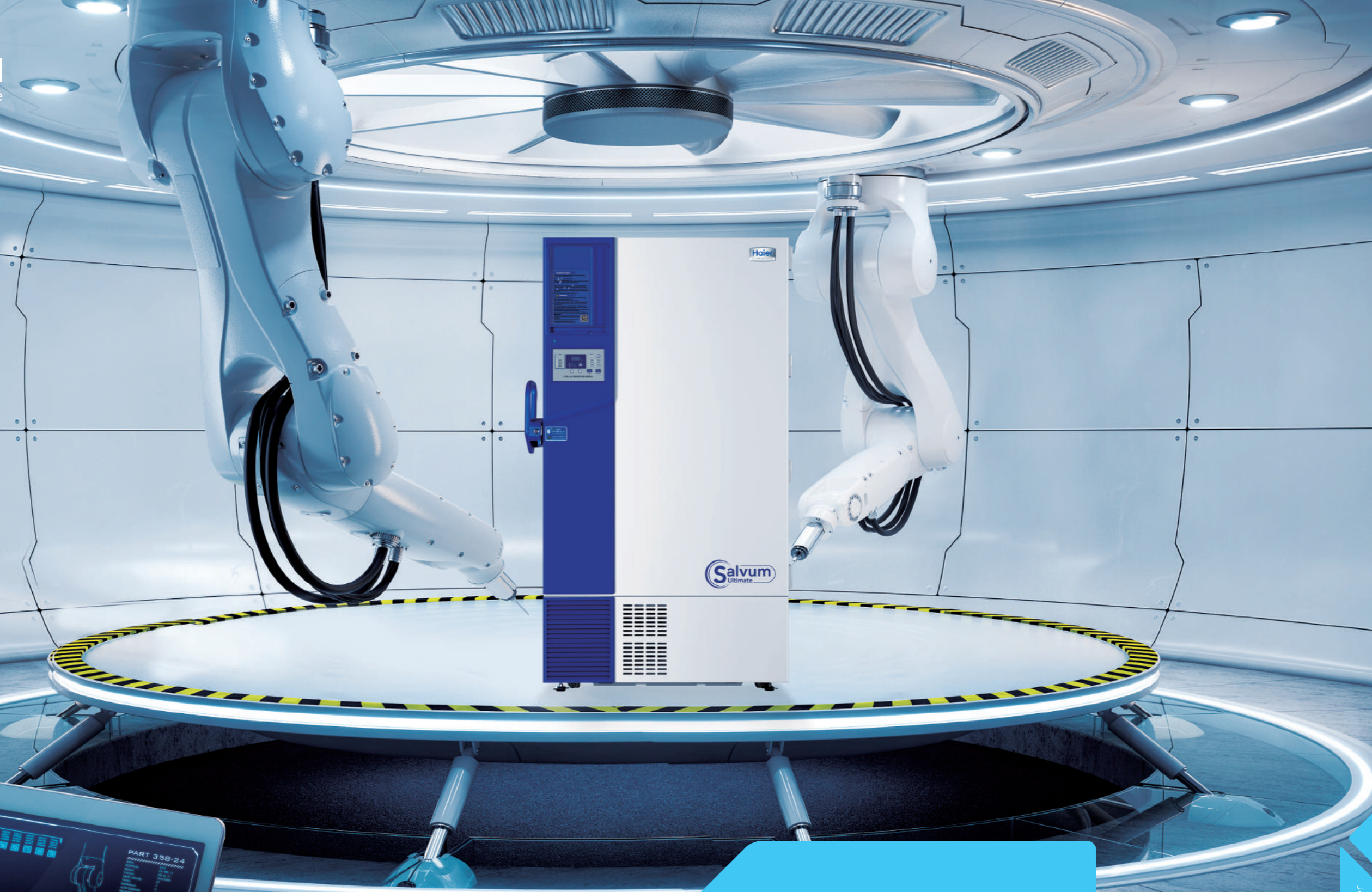
Smart Frequency Conversion ULT Freezer

Scope of Application

Applicable for products and samples which require strict storage conditions such as viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semen, biological products, electronics and special materials. Suitable for long term storage applications and compliant with typical storage requirements found in hospitals, disease control and prevention centers, scientific research institutions, biomedical engineering institutes, agriculture/ fishery companies as well as the electronics and chemical industry.

Advanced Hardware System

Smart Full-size Touch Screen

10-inch capacitive touch screen, state-of-art UI design coupled with sample management system to provide the optimal user experience.

HC & Variable Frequency Drive Refrigeration System for Additional Energy Saving

Advanced innovative design delivers excellent energy savings. The energy consumption is down to a single digit.

Optional IoT Software System

Simplified Sample Management Experience

Optional barcode scanner for simple, effortless and precise identification. Input and retrieve your samples with higher precision and efficiency

Wireless Monitoring Connectivity

Check the real-time operating status via mobile phones or palmtop, simple and reliable

A Quicker product access, identification and retrieval

Instead of a manual system, the one-gun, one-code and one-key operation plus touch screen synchronization means you can access and retrieve your samples within seconds

B 24-hour sample protection

Using Haier's app and IoT technology the unit can be monitored and can self-diagnose faults, ensuring you are always aware of your unit's status and able to make real-time and informed choices to protect your samples

C Cloud data storage available

Store hundreds of millions of scientific research and sample information in the cloud server

Friendly Design

Safe and secure

Standard equipped with key lock, padlock and electromagnetic lock with optional fingerprint lock, providing multiple safeguards for sample safety

Low noise design, reducing the noise down to 43.5dB

Special noise-reduction design plus super silent compressor technology and energy-saving fan, considerably lowers noise level

Super energy efficient with three environmentally friendly innovations

Ultra-low power consumption, down to less than 10kWh/day, ensuring a world leading energy saving performance

Optimized insulation

Double foaming for both inner and outer doors and five-layer sealing design and optimized super-thick VIP thermal insulation technology, extends temperature holdover time during power failure and increases insulation efficiency by 20%

Specifications

	Model		DW-86L579BPT	DW-86L729BPT	DW-86L829BPT		DW-86L959BPT
Technical Data	Cabinet Type		Upright	Upright	Upright		Upright
	Climate Class		N	N	N		N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling		Direct Cooling
	Defrost Mode		Manual	Manual	Manual		Manual
	Refrigerant		HC	HC	HC		HC
	Sound Level (dB(A))		43.5	43.5	43.5		47
Performance	Cooling Performance (°C)		-86	-86	-86		-86
	Temperature Range (°C)		-40~-86	-40~-86	-40~-86		-40~-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor		Microprocessor
	Display		Touch Screen LCD	Touch Screen LCD	Touch Screen LCD		Touch Screen LCD
Electrical Data	Power Supply (V/Hz)		100~230/50/60	100~230/50/60	110-120/60	208-230/50/60	100~230/50/60
	Electrical Current (A)		14	14	15	6	20
Dimensions	Capacity (L/Cu.Ft)		579/20.4	729/25.7	829/29.2		959/33.9
	Net/Gross Weight (approx)	kg	325/355	350/385	380/415		450/485
		lbs	716.5/782.6	771.6/848.8	837.7/914.9		992.1/1069.2
	Interior Dimension (W*D*H)	mm	620*716*1310	766*716*1310	870*716*1310		1016*716*1310
		in	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6		40.0*28.2*51.6
	Exterior Dimension (W*D*H)	mm	895*998*1980	1046*998*1980	1145*998*1980		1296*998*1980
		in	35.2*39.3*78.0	41.2*39.3*78.0	45.1*39.3*78.0		51.0*39.3*78.0
	Packing Dimension (W*D*H)	mm	950*1055*2150	1100*1105*2150	1193*1048*2127		1358*1098*2127
		in	37.4*41.5*84.6	43.3*43.5*84.6	47.0*41.3*83.7		53.5*43.2*83.7
	Container load (20'/40'/40'H)		12/24/24	10/20/20	8/20/20		8/16/16
Functions	High/Low Temperature		Y	Y	Y		Y
	Hot Condenser		Y	Y	Y		Y
	Power Failure		Y	Y	Y		Y
	High/Low Voltage		Y	Y	Y		Y
	Sensor Error		Y	Y	Y		Y
	Low Battery		Y	Y	Y		Y
	High Ambient Temperature		Y	Y	Y		Y
	Door Ajar		Y	Y	Y		Y
	Start-up Delay		Y	Y	Y		Y
Accessories	Caster		Y	Y	Y		Y
	Foot		Y	Y	Y		Y
	Porthole		Y/2	Y/2	Y/2		Y/2
	Shelves/Inner Doors		3/4	3/4	3/4		3/4
	USB Interface		Y	Y	Y		Y
	Remote Alarm		Y	Y	Y		Y
	5V Power Supply Port		Y	Y	Y		Y
	Temperature Chart Recorder		Optional	Optional	Optional		Optional
	RS485 Port		Y	Y	Y		Y
	CO₂ Backup System		Optional	Optional	Optional		Optional
	LN₂ Backup System		Optional	Optional	Optional		Optional
Certifications	CE		Y	Y	/	Y	/	Y
	UL		Y	Y	/	Y	/	Y
	ENERGY STAR		Y	Y	Y	Y	Y	Y

Haier Biomedical reserves the right to change products and specifications without prior notice.

Haier Biomedical's SmartFrequency technology manages the compressor speeds on demand. The ultra-low temperature freezers can thus achieve the world-leading energy efficiency in ultra-low temperature.

Smarter by Design

The SmartFrequency Conversion range of ultra low temperature freezers have been designed and developed at the Haier Biomedical R&D Institute. They are certified by one of the world's leading energy conservation and environmental protection organisations.

Intelligent frequency Conversion technology

Two variable speed compressors are controlled for optimal freezer performance. Low energy consumption is achieved.

Maximum energy efficiency

Our SmartFrequency Technology, coupled with our environmentally safe and friendly hydrocarbon refrigeration system, allows the Haier freezers to operate at a low level of energy of 8.2 kWh/day.
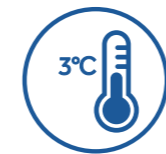
Precise temperature control

The innovative control algorithm balances the effects of temperature loss with the unique frequency conversion refrigeration system, ensuring the cabinet temperature stability of ±3°C.

Frequency conversion Adaptive technology

Variable speed compressors in Haier Biomedical freezers are operated to produce the capacity that matches the demand of the load. The control system automatically tunes the speed of the compressors to optimize the operation.

World-leading energy saving Refrigeration technology

Our hydrocarbon refrigeration technology can save energy by 50%, significantly reducing operator's cost. The refrigerants do not contain fluoride and chloride. The global warming potential is extremely low at 3. Thus they are very friendly to the environment.

Minimal sound level output

Adaptive control technology controls the fans and compressors to reduce the sound level to 43.5 dB(A).

DW-86L829BP

Haier Biomedical

Salvum Ultimate Smart Frequency Conversion ULT Freezer

Energy Saving Refrigeration

High efficiency cooling fans and compressors, combined with hydrocarbon refrigerants, ensure energy savings and long-term sample security

Pressure Equalisation Port

Heated port with spring assisted mechanism to prevent icing on the vent allows users to reopen the main door soon after entering Adopts chromium plating, rust-proof

USB Interface

Enables users to download historical temperature data for compliance/auditing purposes

Multilayered Sealing Structure

Triple layer of gaskets split between main and inner doors decreases heat loss and guarantee excellent warm up times in the event of a power failure
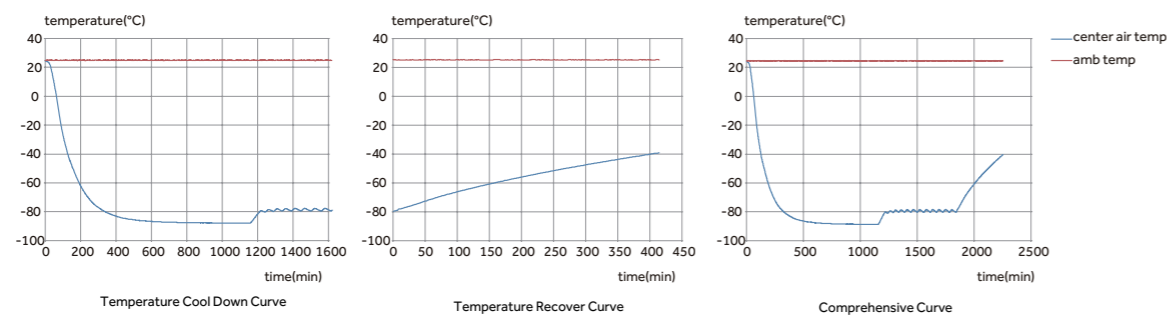
Improved Handle Design

Lockable handle with unique key prevents other Haier freezer owner's access to your precious samples, also comes with space for a padlock for that extra security

Multilevel Alarms

Alarming functions that include high and low temperature, sensor error, power failure, highambient, clean filter and door ajar

DW-86L829BP

DW-86L829BP | TYPICAL PERFORMANCE CHARACTERISTICS AT 25°C AMBIENT

Temperature Cool Down Curve

Temperature Recover Curve

Comprehensive Curve

— center air temp
— amb temp

Specifications

	Model		DW-86L579BP	DW-86L729BP	DW-86L829BP	DW-86L959BP
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright
	Climate Class		N	N	N	N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC
	Sound Level (dB(A))		43.5	43.5	43.5	47
Performance	Cooling Performance (°C)		-86	-86	-86	-86
	Temp Range (°C)		-40～-86	-40～-86	-40～-86	-40～-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)		100～230/50/60	100～230/50/60	208～230/50/60	208～230/50/60
	Electrical Current (A)		14	14	6	7
	Power Consumption (kWh/24h)		7.5	8	8.2	9.8
Construction	Capacity (L/Cu.Ft)		579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight (approx)	kg	325/355	350/385	380/415	450/485
		lbs	716.5/782.6	771.6/848.8	837.7/914.9	992.1/1069.2
	Interior Dimensions (W*D*H)	mm	620*716*1310	766*716*1310	870*716*1310	1016*716*1310
		in	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	895*998*1980	1046*998*1980	1145*998*1980	1296*998*1980
		in	35.2*39.3*78.0	41.2*39.3*78.0	45.1*39.3*78.0	51.0*39.3*78.0
	Packing Dimension (W*D*H)	mm	950*1055*2150	1100*1105*2150	1193*1048*2127	1358*1098*2127
		in	37.4*41.5*84.6	43.3*43.5*84.6	47.0*41.3*83.7	53.7*43.5*84.6
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24	10/20/20	9/20/20	8/16/16
Alarms	Remote Alarm (Dry contacts)		Y	Y	Y	Y
	High/Low Temp		Y	Y	Y	Y
	Hot Condenser		Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Low Battery		Y	Y	Y	Y
	High Ambient Temp		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
Accessories	Caster		Y	Y	Y	Y
	Foot		Y	Y	Y	Y
	Porthole		Y/2	Y/2	Y/2	Y/2
	Shelves/ Inner Doors		3/4	3/4	3/4	3/4
	USB Interface		Y	Y	Y	Y
	5V Power Supply Port		Y	Y	Y	Y
	Temp Recorder		Optional	Optional	Optional	Optional
	RS485 Port		Y	Y	Y	Y
	CO₂ Backup System		Optional	Optional	Optional	Optional
	LN₂ Backup System		Optional	Optional	Optional	Optional
Certifications	CE		Y	Y	Y	Y
	UL		Y	Y	Y	Y
	ENERGY STAR		Y	Y	Y	Y

BP suffix - Variable frequency invertor compressor
Product appearance and specifications are subject to change without notice

(Salvum Ultimate) Water-Cooled ULT Freezer

Haier water-cooled ULT freezers are designed to meet strict requirements for storage of plasma, biological materials, vaccines, reagents, specimens, and other valuable samples. They are ideal for installations in hospitals, clinics, blood banks and medical research facilities where freezer heat must be removed by cooling water.

Advantages

- Intelligent frequency conversion technology
- Advanced control Touchscreen
- Higher efficiency to yield more energy savings of up to 20%
- Approximately 90% of the compressor heat generated during operation is removed by the cooling water, thus posting little impact to a laboratory's ambient
- Use less air-conditioning power for a comfortable laboratory condition
- Advanced control
- Low sound level
- Smart coolant control
- High quality industry grade hermetically sealed compressors
- Pressure protection system due to lack of water flow

47dB

Specifications

	Model		DW-86L828W	DW-86L959W
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		N	N
	Cooling Type		Direct cooling	Direct cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level (dB(A))		43.5	47
Performance	Cooling Performance (°C)		-86	-86
	Temperature Range (°C)		-40--86	-40--86
Control	Controller		Microprocessor	Microprocessor
	Display		LCD Touch Screen	LCD Touch Screen
Electrical Data	Power Supply (V/Hz)		208~230/50/60	208~230/50/60
	Electrical Current (A)		6	7
Dimensions	Capacity (L/Cu.Ft)		828/29.2	959/33.9
	Net/Gross Weight (approx)	kg	380/415	450/485
		lbs	837.7/914.9	992.1/1069.2
	Interior Dimension (W*D*H)	mm	870*716*1310	1016*716*1310
		in	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimension(W*D*H)	mm	1145*998*1980	1296*998*1980
		in	45.1*39.3*78.0	51.0*39.3*78.0
	Packing Dimension (W*D*H)	mm	1190*1045*2150	1358*1098*2127
		in	46.9*41.1*84.6	53.5*43.2*83.7
	Container Load (20'/40'/40'H)		8/20/20	8/16/16
Alarms	High/Low Temperature		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	High/Low Voltage		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y/2	Y/2
	Shelves/Inner doors		3/4	3/4
	USB Interface		Y	Y
	Remote Alarm (Dry contacts)		Y	Y
	5V Power Supply Port		Y	Y
	Temperature Recorder		Optional	Optional
	Rs485 Port		Y	Y
	CO_2 Backup System		Optional	Optional
	LN_2 Backup System		Optional	Optional
Others	Certification		CE	CE

Product appearance and specifications are subject to change without notice

Haier Biomedical Salvum brand of ULT freezers has been designed to deliver energy savings and reduced carbon footprint. This range uses environmentally safe hydrocarbon refrigerants and high efficiency fan motors to maximize the cooling ability of the system and reduce energy consumption. While providing sample safety, the freezer design makes energy savings possible for laboratories.

DW-86L829

DW-86L579
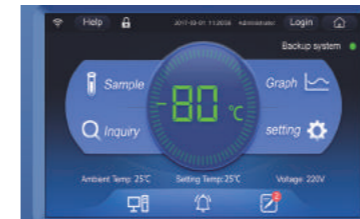
Large Intelligent LCD Screen Visual Management

10-inch high-performance LCD capacitive screen, sensitive touch operation; intuitive display of inside temperature, ambient temperature, input voltage and other data and temperature curves.

Inventory Management System

The single version of the inventory management allows users who do not have a racking system within the freezer to easily record item locations, entry and exit records.
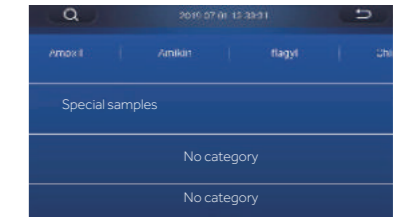
Single version (standard)

Professional version(optional)

In instances where customers use racking systems, the optional professional version of the inventory management is available. Freezer racks, boxes, and vials can easily record item locations and entry and exit records, facilitate item inventory and statistics, realize multi-screen interaction and reduce errors through secondary verification.

The freezer comes with the single version as standard.

Equipped with Multiple Interfaces

·Standard USB interface, capable of storing data for 10 years
·Standard remote alarm terminal RS485 port

Multiple Options for Safe Management and Control Systems

Standard password lock, optional fingerprint module, punch card module, face recognition, realizing safe and secure multi-user management.

# Standard Low Energy ULT Freezer with LCD Touchscreen

Optional IoT System Realizes Real-time Monitoring

The IoT APP can monitor the operating status of the equipment anytime and anywhere. Equipped with multiple alarm functions and able to self-diagnose system faults to ensure sample safety. (Contact your local area representative to check local availability.)

Safe and Secure with Multiple Alarms

Multiple alarm functions include high temperature alarm, low temperature alarm, sensor failure alarm, power failure alarm, low battery alarm, door ajar alarm and high ambient temperature alarm.
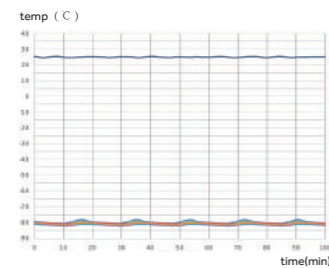
Precise Temperature Control Ensures Safe Storage

Adjustable temperature set-point between -40℃ ~ -86℃ and the ability to monitor temperature curves in real time, equipped with sophisticated temperature safety alarm system to ensure product safety.

Ergonomic Design

Narrow Door Design
The freezer can pass through an 750mm wide door when the door is open

New Handle Design
Adopting exclusive slide design, easy to open and close the door

Pressure Equalization Port
Equipped with pressure equalization port, realize easy opening
Adopts chromium plating, rust-proof

Porthole
Two portholes as standard, allows for independent testing of cabinet temperature

Filter Design
Tool-free removable filter design, easy and quick to clean the filter

Detachable Inner Door Design
Tool-free detachable inner door, realizing easy and quick defrost

Specifications

	Model		DW-86L419	DW-86L579	DW-86L729	DW-86L829
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright
	Climate Class		N	N	N	N
	Cooling Type		Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode		Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC
	Sound Level (dB(A))		47	47	52	52
Performance	Cooling Performance (°C)		-86	-86	-86	-86
	Temp Range (°C)		-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LCD Touchscreen	LCD Touchscreen	LCD Touchscreen	LCD Touchscreen
Electrical Data	Power Supply (V/Hz)		220~240/50	220~240/50	220~240/50	220~240/50
	Electrical Current (A)		5	5.5	9	10
	Power Consumption (kWh/24h)		8	9	10	11
Construction	Capacity (L/Cu.Ft)		419/14.8	579/20.45	729/25.75	829/29..3
	Net/Gross Weight (approx)	kg	255/286	300/330	350/385	380/410
		lbs	562.2/630.5	661.4/727.5	771.6/848.8	837.7/903.9
	Interior Dimensions (W*D*H)	mm	465*716*1310	620*716*1310	766*716*1310	870*716*1310
		in	18.3*28.2*51.6	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	830*980*1980	903*980*1960	1049*980*1980	1153*980*1980
		in	32.7*38.6*78.0	35.6*38.6*77.2	41.3*38.6*78.0	45.4*38.6*78.0
	Packing Dimension (W*D*H)	mm	874*1073*2127	948*1078*2127	1100*1105*2150	1190*1045*2150
		in	34.4*42.2*83.7	37.3*42.4*83.7	43.3*43.5*84.6	46.9*41.1*84.6
Loading Quantities	Container Load (20'/40'/40'H)		12/26/26	12/24/24	10/20/20	10/20/20
Alarms	High/Low Temp		Y	Y	Y	Y
	Hot Condenser		Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y
	High/Low Voltage		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Low Battery		Y	Y	Y	Y
	High Ambient Temp		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
Accessories	Caster		Y	Y	Y	Y
	Foot		Y	Y	Y	Y
	Porthole		Y/2	Y/2	Y/2	Y/2
	Shelves/ Inner Doors		3/2	3/4	3/4	3/4
	USB Interface		Y	Y	Y	Y
	Remote Alarm (Dry contacts)		Y	Y	Y	Y
	5V Power Supply Port		Y	Y	Y	Y
	Temp Recorder		Optional	Optional	Optional	Optional
	RS485 Port		Y	Y	Y	Y
	CO_2 Backup System		Optional	Optional	Optional	Optional
	LN_2 Backup System		Optional	Optional	Optional	Optional
Certification	CE		Y	Y	Y	Y
	Energy star		/	Y	Y	Y

Product appearance and specifications are subject to change without notice

Standard Low Energy ULT Freezer with LED Display

This product line is designed and manufactured for long term storage of various biological products, including viruses, germs, erythrocytes and leucocytes. Applications can be found in blood banks, hospitals, epidemic prevention services, research institutes, biological engineering institutes, laboratories in electronic and chemical plants.

Advantages

• World leading energy-efficient
• Hydrocarbon refrigeration system
• Slim cabinet design
• Reliable sample protection
• Malfunction alarms
• Excellent insulation performance
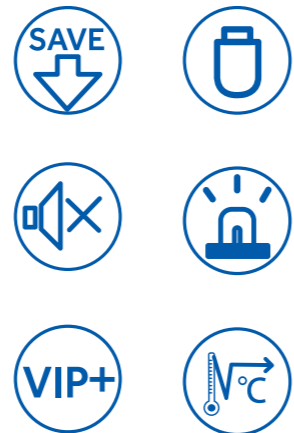
Insulation and System Design

• Special V-I-P (Vacuum Insulation Panel) insulation system reduces the heat gain by 25%
• High efficiency HC refrigeration system improves the overall efficiency by 45%
• Four individual insulated inner doors reduce the cold air loss to the minimum
• Heated Pressure Equalization Port makes re-accessing the unit fast
• About 50 dba sound level

Safe and Reliable Storage

• Superior temperature uniformity
• Dependable fans, compressors and other system related components

Alarms (Visual and Audible)

• Adjustable High/Low temperature alarm
• Sensor error
• Low battery
• Door ajar
• Power failure
• Hot condenser
• High ambient
• Remote alarm contact

(Salvum ultimate) Standard Low Energy ULT Freezer with LED Display

Extended Warm up Time During Power Failure

- Warm up time measures the time taken for temperature to rise up (from -80°C to -50°C) at 25°C ambient when the power is interrupted.
- Haier has the longest warm up time when compared with other major brands in the market.

TYPICAL PERFORMANCE CHARACTERISTICS AT 25°C AMBIENT

Temperature Cool Down Curve

Temperature Recover Curve

Comprehensive Curve

— 3rd centre
— amb temp
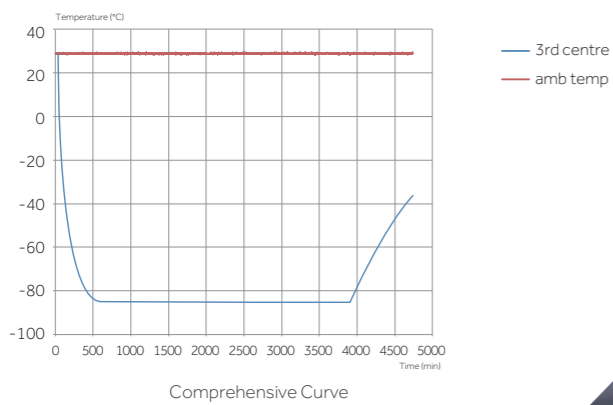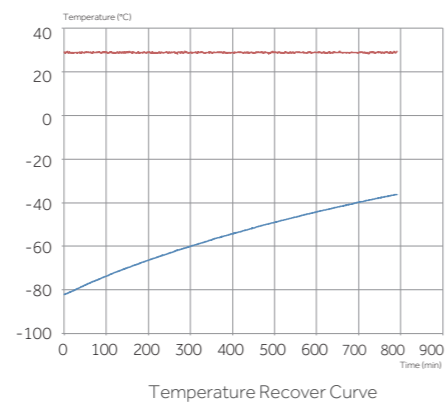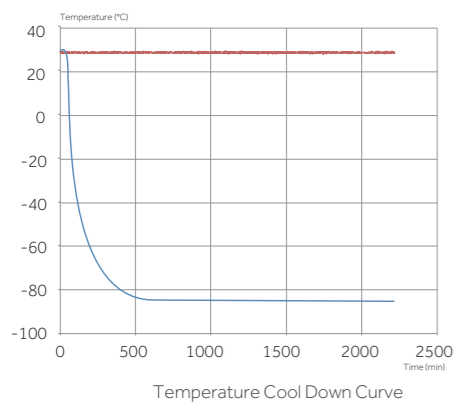
4 Individual Removable Foam Inner Doors

- 4 individual inner doors can be opened independently to minimize frost buildup inside the chamber.
- Unique door seal design for the minimum loss of cold temperature during a door opening.
- Compatibility with existing racking system from competitors.
- Stainless steel handle to ensure proper strength for door latching.
- Some interior door handles have been upgraded to stainless steel for more comfortable door opening experience

Excellent Doors Seals

- Total of five gaskets to safeguard the freezer temperature, including four seals for the exterior door, one for each inner door

- Optimized slideway design, easier to open and close the door

Pressure Equalization Port

- Heated port with spring-assisted mechanism to prevent icing on the vent.
- Allows re-accessing the freezer after initial door opening.
- Adopts chromium plating, rust-proof

DW-86L728J

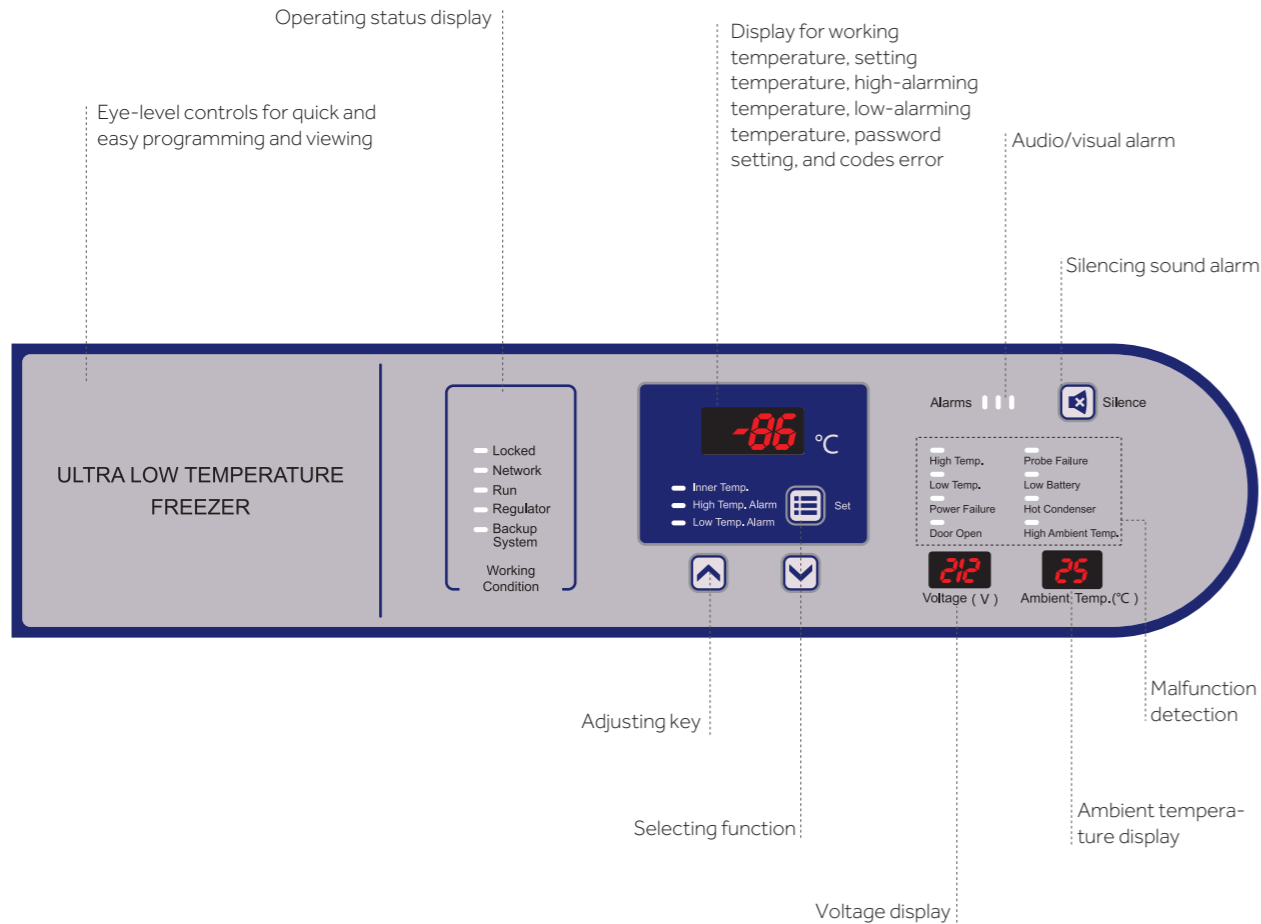### Circular- chart Recorder (Optional)

- Front-mounted.
- For independent temperature monitoring.

High Efficiency Refrigeration Components

Two port holes for ease of temperature monitoring

Operating status display

Display for working temperature, setting temperature, high-alarming temperature, low-alarming temperature, password setting, and codes error

Eye-level controls for quick and easy programming and viewing

Audio/visual alarm

Silencing sound alarm

ULTRA LOW TEMPERATURE FREEZER

Alarms Silence

-86 ℃

Locked
Network
Run
Regulator
Backup System

Working Condition

Inner Temp.
High Temp. Alarm
Low Temp. Alarm

Set

High Temp. Probe Failure
Low Temp. Low Battery
Power Failure Hot Condenser
Door Open High Ambient Temp.

212 25

Voltage (V) Ambient Temp.(℃)

Malfunction detection

Adjusting key

Selecting function

Voltage display

Ambient temperature display

Specifications

| Alarm	Alarm Triggering Condition
High Temperature	Temperature reaches the warm alarm limit
Low Temperature	Temperature reaches the low alarm limit
Power Failure	Equipment loses power
Door Ajar	Door opening time secedes set time, settable between 0 and 20 minutes
Sensor Error	E0.Ambient sensor fails E1.Condenser sensor fails E2.Main cabinet temperature control sensor fails E3.Heat exchanger sensor fails E4.Heat exchanger temperature fails
Low Battery	Battery capacity runs low or battery switch is not turned on
Hot Condenser	1. Condensers filter element is clogged 2. Ambient temperature is too high
High Ambient Temperature	Ambient temperature exceeds 32℃

Field proven reliablity
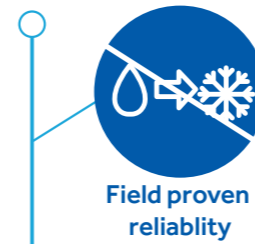
- Unique insulated inner door design for four separate storage compartments to minimize frost buildup inside the chamber
- Specialized control system design for a well-balanced operation of cascade refrigeration system
- Positive field proven reliability record

Safety

- Malfunction alarms including high and low temperature, power failure, sensor error, clean -filter, and extremely high ambient
- Capable of producing two types of alarm outputs: audible buzzer and visible flashing light
- Multiple built-in system protection features including user-settable protection code for controls, user settable delay to start, voltage compensation system, and protection against extreme high voltages
- Door open feature standard and USB port for temperature data downloading standard on upright models
- Remote alarm contacts

Installation & Application

- Wide range operating voltage system from 185V to 260 V designed to allow units installed in areas with poor voltage condition
- Suitable for 10℃ to 32℃ ambient temperature
- Input voltage and ambient temperature shown simultaneously for ease of monitoring environmental conditions
- Robust door latch designed for secure door closing
- Compact casters for ease of maneuvering

Low sound level
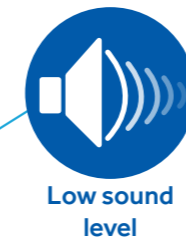
- Specialized refrigeration system design using whisper quiet fan and compressors
- Freezer chassis designed to absorb vibration and sound

Energy saving

- Unique door seal design for the minimum loss of cold temperature during a door opening
- High performance VIP insulation panels to minimize cabinet heat gain and to improve temperature stability
- Patented cabinet insulation system designed for optimal performance of cold storage temperature and minimal frost buildup
- Unique design of independent insulated inner door systems for independent access of storage space to provide the maximum protection of stored samples

Key design features

- Microprocessor-controlled system designed for controllable range of -40℃ to -86℃ for cabinet space with 1℃ increment
- Large LED display for cabinet temperature, set temperature, ambient temperature, and input voltage
- Settable high temperature and low temperature alarms
- Automatic clean-filter alarm and sensor error alert
- Adjustable storage shelf height
- Optional temperature recorder, storage racks and storage boxes

Heat Exchange Circulation System

Capillary Tube

Filter Dryer

Condenser

Cascade Condenser

Capillary Tube

Evaporator

anti condensation

Suction Accumlator

Pressure Switch

Precondenser

Filter Dryer

Low Stage Compressor

High Stage Compressor

Oil Separator

Filter dryer
• Filtration and drying device for water and debris

Capillary tube for high stage
• Expansion device for high stage liquid refrigerant

Capillary tube for low stage
• Expansion device for low stage refrigerant

High stage condenser
• Extra-large air cooled condenser dissipates product heat content efficiently.

Low stage evaporator
• Heat exchanger for expanded low stage refrigerant

Ultra low noise compressor
• Compressor provides reliable performance with ultra low noise
• Specially designed low stage evaporator yields excellent temperature uniformity and recovery after loading and door opening.
• Both high and low stage compressors are industrial grade hermetically sealed compressor designed for low temperature application. Sound level is extremely low.

Cascade condenser
• Heat exchanger between the high and low temperature stage in the system

Temprite oil separator
• Temprite oil separator can effectively separate oil and water to improve the refrigeration performance

Suitable for clinical, medical, scientific research, quarantine and other departments to store items under low temperature conditions. Applicable for universities, hospitals, disease prevention and control centers, blood stations, scientific research institutes, electronics and chemical enterprise laboratories and biomedical engineering research institutes. For storage of biological products and biological samples such as red and white blood cells, viruses, bone and bacteria. Also used for electronic devices and other materials used for cryogenic tests.

DW-86L100J

Energy Efficient, Safe and Reliable
High efficiency HC refrigeration system, optimised for energy efficiency delivering a power consumption figure of just 5.5kW/24hrs.

Personal ULT Storage
810mm cabinet height makes it easy to place on or under counter, saving storage space. Stackable design.

Ergonomic design
Ergonomic handle design ensures easy one-hand door opening.

Low noise
Optimized noise reduction cabinet and system design, emits sound level of only 46.8dB.

Under Counter ULT freezer

VIP insulation and multilayered sealing design

70mm insulating layer with 25mm VIP and 4 layers of gasket improves energy efficiency and reduces heat loss to deliver excellent warm up times in event of power failure.

Optional IoT Module

Real time monitoring of cabinet temperature, temperature setting, high and low temperature alarm value, temperature curve, alarm log and event log.

· User-settable parameters such as set point and alarms.
· Real-time cabinet temperature display, alarm information, power supply and compressor start/stop state.
· Standard USB port capable of storing
  >15 years of operating data for compliance.

Filter is easy to remove and clean without the need for tools.

Ergonomic design for easy door opening and closing. Lockable and equipped with 4 keys as standard with the ability to add a padlock for extra security when required.

Double stainless-steel inner doors to prevent cooling loss when opening the outer door, easy to clean.

4 casters + 2-foot locks, easy to move, lock and level.

Microprocessor control system

· Microcomputer electronic thermostat, LED temperature display, display precision 1°C, adjustable cabinet
  temperature set point -40°C~-86°C.
· Cabinet temperature/voltage/ambient temperature checking are available.
· Multiple alarm functions: high temperature alarm, low temperature alarm, sensor fault alarm, power failure
  alarm, low battery power alarm, open door alarm and high ambient temperature alert.
· Sound and light alarm mode, attachable to remote alarm interface.
· Battery backup alarm function operates continuously for >24hrs in the event of a power outage.
· Standard configuration: RS485 port and USB interface.
· Standard 5V power supply available for test equipment.
· Optional IoT module.

Superior thermal insulation performance

70mm super thick insulation layer design, aviation vacuum insulation material VIP, thickness of 25 mm or more, 4 layers of silicone seal, superior thermal insulation and energy saving effect.

Porthole

Portholes as standard, allows for independent testing of cabinet temperature.

Security lock

Standard door lock and padlock to ensure sample security and prevent unauthorised access.

USB data storage

Capable of storing more than 15 years of data.

Specifications

Category	Parameter		DW-86L338J	DW-86L338JA	DW-86L388J	DW-86L486E	DW-86L490J	DW-86L490JA	DW-86L578J	DW-86L578JA	DW-86L628E
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright	Upright	Upright	Upright	Upright	Upright
	Climate Class		N	N	N	N	N	N	N	N	N
	Cooling Type		Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode		Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC	HC	HC	HC	HC	HC
	Sound level (dB(A))		50	50	50	49	50	50	50	50	49
Performance	Cooling Performance (°C)		-86	-86	-86	-86	-86	-86	-86	-86	-86
	Temperature Range (°C)		-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED	LED	LED	LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)		220~240/50	115/60 / 208~230/60	220~240/50	220~240/50	220~240/50	208~230/60	220~240/50	120/60 / 208~230/60	220~240/50
	Electrical Current (A)		7.5	12 / 7.5	7.5	10	8	8	7.5	12 / 9	11
	Power Consumption(kWh/24h) (set -80°C at 25°C ambient)		10	7.5 / 8.2	11	13	11.5	11.5	12	8.5 / 8.5	14
Construction	Capacity (L/Cu.Ft)		338/11.9		388/13.7	486/17.1	490/17.3		578/20.4		626/22.1
	Net/Gross Weight (approx)	kg	238/278		255/286	290/310	295/335		300/330		301/323
		lbs	524.7/612.9		562.2/630.5	639.3/683.4	650.4/738.5		661.4/727.5		664.0/712.0
	Interior Dimension (W*D*H)	mm	465*630*1165		465*716*1310	590*630*1310	590*630*1310		620*716*1310		760*630*1310
		in	18.3*24.8*45.9		18.3*28.2*51.6	23.3*24.8*51.6	23.2*24.8*51.6		24.4*28.2*51.6		29.9*24.8*51.6
	Exterior Dimension (W*D*H)	mm	823*900*1871		830*980*1980	953*900*1980	873*900*1980		903*980*1960		1035*900*1980
		in	32.4*35.4*73.6		32.7*38.6*78.0	37.5*35.4*78.0	34.4*35.4*78.0		35.6*38.6*77.2		40.7*35.4*78.0
	Packing Dimension (W*D*H)	mm	878*973*2027		893*1078*2135	998*998*2127	928*988*2127		990*1110*2070		1080*965*2150
		in	34.6*38.3*79.8		35.2*42.4*84.1	39.3*39.3*83.7	36.5*38.9*83.7		39.0*43.7*81.5		42.5*38.0*84.6
Loading Quantities	Container load (20'/40'/40'H)		12/24/24		12/24/24	12/24/24	12/24/24		12/24/24		12/24/24
Alarms	High/Low Temperature		Y		Y	Y	Y		Y		Y
	Hot Condenser		Y		Y	Y	Y		Y		Y
	Power Failure		Y		Y	Y	Y		Y		Y
	Sensor Error		Y		Y	Y	Y		Y		Y
	Low Battery		Y		Y	Y	Y		Y		Y
	High Ambient Temperature		Y		Y	Y	Y		Y		Y
	Door Ajar		Y		Y	Y	Y		Y		Y
Accessories	Caster		Y		Y	Y	Y		Y		Y
	Foot		Y		Y	Y	Y		Y		Y
	Porthole		Y/2		Y/2	Y/2	Y/2		Y/2		Y/2
	Shelves/Inner doors		3/2		3/2	3/4	3/4		3/4		3/4
	USB Interface		Y		Y	Y	Y		Y		Y
	Remote Alarm (Dry contacts)		Y		Y	Y	Y		Y		Y
	5V Power Supply Port		Y		Y	Y	Y		Y		Y
	Temperature Recorder		Optional		Optional	Optional	Optional		Optional		Optional
	RS232/485 Port		Optional		Optional	Optional	Optional		Optional		Optional
	CO$_2$ Backup System		Optional		Optional	Optional	Optional		Optional		Optional
	LN2 Backup System		Optional		Optional	Optional	Optional		Optional		Optional
Certifications	CE		Y	/	Y	Y	Y	/	Y	/ /	Y
	UL		/	Y	/	/	/	Y	/	Y / Y	/
	ENERGY STAR		/	/	/	/	Y	Y	Y	Y / /	/

· Product appearance and specifications are subject to change without notice
· DW-86L338J/490J/578/628/959 stainless steel interior optional

-86°C ULT Freezer

Specifications

	Model	DW-86L728J	DW-86L728JA	DW-86L828J	DW-86L828JA	DW-86L100J	DW-86W100J	DW-86W420J	DW-86W420JA
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright	Upright	Chest	Chest	Chest
	Climate Class	N	N	N	N	N	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC	HC	HC	HC	HC
	Sound level (dB(A))	50	50	50	51.5	46.8	49	50	50
Performance	Cooling Performance (°C)	-86	-86	-86	-86	-86	-86	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED	LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)	220~240/50	120/60 · 208~230/60	220~240/50	208~230/60	220~240/50 · 120/60	220~240/50	220~240/50	208~230/60
	Electrical Current (A)	10	18 · 10	10	10	3 · 6.5	4	7.5	7.5
	Power Consumption (kWh/24h)	10.5	10.5 · 10.5	12	12	5.5 · 5.5	5	12.5	12.5
Construction	Capacity (L/Cu.Ft)	728/25.7	728/25.7	828/29.2	828/29.2	100/3.5	100/3.5	420/14.8	420/14.8
	Net/Gross Weight (approx) — kg	345/385	345/385	380/410	380/410	108/132	138/160	310/357	310/357
	Net/Gross Weight (approx) — lbs	760.6/848.8	760.6/848.8	837.7/903.9	837.7/903.9	238/291	304.2/352.7	683.4/787.0	683.4/787.0
	Interior Dimension (W*D*H) — mm	766*716*1310	766*716*1310	870*716*1310	870*716*1310	330*481*630	470*450*480	1367*462*652	1367*462*652
	Interior Dimension (W*D*H) — in	30.2*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6	34.3*28.2*51.6	13*19*25	18.5*17.7*18.9	53.8*18.2*25.7	53.8*18.2*25.7
	Exterior Dimension (W*D*H) — mm	1049*980*1980	1049*980*1980	1145*980*1980	1145*980*1980	770*660*810	769*825*1120	2130*870*1020	2130*870*1020
	Exterior Dimension (W*D*H) — in	41.3*38.6*78.0	41.3*38.6*78.0	45.1*38.6*78.0	45.1*38.6*78.0	30*26*32	30.3*32.5*44.1	83.9*34.3*40.2	83.9*34.3*40.2
	Packing Dimension (W*D*H) — mm	1093*1048*2127	1093*1048*2127	1240*1117*2110	1240*1117*2110	844*724*860	845*855*1250	2200*890*1160	2200*890*1160
	Packing Dimension (W*D*H) — in	43*41.3*83.7	43*41.3*83.7	48.8*44.0*83.1	48.8*44.0*83.1	33.2*28.5*33.9	33.3*33.7*49.2	86.6*35.0*45.7	86.6*35.0*45.7
Loading Quantities	Container load (20'/40'/40'H)	12/20/20	12/20/20	8/20/20	8/20/20	44/88/88	12/24/48	6/12/24	6/12/24
Alarms	High/Low Temperature	Y	Y	Y	Y	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y	Y	Y	Y	Y
	High/Low Voltage	/	/	/	/	Y	Y	/	/
	Sensor Error	Y	Y	Y	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y	Y	Y	Y
	High Ambient Temperature	Y	Y	Y	Y	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y	Y	Y	Y	Y
	Foot	Y	Y	Y	Y	Y	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2	Y/2	Y/1	Y/1	Y/1	Y/1
	Shelves/Inner doors	3/4	3/4	3/4	3/4	1/2	-/1	-/3	-/3
	USB Interface	Y	Y	Y	Y	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y	Y	N/A	N/A	N/A
	Temperature Recorder	Optional	Optional	Optional	Optional	/	Optional	Optional	Optional
	Rs232/485 Interface	Optional	Optional	Optional	Optional	-/Y	Optional	Optional	Optional
	CO$_2$ Backup System	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
	LN$_2$ Backup System	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Certifications	CE	Y	/ · /	Y	/	Y · /	Y	Y	/
	UL	/	Y · Y	/	Y	/ · Y	/	/	Y
	ENERGY STAR	/	Y · /	/	Y	/ · /	/	/	/

Product appearance and specifications are subject to change without notice

-86°C ULT Freezer

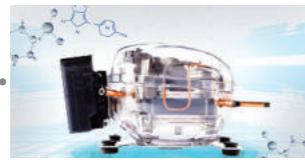# Flexible, Portable Mini-ULT Freezer

Suitable for pharmaceutical, clinical and medical research use, for the long-term storage of samples and products under ultra-low temperature conditions.

Advantage

Microprocessor Control System

Microprocessor control, with temperature display precision at 0.1°C. Internal temperature is adjustable from of -40°C ~ -86°C

Auto-cascade Hydrocarbon (HC) Refrigeration Technology

Utilizing auto-cascade hydrocarbon compressor, with superior refrigeration and energy saving effect

Excellent Doors Seals

Total six gaskets to safeguard the freezer temperature, including a 70mm insulation layer, a 25mm vacuum VIP and 4 layers of silicone seal

Multiple Ports

Enables users to download historical temperature data (up to 15 years) Equipped with remote alarm function and RS485 port

Stainless Steel Inner Door

Prevents loss of internal air to keep samples safe

Quick Access Filter Design

Tool-free removable filter design, easy and quick to clean the filter

Internal Lock

Standard internal lock with 4 keys for multiple users
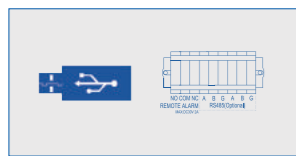
Ergonomic Design

Unique hook slide handle design, allows users to open and close the door with one hand

DW86L51J

Porthole

One porthole as standard, allows for independent testing of cabinet temperature

Advantage

HC Energy Saving

High quality HC high-efficiency compressor with optimized refrigeration system, which can save 50% on power consumption.

One Unit for Multiple Applications

*Vehicle-mounted transportation with 24V(DC) power supply
*Long-term storage with 110V power supply.

Superior Uniformity

Built-in evaporator, fast cool down refrigeration, the temperature is safe, secure and reliable with the uniformity of ±3°C at key characteristic points.

DW-80WZ15

Ergonomic Design

Light Weight
The whole unit weighs 27kg, easy to carry.

Superior Insulation Performance
25mm VIP + 70mm thick LBA foam insulation layer design, dual seal strips for better insulation.

Safety Lock Catch
Simple adjustable mechanical lock with lock catch, and it can be equipped with an external lock to guarantee the safety of sample transportation and storage.

Metal Handle
Hidden metal handle, stylish and comfortable, safe and durable, easy to carry.

Specifications

Model		DW-80WZ15			DW-86L51J	
Technical Data	Cabinet Type	Chest			Upright	
	Climate Class	N			N	
	Cooling Type	Direct Cooling			Direct Cooling	
	Defrost Mode	Manual			Manual	
	Refrigerant	HC			HC	
	Sound Level (dB(A))	60			46.8	
Performance	Cooling Performance (°C)	-80			-86	
	Temperature Range (°C)	-60~-80			-40~-86	
Control	Controller	Temperature Controller			Microprocessor	
	Display	LED			LED	
Electrical Data	Power Supply (V/Hz)	220/50	110/60	DC 24	120/60	220~240/50
	Max Power (W)	320	320	320	420	320
	Electrical Current (A)	2.5	4.5	12	7.5	3
Dimensions	Capacity (L/Cu.Ft)	15/0.53			51/1.8	
	Net/Gross Weight (approx) (kg)	27/33			77/90	73/86
	(lbs)	59.52			160.9/189.6	
	Exterior Dimension (W*D*H) (mm)	690*320*500			532*640*806	
	(in)	27.2*12.6*19.7			20.9*25.2*31.7	
	Interior Dimension (W*D*H) (mm)	260*180*330			330*481*316	
	(in)	10.2*7.1*13.0			13*16.5*12.4	
	Packing Dimension (W*D*H) (mm)	805*430*725			550*703*847	
	(in)	31.7*17.0*28.5			28.3*21.9*38.3	
	Cabinet Width (Without Handle and Hinge)	/			470	
	Container Load (20'/40'/40'H)	105/210/210			64/120/120	
Functions	High/Low Temperature	Y			Y	
	Hot Condenser	N			Y	
	Power Failure	Y			Y	
	High/Low Voltage	N			Y	
	Sensor Error	Y			Y	
	Low Battery	N			Y	
	High Ambient Temperature	N			Y	
	Door Ajar	N			Y	
	Start-up Delay	/			Y	
Accessories	Caster	N			Y	
	Foot	Y			Y	
	Porthole	N			Y/1	
	Shelves/Basket	N/N			1/1	
	USB Interface	N			Y	
	Remote Alarm	N			Y	
	RS232/485 Port	N			NA/Standard	
Other	Certification	/			CE	

*Haier Biomedical reserves the right to change products and specifications without prior notice.

LN₂ backup cooling system is an independent refrigeration system generally used for a -150°C mechanical cryo freezer. When there is a loss of power or the temperature of the freezer rises to the high alarm set point, the LN₂ backup system can be automatically activated to inject LN₂ into the chamber to maintain the freezer temperature. The backup system operates on a rechargeable battery when there is a loss of mains power.

Advantage

- Small footprint, light and easy for installation
- User adjustable temperature setting
- Simple to program and operate
- Flexible – Can be installed on any ULT freezer, which has a port hole
- The CO₂ injection pipe is designed in combination of filter, to prevent the blockage of CO₂ back-up system

Bright LED Display

Front-mounted Control Panel
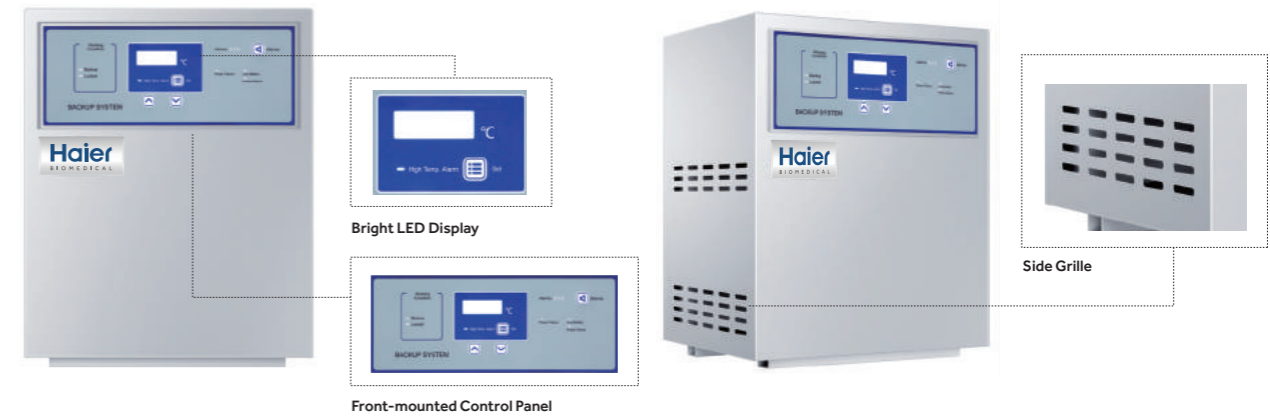
Side Grille

Safety

- Liquid CO₂ test button to ensure the backup system is working
- Low CO₂ alarm system alerts the user when liquid CO₂ bottle is low in liquid level
- Ultra-low sound level compressors

Features

- Interlocked design to turn off the LN₂ injection when the door is opened
- Protection circuit to prevent over-charging battery
- Light weight and portable design, suitable for installation on top of a freezer
- Alarm functions to include low battery and sensor error

Reliability

- Stainless steel covering, more elegant
- Stainless steel input pipe design, allows for flexibility and ease of cylinder positioning
- Durable battery lasts up to 48 hours

Specifications

	Model	HBX-IIA
Technical Data	Cabinet Type	Horizontal
	Cooling Type	Direct cooling
	Refrigerant	LN₂
Performance	Cooling performance (°C)	-135
	Temperature Range (°C)	-90~-135
Control	Controller	Thermostat
	Display	LED
Electrical Data	Power Supply (V/Hz)	220-240/50
		208-230/60
		115/60
	Power (W)	20
	Electrical Current (A)	0.05
Dimensions	Net/Gross Weight (approx)	15/17
		33.1/37.5
	Exterior Dimensions (W*D*H)	360*305*445
		14.2*12.0*17.5
	Packing Dimensions (W*D*H)	417*357*698
		16.4*14.1*27.5
Alarms	Low Battery Alarm	Y
	Sensor Error Alarm	Y
	Main Power Off Alarm	Y
	Charge Indicator	Y
Others	Certification	CE/UL

Product appearance and specifications are subject to change without notice

Specifications

	Model	HBX-IC
Technical Data	Climate Class	N
	Cooling Type	Direct cooling
	Refrigerant	CO₂
Performance	Cooling Performance (°C)	-70
	Temperature Range (°C)	-40~-70
Control	Controller	Thermostat
	Display	LED
Electrical Data	Power Supply (V/Hz)	220-240/50
		208-230/60
		115/60
	Power (W)	20
	Electrical Current (A)	0.25
Dimensions	Net/Gross Weight (approx)	11.2/14
		24.7/30.86
	Exterior Dimensions (W*D*H)	200*400*160
		7.8*15.7*6.3
	Packing Dimensions (W*D*H)	370*530*330
		14.6*20.9*13
Alarms	CO₂ Margin Insufficient Alarm	Y
	Low Battery Alarm	Y
	Sensor Error Alarm	Y
	Main Power Off Alarm	Y
	Charge Indicator	Y
	CO₂ Injection Test Button	Y
Accessories	Foot	4
Others	Certification	CE/UL

Product appearance and specifications are subject to change without notice

Suitable for primary cells and cooling cells that are highly sensitive to temperature changes.

Product Functions

USB Interface
Easier to connect external modules such as printer and barcode reader

Adjustable Feet
Convenient to adjust the height of machine

Temperature Record
Information traceability: the frozen temperature curve and data can be transmitted to the computer for display, and PDF files can be generated synchronously for printing and archiving

Handle
Easy to open and close the door, the user process is safer

Lock
Ergonomic design, easy to operate

Side-opening Door
Convenient access of frozen samples, suitable height

Double Layer Sealing Structure
Good sealing performance

Superior Insulation Performance
Environmental friendly polyurethane foam material has good thermal insulation performance

Power Switch
Easy to operate, safe and reliable

RS 232 Interface

Liquid nitrogen level monitoring port

Gas inlet
Pipe thread connection, safe and stable

Pressure Relief Hole
When the inner pressure is too large, the pressure relief hole releases the pressure by itself to achieve the equilibrium state of internal and external pressure

Power Connecter
Plug and play

Drain

Product Advantages

Precise Temperature Control
- Fine temperature control, the temperature rises and fall rate can be controlled in a large range, can achieve the cooling rate of 0.1~99°C/min
- Stable temperature control, double solenoid valve design and special jet ring design, stable temperature control, effectively reduces cell damage
- Precise temperature control, ADCR control algorithm, temperature fluctuation range is ±0.5°C

Ergonomic Design
- 7-inch touch LCD screen, easy to operate
- Liquid nitrogen allowance warning: Real-time display of liquid nitrogen allowance, timely warning when it is lower than 20%
- Single handle press lock, simple and labor-saving, locking function, and the safety of the test process is guaranteed
- Equipped with a real-time temperature curve printer and electronically archived temperature records

Standard System Consists of

·Controlled Rate Freezer
·LN₂ Container
·LN₂ Transfer Hose
·Sample Probe
·Printer

Controlled Rate Freezer

LN₂ Container

LN₂ Transfer Hose

Sample Probe

Printer
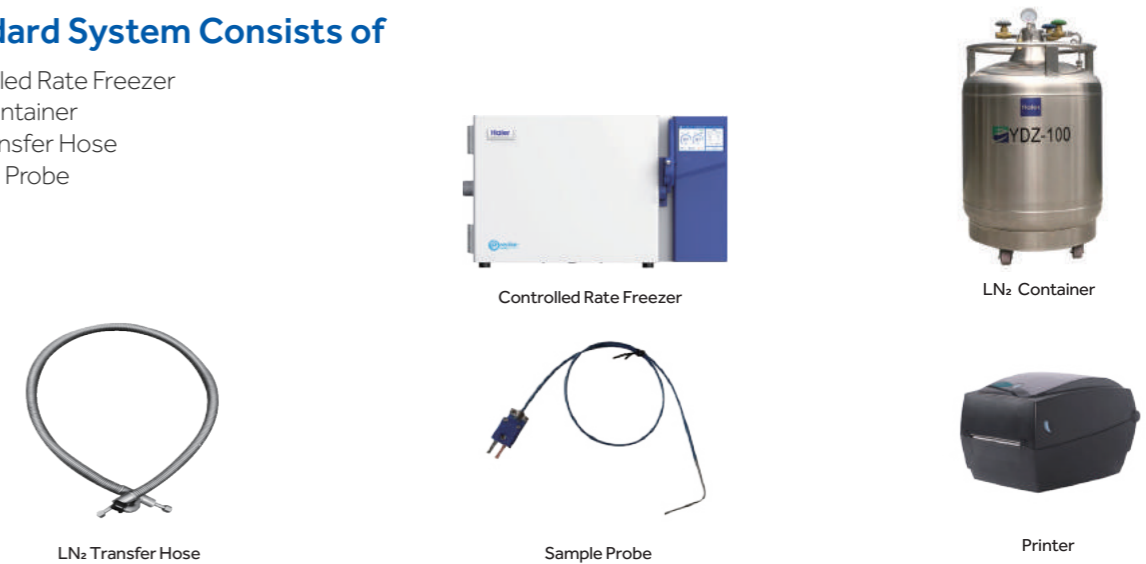
Specifications

Model	Power Supply (V/Hz)	Rated Power (W)	Effective Volume (L)	Temperature Range (°C)
CJ-L37	230~50/60	1300	37	-180~50

Display Screen	Serial Port Form	Exterior Dimensions (W*D*H mm)	Interior Dimensions (W*D*H mm)	Net Weight (Kg)
7 "colorful LCD touch screen	USB Interface/RS232 serial port	941/571/572	330/340/330	73

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Controlled Rate Freezer

Lab Consumables
Storage Solutions

Prefabricated Coded Cryogenic Tubes

The Hoierh coded cryogenic tube solution includes prefabricated QR-coded cryogenic tubes and a coded cryogenic box. When combined with the Hoierh high-speed batch scanner, users can efficiently manage a large volume of samples and their corresponding information.
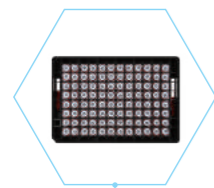
The fusion technology integrates the label and the tube, the durable and corrosion-resistant label adheres securely

Standard interface, suitable for multichannel cap spinners and automation equipment

Sealing rubber gasket design, aviation grade sealing, ensuring no leakage of samples

The batch scanner can quickly scan the prefabricated codes of the whole box and synchronously consolidate the box information

Classification	96–well cryogenic tube		48–well cryogenic tube	24–well cryogenic tube			6–well cryogenic tube
Model	BB-CVO9605 -PS2D4(B)	BB-CVO9610 -PS2D4(B)	BB-CVO4820 -PS2D4(B)	BB-CVO2425 -SS2D(B)	BB-CVO2450 -SS2D(B)	BB-CVO24100 -SS2D(B)	BB-CVO0620 -PS2D(B)
Parameter	0.5mL , four codes in one prefabricated QR code cryogenic tube, slender, equipped with SBS standard 96 (8*12) cryogenic box	1.0mL, four codes in one prefabricated QR code cryogenic tube, slender, equipped with SBS standard 96 (8*12) cryogenic box	2.0mL, four codes in one prefabricated QR code cryogenic tube, standard, equipped with SBS standard 48 (8*6) cryogenic box	3.0mL, prefabricated QR code cryogenic tube, wide and thick, equipped with SBS standard24 (4*6) cryogenic box	5.0mL, prefabricated QR code cryogenic tube, wide and thick, equipped with SBS standard24 (4*6) cryogenic box	10.0mL, prefabricated QR code cryogenic tube, wide and thick, equipped with SBS standard24 (4*6) cryogenic box	20.0mL, prefabricated QR code cryogenic tube, wide and thick, equipped with SBS standard6 (2*3) cryogenic box
Tube dimension (mm)	34.5*8.4	47.7*8.4	47*11.8	30.4*16.8	47.4*16.8	86.5*16.8	35.7*35.6
Box dimension (mm)	86*128*38.5	86*128*50.8	86*128*50.8	86*128*38.5	86*128*50.8	127.76*85.48*89.7	86*128*38.5
Max capacity/ Operating capacity	0.7ml/0.63ml	1.10ml/0.98ml	2.43ml/2.16ml	3.45ml/3.07ml	5.94ml/5.29ml	11.9ml/10.7ml	22.8ml/20.29ml
Minimum operating temperature °C	-196	-196	-196	-196	-196	-196	-196
Sets/Case	4800	4800	2400	1200	1200	1200	300
Package	10box/medium case 5medium box/case	10box/medium case 5medium box/case	10box/medium case 5medium box/case	10box/medium case 5medium box/case	10box/medium case 5medium box/case	10box/medium case 5medium box/case	10box/medium case 5medium box/case

Note: Please operate in strict accordance with the preservation method of laboratory samples. Do not store the cryogenic tube directly in the liquid nitrogen in the liquid nitrogen tank. It is recommended to store it in the gas-phase liquid nitrogen above the liquid nitrogen.

Cryogenic Tubes

Hoierh cryogenic vials are made of medical-grade polypropylene and pass strict tests to ensures the quality and biosafety of samples stored within biobanks.

Classification	External Thread Cryogenic Vial				Internal Thread Cryogenic Vial	
Model	H-OS05	H-OS15	H-OS2	H-OS5	H-IS1	H-IS2
Parameter	0.5ml cryogenic vial; external-threaded and self-standing; with scale and white writing area; temperature range -196℃ to 121℃	1.5ml cryogenic vial; external-threaded and self-standing; with scale and white writing area; temperature range -196℃ to 121℃	2ml cryogenic vial; external-threaded and self-standing; with O-type washer, scale and white writing area; temperature range -196℃ to 121℃	5ml cryogenic vial; external-threaded and self-standing; with O-type washer, scale and white writing area; temperature range -196℃ to 121℃	1ml cryogenic vial; internal-threaded and self-standing; with O-type washer, scale and white writing area; temperature range -196℃ to 121℃	2ml cryogenic vial; internal-threaded and self-standing; with O-type washer, scale and white writing area; temperature range -196℃ to 121℃
Sets/Case	1000	1000	1000	1000	1000	1000
Package	100 pcs/bag, 10 bags/case	100 pcs/bag, 10 bags/case	100 pcs/bag, 10 bags/case	100 pcs/bag, 10 bags/case	100 pcs/bag, 10 bags/case	100 pcs/bag, 10 bags/case

Removable color code design to classify samples by color depending on the actual needs

Vial caps available in multiple colors for easy classification

Clear scale and large writing area to facilitate the accurate marking of samples

Both internal thread design and external thread design are available to meet the different sample storage requirements

Note: Please operate in strict accordance with the preservation method of laboratory samples. Do not store the cryogenic tube directly in the liquid nitrogen in the liquid nitrogen tank. It is recommended to store it in the gas-phase liquid nitrogen above the liquid nitrogen.

Barcode Cryogenic Tubes

Hoierh 2D cryogenic tube solution is composed of prefabricated QR coded cryogenic tubes and coded cryogenic box. Users can achieve high throughput sample information management when combined with the Hoierh high-speed batch scanner

Prefabricated 2D code at the bottom of the tube, laser etching technology, wear resistent and corrosion resistent

Manufactured with both bar and digital codes in one, the same tube can be used for different requirements
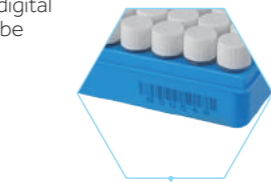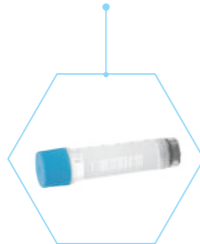
Associate tubes and box data by scanning the cryogenic box bar code with Hoierh batch scanner

The transparent grid design of the lid enables quick positioning and picking of samples
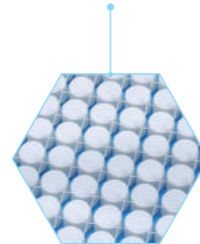
Classification	2D Cryogenic tube	
Model	H-OS05D-1	H-OS15D-1
Parameters	0.5ml 2D cryogenic tube (boxed), external-threaded, self-standing, with scale, bottom QR code, side bar code+digital code, -196℃~-121℃	1.5ml 2D cryogenic tube (boxed), external-threaded, self-standing, with scale, bottom QR code, side bar code+digital code, -196℃~-121℃
Sets/Case	1200	1200
Package	100 pcs/box, 12 box/case	100 pcs/box, 12 box/case

Note: Please operate in strict accordance with the preservation method of laboratory samples. Do not store the cryogenic tube directly in the liquid nitrogen in the liquid nitrogen tank. It is recommended to store it in the gas-phase liquid nitrogen above the liquid nitrogen.

Frozen Storage Box

Hoierh freezer boxes are suitable for different tube sizes (0.5ml, 1ml, 2ml) providing users with flexibility whilst ensuring safe sample storage
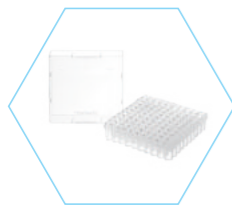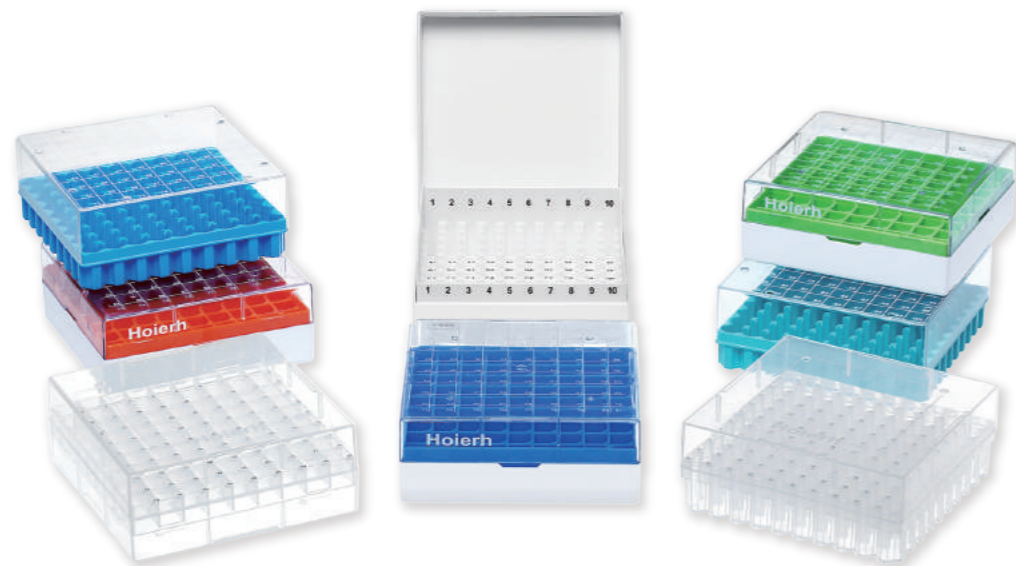
PP Freezer Box
Made of polypropylene, it is highly corrosion-resistant and can withstand freezing and thawing repeatedly. It is used together with 0.5-2ml cryogenic vials and is suitable to be placed in a low-temperature or ultra-low-temperature environments. The corner design of the box ensures the lid cover can be fixed into place quickly.
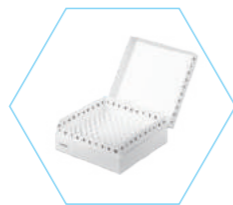
Coated Cardboard Freezer Box
Made of strong cardboard and covered by a film, it is water-proof and corrosion-resistant. With plastic partitions, it can achieve accurate positioning. Also, the flip cover design facilitates the quick storage of samples.
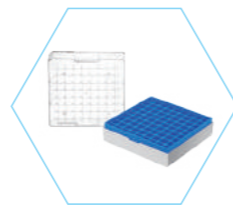
PC Freezer Box
Made of high-strength polycarbonate, it is highly corrosion-resistant. It is suitable to be used together with 0.5-2ml cryogenic vials, suitable for liquid and vapor phase storage. Available in a variety of colours for easy classification.

Classification	Papery Freezer Box		PP Freezer Box		PC Freezer Box			
Model	H-B81-2P	H-B100-2P	H-B81-2PP	H-B100-2PP	T130	T142	H-B81-2PC	H-B100-2PC
Parameter	Coated cardboard freezer box; 2-inch and 81-cell; white; flip cover	Coated cardboard freezer box; 2-inch and 100-cell; white; flip cover	81-well PP freezer box; temperature range -121°C to 90°C; all vials in each carton must be of the same color (white, red, blue, and green are optional); flat cover	100-well PP freezer box; temperature range -121°C to 90°C; all vials in each carton must be of the same color (white, red, blue, and green are optional); flat cover	2-inch 81-well freezer box with the base made of PP, the cover made of PC, and a numeric grid on the cover; suitable for use in a liquid nitrogen environment	2-inch 100-well freezer box with the base made of PP, the cover made of PC, and a numeric grid on the cover; suitable for use in a liquid nitrogen environment	81-well PC freezer box; temperature range -196°C to 121°C; all vials in each carton must be of the same color (white, red, blue, and green are optional); flat cover	100-well PC freezer box; temperature range -196°C to 121°C; all vials in each carton must be of the same color (white, red, blue, and green are optional); flat cover
Sets/Case	50	50	50	50	50	50	50	50
Package	50 pcs/case	50 pcs/case	50 pcs/case	50 pcs/case	50 pcs/case	50 pcs/case	50 pcs/case	50 pcs/case

Freezer Racks

The Hoierh freezer rack is made of quality, high strength, corrosion-resistant 304 stainless steel. It's rigid structure and rapid conductivity ensure safe and efficient inventory storage for freezer samples.

Easy grip handle design

Customized racking is available for different storage requirements
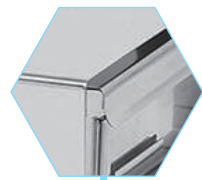
Manufactured and specially welded to ensure a durable rack with smooth surface

Different configurations are available dependent on requirements

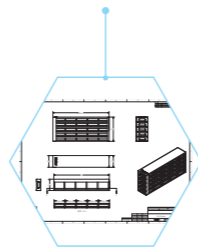| Classification		Model	Parameter	Sets/Case
Sliding-drawer freezer rack		DCJ-55-B(SUS201)	5*5 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-55-B(SUS304)	5*5 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-54-B(SUS201)	5*4 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-54-B(SUS304)	5*4 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-53-B(SUS201)	5*3 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-53-B(SUS304)	5*3 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-44-B(SUS201)	4*4 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-44-B(SUS304)	4*4 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-35-B(SUS304)	(3 inch)3*5 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-34-B(SUS304)	(3 inch)3*4 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-75-B(SUS304)	7*5 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
Side-access freezer rack		DCJ-55-A(SUS304)	5*5 freezer rack; SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0; handgrip;	1
		DCJ-54-A(SUS304)	5*4 freezer rack; SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0; handgrip;	1
		DCJ-35-A(SUS304)	(3 inch)3*5 freezer rack; SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0; handgrip;	1
		DCJ-34-A(SUS304)	(3 inch)3*4 freezer rack; SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0; handgrip;	1
		DCJ-44-A(SUS304)	4*4 freezer rack; SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0; handgrip;	1
SBS freezer rack		DCJ-57-B(SUS304)	5*7 freezer rack; SUS304; drawer/top and bottom of rack/uide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-77-B(SUS304)	7*7 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-56-B(SUS304)	5*6 freezer rack; SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-57-B(SUS201)	5*7 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-77-B(SUS201)	7*7 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-56-B(SUS201)	5*6 freezer rack; SUS201; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
Chest-type freezer rack		DCJ-6-A(SUS304)	6-layer vertical, freezer rack, SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-8-A(SUS304)	8-layer vertical, freezer rack, SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-10-A(SUS304)	10-layer vertical, freezer rack, SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0;	1
		DCJ-12-A(SUS304)	12-layer vertical, freezer rack, SUS304; top and bottom of rack thickness 0.6 mm; rack column thickness 1.0;	1
Centrifugal tube freezer rack		SDCJ-15ml	5*22, SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1
		SDCJ-50ml	3*16, SUS304; drawer/top and bottom of rack/guide rail thickness 0.6 mm; rack column thickness 1.0;	1

Haier Biomedical Equipment Specifications

Product	ULT Freezer Model	Rack Model	Rack and Box Discription	Freezer Rack Quantity	Freezer Box Quantity	Cryo Tube Quantity (2ml)
Racks for ULT Freezers	DW-86L338J/DW-86L338JA	DCJ-54-A (SUS304)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	6	120	12000
		DCJ-54-B (SUS201/304) (Middle, 2 layers)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	6	120	12000
		DCJ-44-A (SUS304) (Top and bottom layers)	2 inch stainless steel side-access freezer rack 4*4 (2 inch freezer box*16 units)	6	96	9600
		DCJ-44-B (SUS201/304) (Top and bottom layers)	2 inch stainless steel sliding-drawer freezer rack 4*4 (2 inch freezer box*16 units)	6	96	9600
	DW-86L388J/418S/418ST/419	DCJ-55-A (SUS304)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	12	300	30000
		DCJ-55-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	12	300	30000
	DW-86L486E	DCJ-54-A (SUS304)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	16	320	32000
		DCJ-54-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	16	320	32000
	DW-86L490J/490JA	DCJ-54-A (SUS304) (Top 2 layers)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	8	160	16000
		DCJ-54-B (SUS201/304) (Top 2 layers)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	8	160	16000
		DCJ-44-A (SUS304) (Bottom 2 layers)	2 inch stainless steel side-access freezer rack 4*4 (2 inch freezer box*16 units)	8	128	12800
		DCJ-44-B (SUS201/304) (Bottom 2 layers)	2 inch stainless steel sliding-drawer freezer rack 4*4 (2 inch freezer box*16 units)	8	128	12800
	DW-86L628E	DCJ-54-A (SUS304)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	20	400	40000
		DCJ-54-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	20	400	40000
	DW-86L578J/578JA/578S/578ST/579/579BP/579BPT	DCJ-55-A (SUS304)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	16	400	40000
		DCJ-55-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	16	400	40000
	DW-86L728J/728JA/728S/728ST/728SAT/729/729BP/729BPT	DCJ-55-A (SUS304)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	20	500	50000
		DCJ-55-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	20	500	50000
	DW-86L828J/828JA/828S/828ST/829/829BP/829BPT/828W	DCJ-55-A (SUS304)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	24	600	60000
		DCJ-55-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	24	600	60000
	DW-86L959BP/959BPT/959W	DCJ-55-A (SUS304)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	28	700	70000
		DCJ-55-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	28	700	70000
	DW-86L100J	DCJ-53-A (SUS304)	2 inch stainless steel side-access freezer rack 5*3 (2 inch freezer box*15 units)	4	60	6000
		DCJ-53-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*3 (2 inch freezer box*15 units)	4	60	6000
	DW-86W420J/420JA	DCJ-10-A (SUS304)	2 inch chest-type freezer rack (2 inch freezer box*10 units)	27	270	27000
	DW-86W100J	DCJ-08-A (SUS304)	2 inch chest-type freezer rack (2 inch freezer box*8 units)	9	72	7200
	DW-150W200	DCJ-10-A (SUS304)	2 inch chest-type freezer rack (2 inch freezer box*10 units)	12	120	12000
	DW-150W209	DCJ-10-A (SUS304)	2 inch chest-type freezer rack (2 inch freezer box*10 units)	12	120	12000
		DCJ-12-A (SUS304)	2 inch chest-type freezer rack (2 inch freezer box*12 units)	12	144	14400
	DW-86L51J	DCJ-53-B (SUS201/304)	2 inch stainless steel sliding-drawer freezer rack 5*3 (2 inch freezer box*15 units)	2	30	3000

The Hoierh high speed batch scanner can be used to scan various coded, boxed prefabricated code cryogenic tubes to achieve high-speed identification and efficient management of samples.

Detachable module design, compatible with SBS, square and other cryogenic boxes
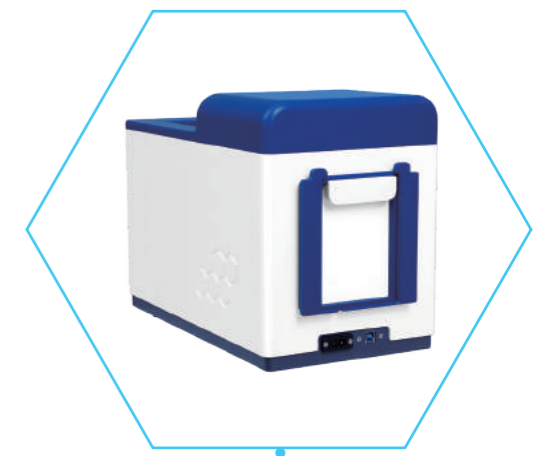
Ergonomic design: The scanner can be wall-mounted and stored safely using the attachment included

Intelligent induction of tube boxes and automatic light filling function, adaptable to multiple applications
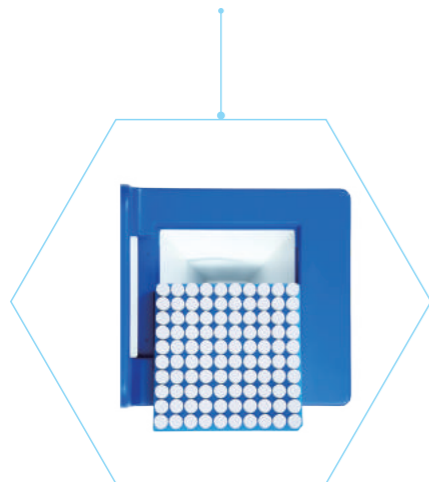
Reading synchronously the bottom code of freezing tubes and of boxes
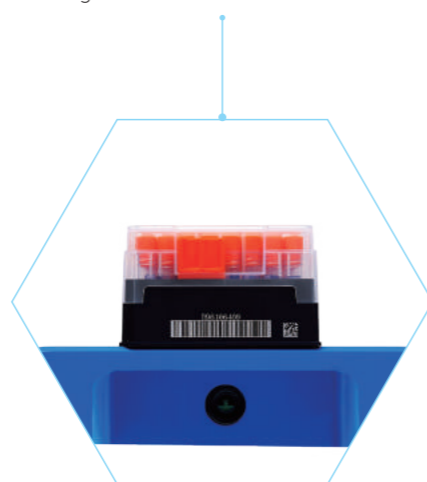
Classification		Model	Parameter	Sets/Case	Package
High speed batch scanner		HS-SBS-001	Batch scanning, high-speed scanning, side code scanning, suitable for 10*10 /SBS and other specifications of prefabricated coded standard cryogenic tube/box of various brands	1	1 set/case
		HS-SBS-002	Batch scanning, high-speed scanning, side code scanning, suitable for 10*10 /SBS and other specifications of prefabricated coded standard cryogenic tube/box of various brands	1	1 set/case
Top batch scanner		HS-100-002	Batch scanning, high-speed scanning, top scanning, suitable for scanning of 10*10/9*9 cryogenic tube, centrifuge tube, etc. (two-dimensional code label is pasted on the top)	1	1 set/case

Single Tube Scanner

The Hoierh single tube scanner is flexible and quick to scan information

The Hoierh batch cover opener opens or closes the multi-channel cap which provides increased efficiency compared to manual operation and reduces the risk of contact with biochemical reagents and other safety risks

Wireless communication distance up to 30 meters

Support battery charging and replacement, can work for 20 hours or standby for 50 hours when fully charged

Excellent DPM code reading ability, suitable for all kinds of precision code recognition, fast and accurate

Simultaneously open up to 8 channels at one time

Convenient and fast removal of cover

Support design, convenient storage opened batch tube cover

Classification		Model	Parameter	Sets/case	package
Single tube scanner		HS-H-001	Handheld scanner, provide single cryogenic tube or cryogenic box, scanner recognition one-dimensional code/two-dimensional code function, plug and play	1	1 set/case
		HS-W-001	Wireless handheld scanner, provide single cryogenic tube or cryogenic box, scanner recognition one-dimensional code/two-dimensional code function, plug and play	1	1 set/case
		HS-T-001	Desktop scanner, provide single cryogenic tube or cryogenic box, scanner recognition one-dimensional code/two-dimensional code function, plug and play	1	1 set/case

Classification		Model	Parameter	Sets/case	package
Batch cover opener		BQ-OP8	The 8-channel hand-held electric cover opener can open the prefabricated QR code cryogenic tube (8x12) with 8 cryogenic tube covers in a row, or (diamond layout 8x6) with 4 cryogenic tube covers in a row	1	1 set/case
		BQ-OP4	The 4-channel hand-held electric cover opener can open the prefabricated QR code cryogenic tube (4x12) with 4 cryogenic tube covers in a row, or (4x6) with 4 cryogenic tube covers in a row	1	1 set/case

Low Temperature Label Printer

The low-temperature printer allows users to print different labels that are durable, stable, and resistant to wear, ensuring the long-term safety of sample information.

Suitable for all kinds of experimental instruments, resistant to solvent and chemical corrosion, repeated freezing and thawing without falling off

Touch operation for quick adjustment of printer Settings

High performance printing, meet the high requirements of biobank processing

Classification	Product Number	Model	Supporting Printer	Parameter	Loading Capacity
Printer	i5100 300dpi	Printer i5100 300dpi	\	Thermal transfer printer, printing accuracy 300dpi, maximum printing speed 300mm/s	1 set/case
	BBP12	Brady BBP12 printer	\	Printing accuracy 300dpi, low-end printing	1 set/case
	i5100 600dpi	Printer i5100 600dpi	\	Thermal transfer printer, printing accuracy 600dpi, maximum printing speed 150mm/s	1 set/case
Ribbon	IP-R4302	Ribbon IP R4302	i5100 300dpi	60mm*300m/roll, used together with IP 300; Print about 4-5 rolls of labels (B490A or B490B)	1 roll/bag
	IP-R4902	Ribbon IP-R4902	i5100 300dpi	60mm*300m/roll, used together with IP 300; Print about 4-5 rolls of labels (B6422)	1 roll/bag
	R4313	Ribbon R4313	BBP11/BBP12	110mm*74m/roll, used with BBP11/BBP12 printer	1 roll/bag
Lable	THT-152-053-3-2A	B053 material (25.4*9.53mm)*2 two rows of labels	i5100 300dpi	Label for room temperature use. The label material is synthetic paper, and the use temperature range is -20℃-+80℃; Two labels in a row, 3000 pcs/roll, and the matching ribbon is IP-R4302	3000 pcs/roll
	THT-152-053-3-RP	B053 material 25.4*9.53mm one in a row	i5100 300dpi	Label for normal temperature use. The label material is synthetic paper, and the use temperature range is -20℃-+80℃; Two labels in a row, 4000pcs/roll, and the matching ribbon is IP-R4302; Customized, pre printed coding	4000 pcs/roll
	THT-163-6422-3	B6422 lable 25.4mm*9.53mm + D=9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml; Environment temperature above 40 ℃	3000 pcs/roll
	THT-163-490-3	B490 material 25.4mm*9.53mm + D=9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml and pasted on the wall and round cover of the croygenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	3000 pcs/roll
	THT-152-490-3	B490 material 25.4mm*9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml, only pasted on the wall of cryogenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	3000 pcs/roll
	THT-151-490-3	B490 material 15.24mm*10.16mm+D=8.26mm	i5100 300dpi	Apply to cryogenic tube below 2ml and pasted on the wall and round cover of the croygenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	3000 pcs/roll

Low Temperature Label Printer

Pipette Tip Series

Classification	Product Number	Model	Supporting Printer	Parameter	Loading Capacity
Lable	iTHT-351-490-3	B490 material 35mm*10mm+D=9.53mm	i5100 300dpi	Apply to 2ml croygenic tube and pasted on the wall and round cover of the croygenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	3000 pcs/roll
	THT-163-499-3	B499 material 25.4*9.53+D=9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml and pasted on the wall and round cover of the croygenic tube; Pasted at room temperature and used in the environment above -150°C	3000 pcs/roll
	THT-152-499-3	B499 material 25.4*9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml, only pasted on the wall of cryogenic tube; Pasted at room temperature and used in the environment above -150°C	3000 pcs/roll
	THT-163-461-3	B461material 65*9.53mm,3000 pcs / roll, liquid nitrogen direct paste	i5100 300dpi	Apply to cryogenic tube below 2ml, 1.8ml/1.6ml/1.5ml cryogenic tubes are recommended, and pasted on the wall and round cover of the croygenic tube; Winding type, can be directly pasted after taking out the cryogenic tube in liquid nitrogen	3000 pcs/roll
	THT-152-461-3	B461material 65*9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml, 1.8ml/1.6ml/1.5ml cryogenic tubes are recommended, only pasted on the wall of cryogenic tube; Winding type, can be directly pasted after taking out the cryogenic tube in liquid nitrogen	3000 pcs/roll
	THT-163-492-3	B492 material 25.4*9.53mm+D=9.53mm	i5100 300dpi	Apply to cryogenic tube below 2ml, 1.8ml/1.6ml/1.5ml cryogenic tubes are recommended, and pasted on the wall and round cover of the croygenic tube; Winding type, can be directly pasted after taking out the cryogenic tube in liquid nitrogen	3000 pcs/roll
	THT-163-492-3	B492 material 25.4*9.53+D=9.53mm (Discounts for more than 10 volumes)	i5100 300dpi	Apply to cryogenic tube below 2ml, 1.8ml/1.6ml/1.5ml cryogenic tubes are recommended, and pasted on the wall and round cover of the croygenic tube; Winding type, liquid nitrogen direct pasting	3000 pcs/roll
	THT-136-499-3	B499 material 38.1*19.08mm,3000 pcs/roll	i5100 300dpi	Apply to 1.8ml-5ml cryogenic tube, only pasted on the wall of cryogenic tube; Can withstand liquid nitrogen after pasting at room temperature	3000 pcs/roll
	THT-215-490-3	B490 material 25*15mm,3000 pcs/roll	i5100 300dpi	Apply to 1.8ml-5ml cryogenic tube, only pasted on the wall of cryogenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	3000 pcs/roll
	THT-163-490-2-SC	B490 material 25.4*9.53mm+D=9.53mm, 2000pcs/roll	BBP12	Apply to cryogenic tube below 2ml and pasted on the wall and round cover of the croygenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	2000 pcs/roll
	THT-152-490-2-SC	B490 material 25.4*9.53mm,2000 pcs/roll	BBP12	Apply to cryogenic tube below 2ml, only pasted on the wall of cryogenic tube; Can withstand can be directly pasted after taking out the cryogenic tube in liquid nitrogen at room temperature	2000 pcs/roll

Product Features

Internal thread design ensures secure sealing and reproducibility

Filtered tips. Uniform filter for improved accuracy

Fine scale makes the suction volume clearly discernible

Pipette Tip Series

Standard Tips

- Made of medical-grade polypropylene (PP), the tips are high-temperature-resistant, high-pressure-resistant, and non-deformation.
- Optimized pore size ensures smooth sample suction.
- Three capacity options, respectively 10μl, 200μl and 1000μl, are available for both standard manual and electronic pipettors.
- Various packaging methods, including bulk packing and EO sterile racked packing
- High clarity and perpendicularity ensure pipetting accuracy
- RNase, DNase, human DNA and Pyrogen Free

Model	Description	Unit Quantity	Packing Specification
B10T	10μl tip, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
X10T0	10μl tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
B200Y	200μl tip, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
X200Y0	200μl tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
B200YS	200μl tip with scale, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
B200YL(59)	200μl extended tip, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
B200YL(78)	200μl extended tip, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
B200YL(89)	200μl extended tip, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
B01TL	10μl extended tip, bag-packed, basic type	20000	1000 pcs/bag, 20 bags/case
X01TL0	10μl extended tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
B1000B	1000μl tip, bag-packed, basic type	5000	1000 pcs/bag, 5 bags/case
X1000B0-100	1000μl tip, box-packed, sterile	5000	100 pcs/box, 50 boxes/case
B1250B	1250μl tip, bag-packed, basic type	5000	1000 pcs/bag, 5 bags/case
X1250B0	1250μl tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
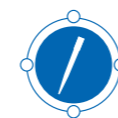
Filter Pipette Tips

- Made of medical-grade polypropylene (PP)
- Super hydrophobicity, the hydrophobic filter element forms a strong barrier to the aerosol, eliminating the risk of cross contamination between the sample and the pipette
- Ultra-fine grinding moulding technology, demoulding without agent guarantees better product quality
- Ultra-fine point ensures smooth sample absorption Innovative design to ensure good flexibility, sealing and compatibility

Model	Description	Unit Quantity	Packing Specification
FB10T	10μl filter tip, bag-packed, basic type	10000	1000 pcs/bag, 10 bags/case
FX10T0	10μl filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FB200T	200μl filter tip, bag-packed, basic type	10000	1000 pcs/bag, 10 bags/case
FX200T0	200μl filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FX200T0S	200μl filter tip with scale, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FX200TL0(59)	200μl extended filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FX200TL0(78)	200μl extended filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FX200TL0(89)	200μl extended filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FB01TL	10μl extended filter tip, bag-packed, basic type	10000	1000 pcs/bag, 10 bags/case
FX01TL0	10μl extended filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
FB1000B	1000μl filter tip, bag-packed, basic type	5000	1000 pcs/bag, 5 bags/case
FX1000B0-100	1000μl filter tip, box-packed, sterile	5000	100 pcs/box, 50 boxes/case
FB1250B	1250μl filter tip, bag-packed, basic type	5000	1000 pcs/bag, 5 bags/case
FX1250B0	1250μl filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case

Pipette Tip Series

Centrifuge Tube Series

Low Retention Tips

Centrifuge tubes

200ul
SLow Retention Tips

200ul
Standard tips

1000ul
SLow Retention Tips

1000ul
Standard tips

- The coated inner wall delivers super hydrophobicity to effectively reduce the risk of the sample of binding to the surface

- Low retention tips help to reduce the loss of precious samples and improve their recovery rate

- Pipette tips reduce the adhesion of DNA, enzymes, proteins, cells, as well as other viscous materials to the tip surface.
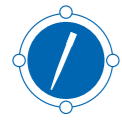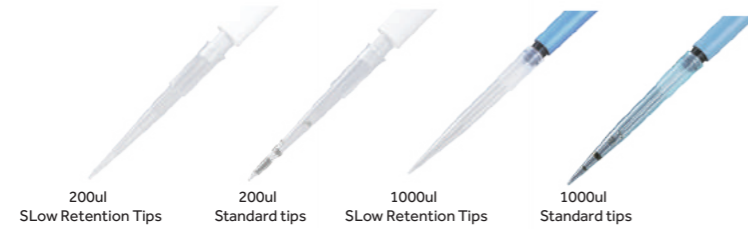
- Low retention tips can be used for pipetting detergent-containing solutions (e.g. PRC master mixes, buffers, or enzyme solutions)

- Suitable for applications that require high micro-pipetting accuracy

- RNase, DNase, human DNA and Pyrogen Free

Model	Description	Unit Quantity	Packing Specification
AB10T	10µl low retention tip, bag-packed	20000	1000 pcs/bag, 20 bags/case
AX10T0	10µl low retention tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AFX10T0	10µl low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB200T	200µl low retention tip, bag-packed	20000	1000 pcs/bag, 20 bags/case
AX200T0	200µl low retention tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AFX200T0	200µl low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB200TS	200µl low retention tip with scale, bag-packed	20000	1000 pcs/bag, 20 bags/case
AFX200T0S	200µl low retention filter tip with scale, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB200TL(59)	200µl extended low retention tip, bag-packed	20000	1000 pcs/bag, 20 bags/case
AB200TL0(59)	200µl extended low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB200TL(78)	200µl extended low retention tip, bag-packed	20000	1000 pcs/bag, 20 bags/case
AB200TL0(78)	200µl extended low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB200TL(89)	200µl extended low retention tip, bag-packed	20000	1000 pcs/bag, 20 bags/case
AB200TL0(89)	200µl extended low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB01TL	10µL extended low retention tip, bag-packed	20000	1000 pcs/bag, 20 bags/case
AX01TL0	10µl extended low retention tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AFX01TL0	10µl extended low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AB1000T	1000µL low retention tip, bag-packed	5000	1000 pcs/bag, 5 bags/case
AX1000T	1000µl low retention tip, box-packed	5000	100 pcs/box, 50 boxes/case
AX1000T0	1000µl low retention tip, box-packed, sterile	5000	100 pcs/box, 50 boxes/case
AFX1000T0-100	1000µl low retention filter tip, box-packed, sterile	5000	100 pcs/box, 50 boxes/case
AB1250T	1250µl low retention tip, bag-packed	5000	1000 pcs/bag, 5 bags/case
AX1250T	1250µl low retention tip, box-packed	4800	96 pcs/box, 50 boxes/case
AX1250T0	1250µl low retention tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
AFX1250T0	1250µl low retention filter tip, box-packed, sterile	4800	96 pcs/box, 50 boxes/case
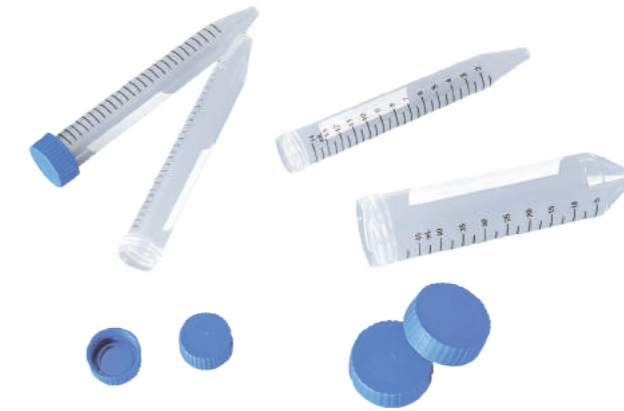
Product Features

- Tube and lid made of medical-grade polypropylene (PP) USP Class VI standards

- 15ml /50ml conical bottom design, high clarity, black clear scale line on the tube body, and a preset white writing area

- Double threaded tube cover, easy to grip for single-handed operation and reliable sealing

- Flat cover design; the cover top can be used as a sample information marking area

- RNase and DNase Free

- Sterilized by gamma rays; sterile and pyrogen-free

- Various packaging methods, including sterile racked packing, sterile bag-packed bulk packing, and non-sterile packing, are available.

A large white frosted writing area

Flat and frosted tube cover facilitates marking

Clear printed scalefacilitates reading of the liquid volume

Model	Description	Unit Quantity	Packing Specification
CEN-15CB0	15ml centrifuge tube	500	25 pcs/bag, 20 bags/case
CEN-50CB0	50ml centrifuge tube	500	25 pcs/bag, 20 bags/case

Centrifuge Tube Series

Microcentrifuge Tubes

Product Features

◦ Made of USP Class VI, medical-grade polypropylene (PP), free from release agent, plasticizer, bacteriostatic agent, and heavy metals

◦ High-clarity tube body for convenient sample observation

◦ The unique cap design with flat surface for writing, delivers enhanced sealing and enables single-handed operation

◦ Can withstand a temperature range: -80°C~120°C

Ultra-high clarity makes samples clearly visible

Universal design suitable for all major brands

Frosted writing area

Snap-on safety cap to ensure safe centrifugation to maximize operational safety during centrifugation tomaximize operational safety

Model	Description	Unit Quantity	Packing Specification
CEN-06T	0.6ml microcentrifuge tube	10000	1000 pcs/box, 10 boxes/case
CEN-15T	1.5ml microcentrifuge tube	5000	500 pcs/box,10 boxes/case
CEN-20T	2.0ml microcentrifuge tube	5000	500 pcs/box,10 boxes/case
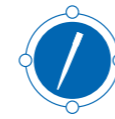
Centrifuge Bottle

Product Features

◦ Unique sealing structure design proves a two-way guarantee for highly effective sealing

◦ Design increases max centrifugal limits

◦ Max. centrifugal force: 7000 xg

◦ Temperature range: -80°C-120°C

◦ Clear scale for accurate and convenient data reading

◦ Sterile and RNase, DNase, human DNA and Pyrogen Free

Model	Description	Unit Quantity	Packing Specification
CEN-225B	225ml centrifuge bottle	36	6 pcs/bag, 6 bags/case
CEN-250B	250ml centrifuge bottle	102	6 pcs/bag, 17 bags/case
CEN-500B	500ml centrifuge bottle	36	6 pcs/bag, 6 bags/case

PCR Tubes
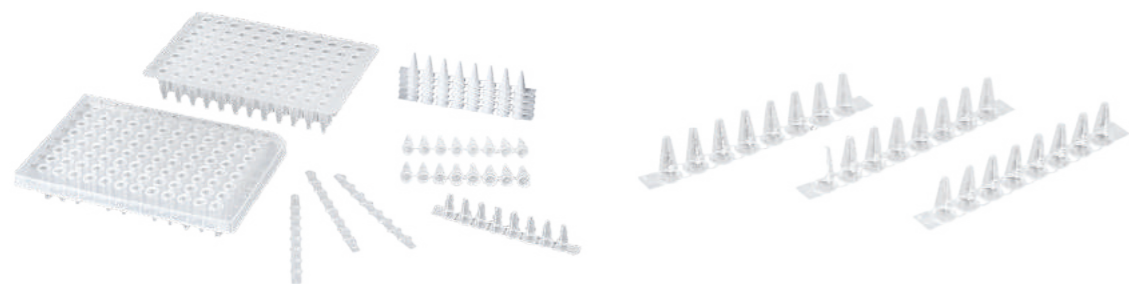
Product Features

- Made from pure polypropylene, it has thin and uniform wall for optimal heat transfer
- The easy-to-open tube and tube lid fasten securely to prevent evaporation and leakage
- RNase, DNase, human DNA and Pyrogen Free, PCR Inhibitors
- Suitable for the mainstream PCR and real-time PCR instruments
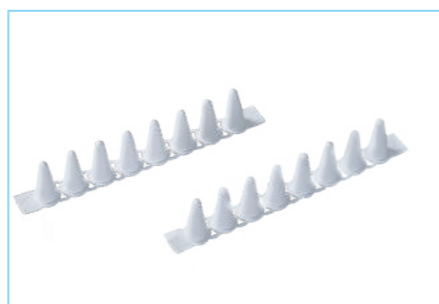
Model	Description	Unit Quantity	Packing Specification
PCR-021T	0.2ml PCR single tube, thin-wall, flat cover	10000	500 pcs/bag,2 bags/box,10 boxes/case
PCR-B-018T	0.1ml PCR 8-strip tube	1250	125 pcs/bag,10 bags/case
PCR-B-018TC	0.1ml PCR 8-strip tube, flat cover	1250	
PCR-B-018W	0.1ml PCR 8-strip tube, white	1250	125 pcs/bag,10 bags/case
PCR-B-018WC	0.1ml PCR 8-strip tube, flat cover, white	1250	
PCR-B-028T	0.2ml PCR 8-strip tube	1250	125 pcs/bag,10 bags/case
PCR-B-028TC	0.2ml PCR 8-strip tube, flat cover	1250	

PCR 96-Well Plates

Product Features

- High-quality polypropylene, manufactured in accordance with high quality standards to produce a reliable plate, delivering excellent uniformity across experiments.
- With a maximum volume of 0.3ml, it is suitable for 0.2ml PCR instruments
- The thin wall of the tube ensures uniform heat transfer and superior light transmittance
- The whole surface of the plate is smooth, firm, and non-deformation.
- RNase, DNase, human DNA and Pyrogen Free
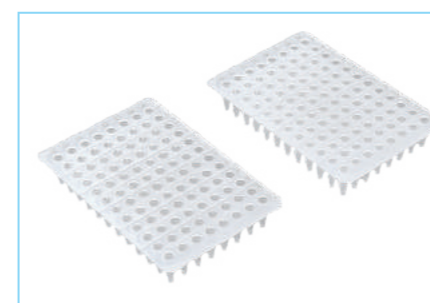
Clear and easy to read andeasy to operate and identify

Prominent open profile reduces the risk of cross contamination

Model	Description	Unit Quantity	Packing Specification
PCR-96B-02NT	0.2ml 96-well PCR plate, no skirt edge	50	10 pcs/box,5 boxes/case
PCR-96B-02HT	0.2ml 96-well PCR plate, half skirt edge	50	10 pcs/box,5 boxes/case
PCR-96B-02HT (U)	0.2ml 96-well PCR plate, half skirt edge, high-temperature-resistant and anti-static.	50	10 pcs/box,5 boxes/case
PCR-96B-02CT	0.2ml 96-well PCR plate, full skirt edge	50	10 pcs/box,5 boxes/case
PCR-96B-02CT (U)	0.2ml 96-well PCR plate, full skirt edge, high-temperature-resistant and anti-static.	50	10 pcs/box,5 boxes/case
PCR96B-01NT	0.1ml 96-well PCR plate, no skirt edge	50	10 pcs/box,5 boxes/case
PCR-96B-01HT	0.1ml 96-well PCR plate, half skirt edge	50	10 pcs/box,5 boxes/case
PCR-96B-01HT (U)	0.1ml 96-well PCR plate, half skirt edge, high-temperature-resistant and anti-static.	50	10 pcs/box,5 boxes/case
PCR-96B-01CT	0.1ml 96-well PCR plate, full skirt edge	50	10 pcs/box,5 boxes/case
PCR-96B-01CT (U)	0.1ml 96-well PCR plate, full skirt edge, high-temperature-resistant and anti-static.	50	10 pcs/box,5 boxes/case

Biomedical
Freezer

-60°C Biomedical Freezer

A versatile low-temperature freezer installed in hospitals, blood stations, diseases control & prevention centers, research institutions, bioscience laboratories and medical laboratories. It is suitable for storing a wide variety of biological products including viruses, bacteria, red blood cells, white blood cells, skin, bone and semen as well as ocean-going supplies and electronic devices. It can also provide a low-temperature environment for testing of special materials.

The secondary application is for the storage of fishery products such as tuna, Australian lobster, salmon, South American shrimps, Argentina red shrimp, top-quality beef, kanpachi, octopus, yellowtail, bonito fish,grouper, and fugu rubripes. This is a requirement for fishery products for human consumption and hence these freezers are popular among professional oceanic fisherman, seafood distributors, speciality seafood stores and sushi restaurants and commercial food manufacturers.

DW-60W258

German Made Energy Efficient Compressor

Digital Temperature Control display

Dual-seal Design

Efficient and Reliable Fan
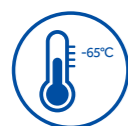
Quickly freeze sea food products to retain their original taste, structure and freshness.

Low noise output, noise cancelling technology yields a smoother operation and a sound level of less than 43dB(A).

Multiple alarm system includes temperature alarm, and sensor error alarm.

HC refrigerant system is optimized to improve refrigeration efficiency by 30 %, and save energy by about 50%.

Single compressor auto cascade refrigeration system provides high efficient cooling power. 100m Insulation ensure optimal thermal protection and energy efficiency.

Dual seal design retains cold and reduces condensation.

304 stainless steel is suitable for both laboratory and is certified food safe for commercial kitchen environments.

Key lock product protection and lockable casters for ease of moving and safe installation.

An easy to use, waterproof digital controller

Temperature Curve
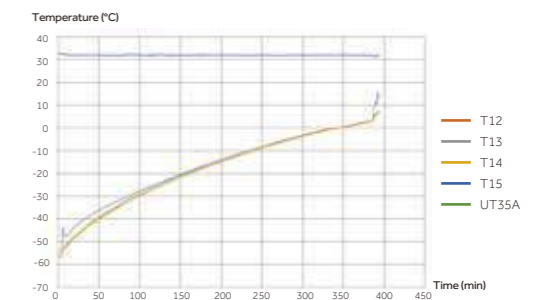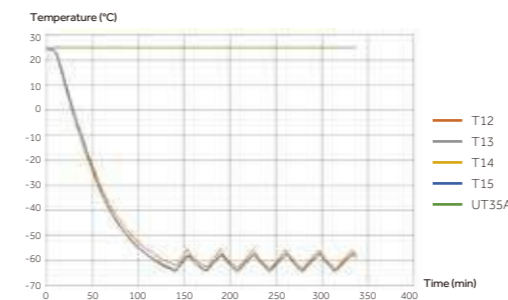
Specifications

	Model		DW-60W138	DW-60W258	DW-60W388
Technical Data	Cabinet Type		Chest	Chest	Chest
	Climate Class		N	N	N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling
	Refrigerant		HC	HC	HC
	Sound Level ((dB(A))		43	43	43
Performance	Cooling Performance (°C)		-60	-60	-60
	Temperature Range (°C)		-30~-60	-30~-60	-30~-60
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED
Electrical Data	Power Supply (V/Hz)		220~240/50	220~240/50	220~240/50
	Power (W)		370	410	420
	Electrical Current (A)		3	3	3.5
	Power Consumption (kWh/24h)		4.5	5.5	6.5
Construction	Capacity (L/Cu.Ft)		138/4.9	258/9.1	388/13.7
	Net/Gross Weight (approx)	kg	62/75	88/108	105/130
		lbs	137/165	194/238	232/287
	Interior Dimensions (W*D*H)	mm	580*445*620	1000*445*620	1450*445*620
		in	22.8*17.5*24.4	39.4*17.5*24.4	57.1*17.5*24.4
	Exterior Dimensions (W*D*H)	mm	790*770*950	1210*770*950	1655*770*950
		in	31.1*30.3*37.4	47.6*30.3*37.4	65.2*30.3*37.4
	Packing Dimensions (W*D*H)	mm	815*800*990	1255*800*990	1695*800*990
		in	32.1*31.5*39	49.4*31.5*39	66.7*31.5*39
Loading Quantities	Container Load (20'/40'/40'H)		28/56/56	22/46/46	14/28/28
Alarms	High/Low Temp		Y	Y	Y
	Sensor Error		Y	Y	Y
Accessories	Caster		Y	Y	Y
	Porthole		Y	Y	Y
Certification	CE		Y	Y	Y

Product appearance and specifications are subject to change without notice

-40°C Biomedical Freezer (Chest)

This product is designed to store vaccines, blood plasma and many other biological materials. Suitable for scientific research institutes, blood stations, hospitals, centers for disease control and prevention, and material science, electronics and chemical laboratories.

DW-40W138J/255J/380J

Scope of Application:

Temperature Control
- Microcomputer control, digital temperature display, display precision is 0.1°C. Adjustable temperature set point -20°C~-40°C
- User settable temperature alarms

Safety System
- Multiple alarms: high/low temperature alarm/sensor error alarm/power failure alarm. Optional high ambient warning and remote alarm contacts
- Battery backed-up alarm will alert for more than 24 hours in case of power failure
- Equipped with overcurrent protector for safety

Refrigeration System
- Durable, market-leading brand compressors and EBM condensing fan ensure a high refrigeration efficiency and maximizes temperature performance
- High density insulation layer delivers superior insulation performance
- Evaporator and condenser design delivers excellent refrigeration efficiencies
- Non-toxic, environmentally-friendly hydrocarbon refrigerants

Temperature Curve

DW-40W138J

DW-40W255J
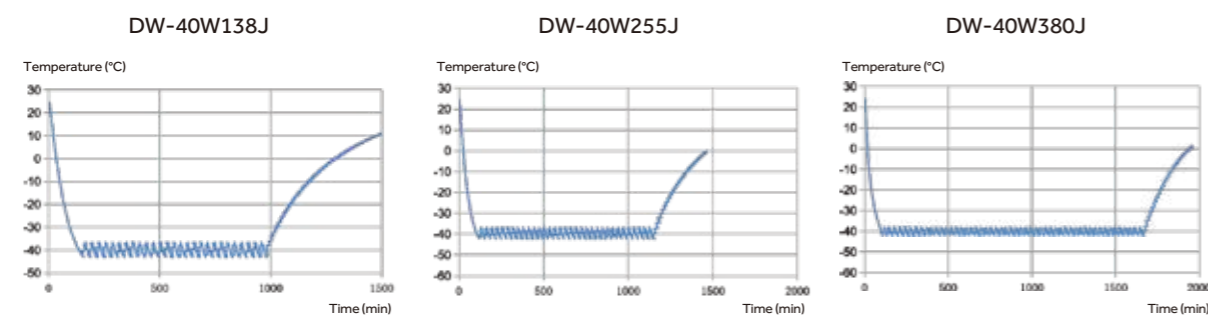
DW-40W380J

Specifications

	Model		DW-40W138J	DW-40W255J	DW-40W380J
Technical Data	Cabinet Type		Chest	Chest	Chest
	Climate Class		SN N	SN N	SN N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual	Manual
	Refrigerant		HC	HC	HC
	Sound Level (dB(A))		42	42	42
Performance	Cooling Performance (°C)		-40	-40	-40
	Temperature Range (°C)		-20~-40	-20~-40	-20~-40
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)		220~240/50	220~240/50	220~240/50
	Power (W)		260	370	450
	Electrical Current (A)		2.3	3.1	2.9
Dimensions	Capacity (L/Cu.Ft)		138/3.9	255/9.0	380/13.4
	Net/Gross Weight (approx)	kg	52/65	76/96	90/115
		lbs	114.6/143.3	167.5/211.6	198.4/253.5
	Interior Dimensions (W*D*H)	mm	580*445*620	1000*445*620	1450*445*620
		in	22.8*17.5*24.4	39.4*17.5*24.4	57.1*17.5*24.4
	Exterior Dimensions (W*D*H)	mm	790*770*950	1210*770*950	1655*770*950
		in	31.1*30.3*37.4	47.6*30.3*37.4	65.2*30.3*37.4
	Packing Dimensions (W*D*H)	mm	815*800*990	1255*800*990	1695*800*990
		in	32.1*31.5*39	49.4*31.5*39	66.7*31.5*39
	Container Load (20'/40'/40'H)		28/56/56	22/46/46	14/28/28
Alarms	High/Low Temperature		Y	Y	Y
	Remote Alarm		Optional	Optional	Optional
	Power Failure		Y	Y	Y
	Sensor Error		Y	Y	Y
	High Ambient Temperature		Optional	Optional	Optional
Accessories	Caster		Y	Y	Y
	Porthole		Y	Y	Y
	USB Interface/RS485		Optional (USB or RS485, either-or)	Optional (USB or RS485, either-or)	Optional (USB or RS485, either-or)
Others	Certificate		CE	CE	CE

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Biomedical Freezer

-40°C Biomedical Freezer (Upright)

Key Features

- Microprocessor control, adjustable temperature range :-20°C to -40°C
- LED digital display and increment at 0.1°C
- Permanently lubricated cooling fan for safety and longevity
- Rapid cooling with shelf evaporator
- Removable double outer door seal design

Ergonomic Design

- USB data logging and temperature recorder (optional)
- Padlock for safe storage
- Drawers are designed with label holders for item identification

Safety

- Multiple alarms include high/low temperature, sensor error, power failure, high ambient temperature, low battery,door ajar
- Alarm Types: buzzer, flashing light, remote alarm

Reliable Performance

USB

Alarms

Double Outer Door Seal

DW-40L278

Padlock

Caster and Feet

Removable Double Outer Door Seal

Suitable for the storage of plasma, biological material, reagents and other essential items. Used within hospitals, disease prevention, academia and commercial laboratories.

Scope of Application:

HC Energy-saving
High efficiency hydrocarbon compressor and refrigeration technology for a lower energy consumption

Superior Uniformity
With the optimized system design, the temperature uniformity of the characteristic point is ± 3°C, and the uniformity of the whole temperature zone is controlled within ± 5°C

Environmental Protection
Hydrocarbon refrigerant, LBA foam polyurethane insulation layer

Adjustable Shelves
Built-in evaporator and adjustable shelves provides large available interior space. Users can store items of different sizes as needed

DW-40L298J

Temperature Curve

DW-40L298J Typical Performance Characteristics at 25°C Ambient

Temperature (°C)

Interior Temperature
Ambien Temperature

Time (min)

Temperature Curve

DW-40L278

Temperature (°C)

Cen Temp
Amb Temp

Time (min)

Temperature (°C)

Cen Temp
Amb Temp

Time (min)

Temperature (°C)

Cen Temp
Amb Temp

Time (min)

-40°C Biomedical Freezer (Upright)

Specifications

	Model	DW-40L92	DW-40L262		DW-40L278		DW-40L298J	DW-40L568J
Technical Data	Cabinet Type	Upright	Upright		Upright		Upright	Upright
	Climate Class	SN N	SN N		SN N		SN N	SN N
	Cooling Type	Direct Cooling	Direct Cooling		Direct Cooling		Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual		Manual		Manual	Manual
	Refrigerant	HC	HC	CFC-Free	HC	CFC-Free	HC	HC
	Sound Level (dB(A))	29	41	44	40	44	39.2	45
Performance	Cooling Performance (°C)	-40	-40		-40		-40	-40
	Temperature Range (°C)	-20~-40	-20~-40		-20~-40		-20~-40	-20~-40
Control	Controller	Microprocessor	Microprocessor		Microprocessor		Microprocessor	Microprocessor
	Display	LCD	LCD		LCD		LED	LCD
Electrical Data	Power Supply (V/Hz)	220~240/50/60	220~240/50/60	115/60	220~240/50	220~240/50/60	220~240/50	220~240/50
	Power (W)	340	310	600	275	370	570	340
	Electrical Current (A)	2.2	2	7.5	2.9	5.1	4.1	2.8
	Power Consumption (kWh/24h)	1.4	2.6	4.3	3.1	5.3	/	4
Construction	Capacity (L/Cu.Ft)	92/3.2	262/9.3		278/98		298/10.5	568/20.1
	Net/Gross Weight (approx) kg	46/51	88/93		115/135		125/140	190/215
	Net/Gross Weight (approx) lbs	101.4/112.4	194.0/205.0		253.5/297.6		275.6/308.6	418.9/474
	Interior Dimensions (W*D*H) mm	435*410*635	480*465*1430		520*435*1230		541*443*1218	610*755*1260
	Interior Dimensions (W*D*H) in	17.1*16.1*25.0	18.9*18.3*56.3		20.5*17.1*48.4		21.3*17.4*48.0	24/29.7/49.6
	Exterior Dimensions (W*D*H) mm	640*610*810	700*705*1665		770*705*1810		770*710*1828	848*951*1780
	Exterior Dimensions (W*D*H) in	25.2*24.0*31.9	27.6*27.8*65.6		30.3*28.0*71.3		30.3*28.0*72.0	33.4/37.4/70.1
	Packing Dimensions (W*D*H) mm	660*700*900	775*760*1880		832*757*1992		832*757*1992	900*1035*1910
	Packing Dimensions (W*D*H) in	26.0*27.6*35.4	30.5*29.9*74.0		32.8*29.8*78.4		32.8*29.8*78.4	35.4/40.7/75.2
Loading Quantities	Container Load (20'/40'/40'H)	48/108/108	21/45/45		21/42/42		21/42/42	12/26/26
Alarms	High/Low Temperature	Y	Y		Y		Y	Y
	Remote Alarm	Y	Y		Y		Y	Y
	Power Failure	Y	Y		Y		Y	Y
	Sensor Error	Y	Y		Y		Y	Y
	Low Battery	/	/		Y		Y	/
	High Ambient Temperature	Y	Y		Y		Y	Y
	Door Ajar	Y	Y		Y		Y	Y
Accessories	Caster	Y	Y		Y		Y	Y
	Foot	Y	Y		Y		Y	Y
	Porthole	Y	Y		Y		Y	Y
	Drawers/Inner Doors	3/-	7/-		6/-		Optional/2	-/2
	USB Interface	Optional	Optional	/	Optional		Optional	Optional
	RS485	Optional	Optional		Optional		Optional	Optional
	Temperature Recorder	/	/		Optional		Optional	Optional
Certification	CE	Y	Y	/	Y		Y	Y

-40°C Biomedical Freezer (Double Doors Type)

The double door -40°C biomedical freezer models offer a large capacity storage space with rapid cooling. Integrated design of cold shelf and evaporator provides additional refrigeration efficiency. Designed to store vaccines, blood plasma and many other biological materials. Installations can be found in research institutions and clinical sites in the life science, pharma, biotech, medical and electronics sectors.

The DW-40L348 is based on the original work horse platform of DW-40L508. The new freezer model operates with two capillary tubes and is equipped with dual gaskets to improve the temperature uniformity through the chamber drastically. It can be installed to satisfy tougher application requirements in universities, research institutions and blood banks.

Reliability and Key Features

- Rated for -40°C at 32°C ambient
- Rapid cooling with shelf evaporator
- Improved temperature uniformity with dual capillary tube design at the range of-20°C to -40°C
- Improved door seal design with two gaskets maintains cabinet temperature more efficiently
- Reduced frost buildup
- 90mm insulation thickness for additional robustness, less power consumption and better temperature retaining ability
- Drawer design maximizes storage space. One unit can hold 360 bags of 230 ml blood bags
- Optional USB interface
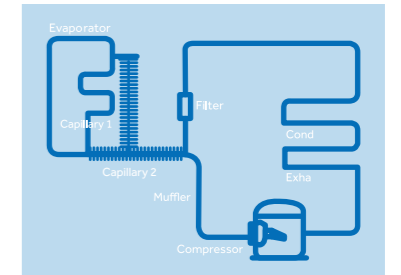
Safety

- Multiple alarms include high/low temperature, power failure, sensor error, low battery, high ambient temperature
- Two types of alarms: buzzer and flashing light, remote alarm

Ergonomic Design

- LED digital display
- Double door design with independent locks to ensure temperature stability and lower power consumption
- Label holders for product identification

DW-40L508

DW-40L348

Control Panel

Drawer

Shelf

Temperature Curve

DW-40L508

DW-40L348
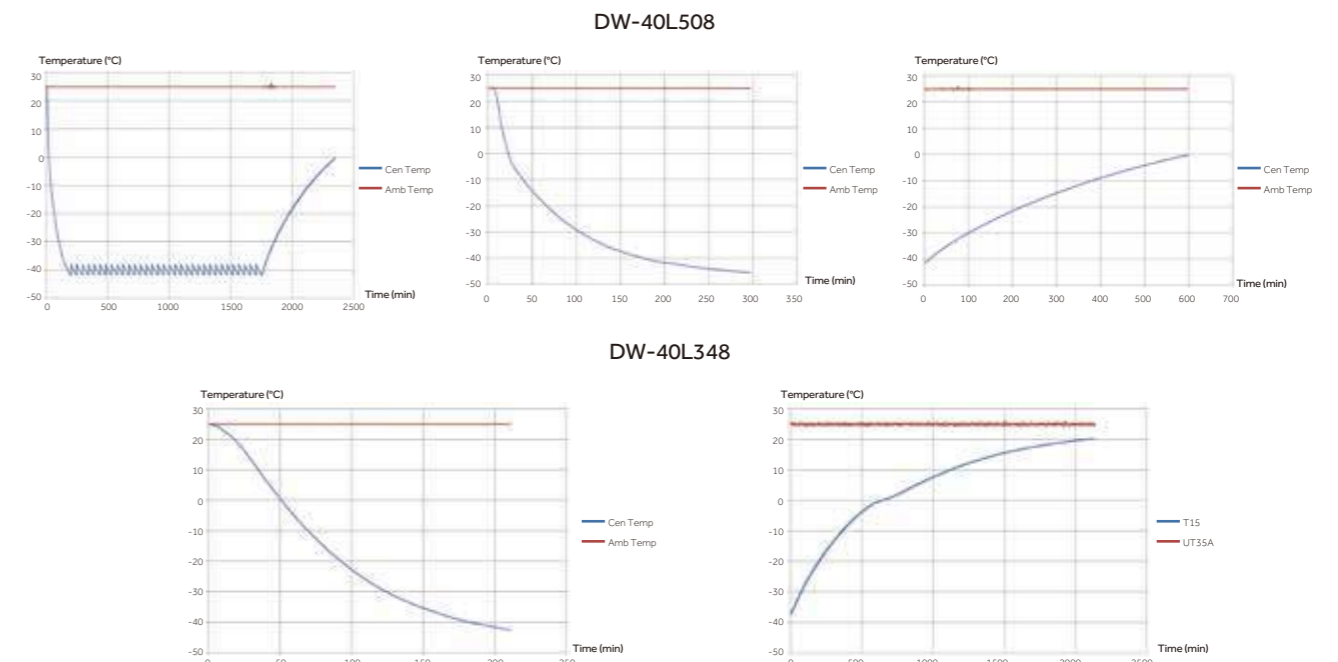
-40°C Biomedical Freezer (Double Doors Type)

Suitable for the storage of plasma, biological material, reagents and other essential items. Used within hospitals, disease prevention, academia and commercial laboratories.

Scope of Application:

HC Energy-saving
High efficiency hydrocarbon compressor and refrigeration technology for a lower energy consumption

Superior Uniformity
With the optimized system design, the temperature uniformity of the characteristic point is ± 3°C, and the uniformity of the whole temperature zone is controlled within ± 5°C

Environmental Protection
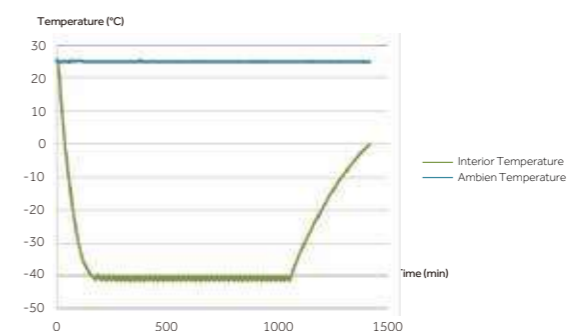Hydrocarbon refrigerant, LBA foam polyurethane insulation layer

Adjustable Shelves
Built-in evaporator and adjustable shelves provides large available interior space. Users can store items of different sizes as needed

DW-40L418D/528D

Temperature Curve

DW-40L418D Typical Performance Characteristics at 25°C Ambient

Temperature (°C)

Time (min)

— Interior Temperature
— Ambien Temperature
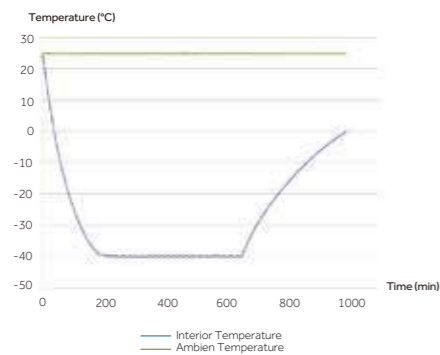
DW-40L528D Typical Performance Characteristics at 25°C Ambient

Temperature (°C)

Time (min)

— Interior Temperature
— Ambient Temperature
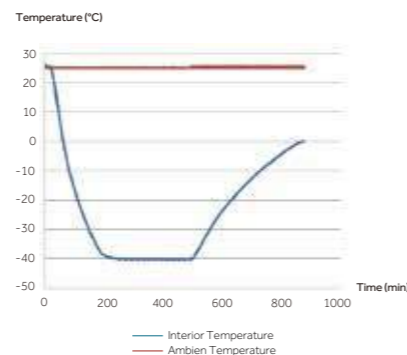
Specifications

Model		DW-40L348	DW-40L508		DW-40L418D	DW-40L528D
Technical Data	Cabinet Type	Upright, Double Door	Upright, Double Door		Upright	Upright
	Climate Class	SN N	SN N		SN N	SN N
	Cooling Type	Direct Cooling	Direct Cooling		Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual		Manual	Manual
	Refrigerant	HC	HC	CFC-Free	HC	HC
	Sound Level (dB(A))	41	41	45	41.7	45
Performance	Cooling Performance (°C)	-40	-40		-40	-40
	Temperature Range (°C)	-20~-40	-20~-40		-20~-40	-20~-40
Control	Controller	Microprocessor	Microprocessor		Microprocessor	Microprocessor
	Display	LED	LED		LED	LED
Electrical Data	Power Supply (V/Hz)	220~240/50	220~240/50	208~230/60	220~240/50	220~240/50
	Power (W)	280	285	510	640	630
	Electrical Current (A)	2.9	2.9	5.6	4.2	5.7
	Power Consumption (kWh/24h)	3.3	3.8	6.6	/	/
Construction	Capacity (L/Cu.Ft)	348/12.3	490/17.3		418/14.8	531/18.8
	Net/Gross Weight (approx) kg	137/145	164/200		145/165	180/205
	Net/Gross Weight (approx) lbs	302.0/320.0	361.6/440.9		319.7/363.8	396.8/451.9
	Interior Dimensions (W*D*H) mm	535*610*1228	685*610*1228		554*620*1230	704*620*1230
	Interior Dimensions (W*D*H) in	21.1*24.0*48.3	27.0*24.0*48.3		21.8*24.4*48.4	27.7*24.4*48.4
	Exterior Dimensions (W*D*H) mm	790*845*1860	940*845*1860		790*845*1878	940*845*1878
	Exterior Dimensions (W*D*H) in	31.1*33.3*73.2	37.0*33.3*73.2		31.1*33.3*73.9	37.0*33.3*73.9
	Packing Dimensions (W*D*H) mm	852*927*2044	997*927*2044		852*927*2044	997*927*2044
	Packing Dimensions (W*D*H) in	33.5*36.5*80.5	39.3*36.5*80.5		33.5*36.5*80.5	39.3*36.5*80.5
Loading Quantities	Container Load (20'/40'/40'H)	12/28/28	12/24/24		12/28/28	12/24/24
Alarms	High/Low Temperature	Y	Y		Y	Y
	Remote Alarm	Y	Y		Y	Y
	Power Failure	Y	Y		Y	Y
	Sensor Error	Y	Y		Y	Y
	Low Battery	Y	Y		Y	Y
	High Ambient Temperature	Y	Y		Y	Y
	Door Ajar	/	/		Y	Y
Accessories	Caster	Y	Y		Y	Y
	Foot	Y	Y		Y	Y
	Porthole	Y	Y		Y	Y
	Drawers/Inner Doors	12/-	10/-		Optional/-	Optional/-
	USB Interface	Optional	Optional		Optional	Optional
	RS485	Optional	Optional		Optional	Optional
	Temperature Recorder	Optional	Optional		Optional	Optional
Certification	CE	Y	Y		Y	Y

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Biomedical Freezer

-40°C Smart Frequency Conversion Biomedical Freezer

DW-40L818BP

Product Features

- **High-efficiency and energy-saving compressor and system**
  Optimized refrigeration system with a high efficiency inverter compressor to reduce energy consumption

- **Green and environmental friendly**
  Hydrocarbon refrigerant, energy saving and environmental protection, built with Urethane foam insulation complies with European ROHS regulation

- **Superior temperature uniformity in a large storage space**
  Built-in evaporator design, and the shelf height can be adjusted according to the size of the stored articles, so as to realize the efficient use of large space in the cabinet.
  The temperature uniformity is ±3°C with the setting temperature of -40°C.

- **Low sound level**
  Noise level less than 45 dB, providing a more comfortable environment

Ergonomic Design

Microprocessor-controlled system
Microprocessor control, with temperature display precision at 0.1°C. Internal temperature is adjustable from -20°C to -40°C.

Multiple alarm functions
Including high/ low temperature, sensor error, power failure, low battery, high ambient, and door ajar alarms. Alarm mode is sound and flash. And the remote alarm interface is available

Configuration
Standard: RS485 interface
Optional: Temperature recorder , USB interface, 10-inch touch screen

Safe and secure
Equipped with key lock, padlock, optional electronic lock, providing multiple safeguards for sample safety

Porthole
Two portholes as standard, allows for independent testing of cabinet temperature

Specifications

	Model		DW-40L818BP
Technical Data	Cabinet Type		Upright
	Climate Class		SN N
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		44 (220V/50Hz)
Performance	Cooling Performance (°C)		-40
	Temperature Range (°C)		-20~-40
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply (V/Hz)		100~230/50/60
	Power (W)		795
	Electrical Current (A)		7.9
Dimensions	Capacity (L/Cu.Ft)		818/28.9
	Net/Gross Weight (approx)	(kg)	210/240
		(lbs)	463.0/529.1
	Interior Dimension (W*D*H)	(mm)	750*755*1460
		(in)	29.5/29.7/57.5
	Exterior Dimension (W*D*H)	(mm)	988*951*1980
		(in)	38.9/37.4/78.0
	Packing Dimension (W*D*H)	(mm)	1040*1060*2150
		(in)	40.9/41.7/84.6
	Container Load (20'/40'/40'H)		10/22/22
Alarms	High/Low Temperature		Y
	Remote Alarm		Y
	Power Failure		Y
	Sensor Error		Y
	Low Battery		Y
	High Ambient Temperature		Y
	Door Ajar		Y
Accessories	Castor		Y
	Foot		Y
	Porthole		Y
	Drawers/Inner Doors		-/3
	USB Interface		Optional
	RS485		Y
	Temperature Recorder		Optional
Others	Certificate		CE

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Temperature Curve

DW-40L818BP

Temperature (°C) — Time (min) — Cen Temp / Amb Temp

Temperature (°C) — Time (min) — T03 / T04 / T05 / UT35A

-40°C Biomedical Freezer

Specifications

	Model	DW-40L92	DW-40L262		DW-40L278		DW-40L348	DW-40L508		DW-40L818BP
Technical Data	Cabinet Type	Upright	Upright		Upright		Upright, Double Door	Upright, Double Door		Upright
	Climate Class	SN N	SN N		SN N		SN N	SN N		SN N
	Cooling Type	Direct Cooling	Direct Cooling		Direct Cooling		Direct Cooling	Direct Cooling		Direct Cooling
	Defrost Mode	Manual	Manual		Manual		Manual	Manual		Manual
	Refrigerant	HC	HC	CFC-Free	HC	CFC-Free	HC	HC	CFC-Free	HC
	Sound Level (dB(A))	29	41	44	40	44	41	41	45	44 (220/50)
Performance	Cooling Performance (°C)	-40	-40		-40		-40	-40		-40
	Temperature Range (°C)	-20~-40	-20~-40		-20~-40		-20~-40	-20~-40		-20~-40
Control	Controller	Microprocessor	Microprocessor		Microprocessor		Microprocessor	Microprocessor		Microprocessor
	Display	LCD	LCD		LED		LED	LED		LED
Electrical Data	Power Supply (V/Hz)	220~240/50/60	220~240/50/60	115/60	220~240/50	220~240/50/60	220~240/50	220~240/50	208~230/60	100~230/50/60
	Power (W)	340	310	600	275	370	280	285	510	795
	Electrical Current (A)	2.2	2	7.5	2.9	5.1	2.9	2.9	5.6	7.9
	Power Consumption (kWh/24h)	1.4	2.6	4.3	3.1	5.3	3.3	3.8	6.6	/
Construction	Capacity (L/Cu.Ft)	92/3.2	262/9.3		278/9.8		348/12.3	490/17.3		818/28.9
	Net/Gross Weight (approx) kg	46/51	88/93		115/135		137/145	164/200		210/240
	lbs	101.4/112.4	194.0/205.0		253.5/297.6		302.0/320.0	361.6/440.9		463.0/529.1
	Interior Dimensions (W*D*H) mm	435*410*635	480*465*1430		520*435*1230		535*610*1228	685*610*1228		750*755*1460
	in	17.1*16.1*25.0	18.9*18.3*56.3		20.5*17.1*48.4		21.1*24.0*48.3	27.0*24.0*48.3		29.5/29.7/57.5
	Exterior Dimensions (W*D*H) mm	640*610*810	700*705*1665		770*710*1810		790*845*1860	940*845*1860		988*951*1980
	in	25.2*24.0*31.9	27.6*27.8*65.6		30.3*28.0*71.3		31.1*33.3*73.2	37.0*33.3*73.2		38.9/37.4/78.0
	Packing Dimensions (W*D*H) mm	660*700*900	775*760*1880		832*757*1992		852*927*2044	997*927*2044		1040*1060*2150
	in	26.0*27.6*35.4	30.5*29.9*74.0		32.8*29.8*78.4		33.5*36.5*80.5	39.3*36.5*80.5		40.9/41.7/84.6
Loading Quantities	Container Load (20'/40'/40'H)	48/108/108	21/45/45		21/42/42		12/28/28	12/24/24		10/22/22
Alarms	High/Low Temperature	Y	Y		Y		Y	Y		Y
	Remote Alarm	Y	Y		Y		Y	Y		Y
	Power Failure	Y	Y		Y		Y	Y		Y
	Sensor Error	Y	Y		Y		Y	Y		Y
	Low Battery	/	/		Y		Y	Y		/
	High Ambient Temperature	Y	Y		Y		Y	Y		Y
	Door Ajar	Y	Y		Y		/	/		Y
Accessories	Caster	Y	Y		Y		Y	Y		Y
	Foot	Y	Y		Y		Y	Y		Y
	Porthole	Y	Y		Y		Y	Y		Y
	Drawers/Inner Doors	3/-	7/-		6/-		12/-	10/-		-/3
	USB Interface	Optional	Optional	/	Optional		Optional	Optional		Optional
	RS485	Optional	Optional		Optional		Optional	Optional		Y
	Temperature Recorder	/	/		Optional		Optional	Optional		Optional
Certification	CE	Y	Y	/	Y		Y	Y		Y

Product appearance and specifications are subject to change without notice

-40°C Biomedical Freezer

Specifications

	Model		DW-40W138J	DW-40W255J	DW-40W380J	DW-40L298J	DW-40L568J	DW-40L418D	DW-40L528D
Technical Data	Cabinet Type		Chest	Chest	Chest	Upright	Upright	Upright	Upright
	Climate Class		SN N	SN N	SN N	SN N	SN N	SN N	SN N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual	Manual	Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC	HC	HC	HC
	Sound Level (dB(A))		42	42	42	39.2	45	41.7	45
Performance	Cooling Performance (°C)		-40	-40	-40	-40	-40	-40	-40
	Temperature Range (°C)		-20~-40	-20~-40	-20~-40	-20~-40	-20~-40	-20~-40	-20~-40
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LCD	LCD	LCD	LED	LCD	LED	LED
Electrical Data	Power Supply (V/Hz)		220~240/50	220~240/50	220~240/50	220~240/50	220~240/50	220~240/50	220~240/50
	Power (W)		260	370	450	570	340	640	630
	Electrical Current (A)		2.3	3.1	2.9	4.1	2.8	4.2	5.7
	Power Consumption (kWh/24h)		/	/	/	/	4	/	/
Construction	Capacity (L/Cu.Ft)		138/3.9	255/9.0	380/13.4	298/10.5	568/20.1	418/14.8	531/18.8
	Net/Gross Weight (approx)	kg	52/65	76/96	90/115	125/140	190/215	145/165	180/205
		lbs	114.6/143.3	167.5/211.6	198.4/253.5	275.6/308.6	418.9/474	319.7/363.8	396.8/451.9
	Interior Dimensions (W*D*H)	mm	580*445*620	1000*445*620	1450*445*620	541*443*1218	610*755*1260	554*620*1230	704*620*1230
		in	22.8*17.5*24.4	39.4*17.5*24.4	57.1*17.5*24.4	21.3*17.4*48.0	24/29.7/49.6	21.8*24.4*48.4	27.7*24.4*48.4
	Exterior Dimensions (W*D*H)	mm	790*770*950	1210*770*950	1655*770*950	770*710*1828	848*951*1780	790*845*1878	940*845*1878
		in	31.1*30.3*37.4	47.6*30.3*37.4	65.2*30.3*37.4	30.3*28.0*72.0	33.4/37.4/70.1	31.1*33.3*73.9	37.0*33.3*73.9
	Packing Dimensions (W*D*H)	mm	815*800*990	1255*800*990	1695*800*990	832*757*1992	900*1035*1910	852*927*2044	997*927*2044
		in	32.1*31.5*39	49.4*31.5*39	66.7*31.5*39	32.8*29.8*78.4	35.4/40.7/75.2	33.5*36.5*80.5	39.3*36.5*80.5
Loading Quantities	Container Load (20'/40'/40'H)		28/56/56	22/46/46	14/28/28	21/42/42	12/26/26	12/28/28	12/24/24
Alarms	High/Low Temperature		Y	Y	Y	Y	Y	Y	Y
	Remote Alarm		Optional	Optional	Optional	Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y	Y	Y	Y
	Low Battery		/	/	/	Y	/	Y	Y
	High Ambient Temperature		Optional	Optional	Optional	Y	Y	Y	Y
	Door Ajar		/	/	/	Y	Y	Y	Y
Accessories	Caster		Y	Y	Y	Y	Y	Y	Y
	Foot		/	/	/	Y	Y	Y	Y
	Porthole		Y	Y	Y	Y	Y	Y	Y
	Drawers/Inner Doors		/	/	/	Optional/2	- / 2	Optional/2	Optional/-
	USB Interface		Optional	Optional	Optional	Optional	Optional	Optional	Optional
	RS485		(USB or RS485, either-or)	(USB or RS485, either-or)	(USB or RS485, either-or)	Optional	Optional	Optional	Optional
	Temperature Recorder		/	/	/	Optional	Optional	Optional	Optional
Certification	CE		Y	Y	Y	Y	Y	Y	Y

Product appearance and specifications are subject to change without notice

-30°C Biomedical Freezer (Forced Air Cooling)

Typical Installation and Application

Large capacity, double door biomedical freezer, designed and manufactured for the low temperature storage of plasma, biological products and other items.

DW-30L1280F

Product Advantages

Microcomputer control, LED digital temperature display with inside temperature accuracy of 0.1°C

Supersized double outer doors, 70mm insulation layer

Safe lock

Electronic mortise lock design, with NFC clocking-in function (fingerprint optional)

Low noise

Casters and foots

4 omnidirectional casters + 2 level legs, easy to move, lock and level

Bottom strainer drawable design

Easy to clean

Optimized system

Ensures fast cool down, reaches -30°C within 3 hours

Standard USB port

Capable of storing more than 15 years of data

Key Features

3°C

Intelligent Defrosting: Prolongs the Defrosting Cycle, Safeguarding the Stability of the Storage Temperature

Compared with traditional timed defrosting, the intelligent defrosting technology reduces the defrosting frequency by half, effectively draws down the temperature fluctuation caused by defrosting during the sample storage cycle by intelligently identifying the amount of frost on the evaporator.

Advanced Defrosting Technology Optimised Safety

The automatic hot gas defrosting technology eliminates the risk of electrical leakage which can occur with heated wire defrosting techniques.

Dual Independent Refrigeration Systems: Superior Safety

If one system fails, the other one would reach -25°C quickly, which doubles the safety of the sample; With air cooling technology, the inside uniformity can reach ±3°C (±5°C during the defrosting period).

Green Hydrocarbon Refrigeration

The DW-30L1280F utilises HC refrigeration technology which is energy-efficient and has a zero impact on the ozone layer. The energy consumption of this model is 8kW/24H.
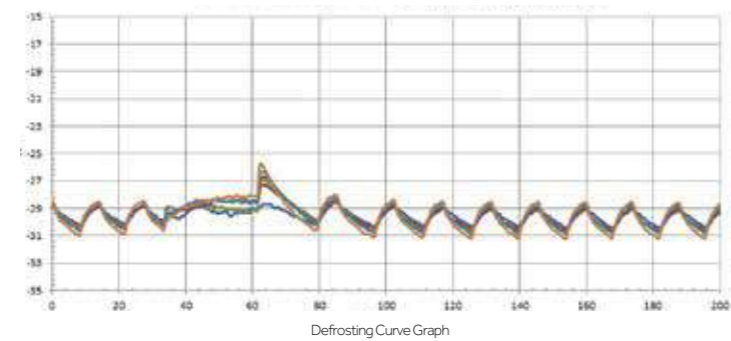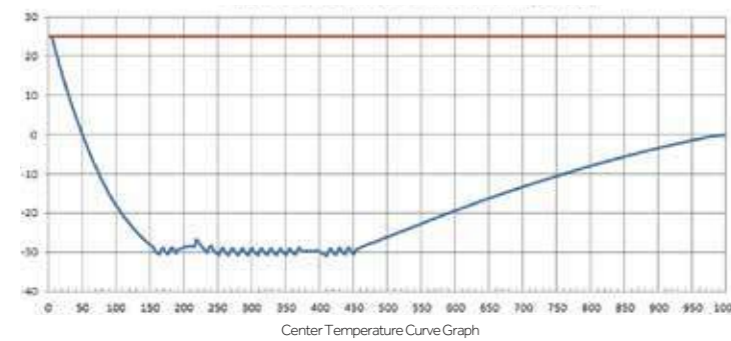
This freezer is designed for storage of critical and temperature sensitive biological samples, laboratory products and medical products in institutions such as blood banks, hospitals and research laboratories.

Key Features

• Forced air and auto defrost design: -30°C storage temperature with automatic defrost cycles guided by time and temperature, ensure maximum temperature stability and minimize energy use

• High-performance refrigeration system: achieves excellent temperature uniformity with intelligent operation control at -30°C

• Microprocessor control with digital display: 0.1° C control increments, adjustable range of -10°C to -30°C

Door lock and padlock

48h Backup battery protection

USB USB

Malfunction Alarms

DW-30L420F

— center of the four-storey inside cabinet
— ambient temperature

Center Temperature Curve Graph

— 1th storey center
— 2th storey center
— 3th storey center
— 4th storey center
— 5th storey center
— 6th storey center

Defrosting Curve Graph

Drawer (Optional)

Microprocessor control panel

Air distribution

Biomedical Freezer

-30°C Biomedical Freezer (Forced Air Cooling)

Safety

- The alarm system includes audible and visual alerts. Alarms include high and low temperature, sensor error, power failure, door ajar, low battery and high ambient temperature. Remote contacts are standard

- A backup battery ensures the display and display continue to operate in the event of a power failure for up to 48hrs

- Standard USB port on DW-30L420F allows users to download temperature data

- Lockable door with padlock facility for added sample security

Ergonomic Design

- Self-closing door with 90° stay-open feature conserves energy and helps maintain temperature uniformity to protect your valuable samples

- Corrosion-free interior brushed stainless steel liner and exterior coated steel plate

- 5 adjustable stainless steel shelves and optional drawer

- Casters and levelling legs, easy to move and lock

Temperature Curve

Pull down test at 25°C ambient

Temperature Uniformity
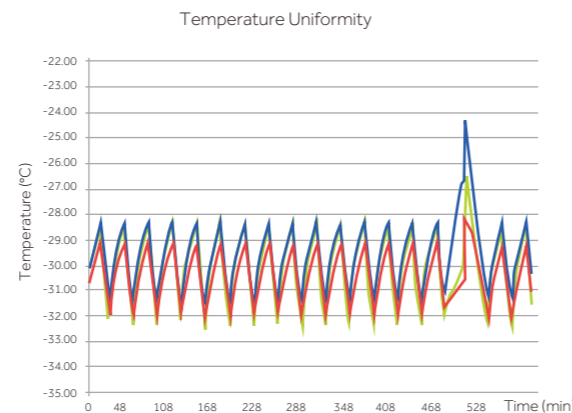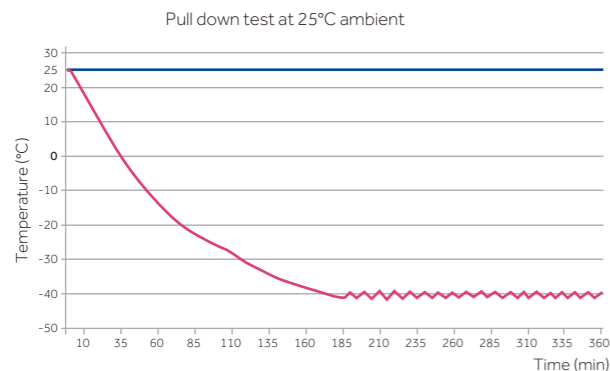
*Freezer set-point -30 ℃， ambient temperature 25 ℃

Specifications

Model		DW-30L420F		DW-30L1280F
Technical Data	Cabinet Type	Upright		Upright
	Climate Class	SN N		N
	Cooling Type	Forced air cooling		Forced air cooling
	Defrost Mode	Automatic (Evaporator), Manual (Inner cabinet & Door frame)		Automatic (Evaporator), Manual (Inner cabinet & Door frame)
	Refrigerant	HC		HC
	Noise (dB(A))	46		46
Performance	Cooling Performance (℃)	-30		-30
	Temp Range (℃)	-10~-30		-10~-30
Control	Controller	Microprocessor		Microprocessor
	Display	LED		LED
Electrical Data	Power Supply (V/Hz)	220~240/50	208~230/60	220~240/50
	Power (W)	460/1000 (Defrost)		900W (220V/50Hz)
	Electrical Current (A)	4.0/5.8 (Defrost)		5
	Power Consumption (kWh/24h)	4.6	5.3	8
Construction	Capacity (L/Cu.Ft)	420/14.8		1280/45.2
	Net/Gross Weight(approx) — kg	195/225		420/480
	Net/Gross Weight(approx) — lbs	429.9/496.0		925/1057
	Interior Dimension(W*D*H) — mm	685*610*1028		1320*752*1260
	Interior Dimension(W*D*H) — in	27.0*24.0*40.5		52/29.6/49.6
	Exterior Dimension(W*D*H) — mm	950*920*1900		1520*1065*1996
	Exterior Dimension(W*D*H) — in	37.4*36.2*74.8		59.8/41.9/78.6
	Packing Dimension(W*D*H) — mm	980*935*2040		1570*1080*2130
	Packing Dimension(W*D*H) — in	38.6*36.8*80.3		61.8/42.5/83.8
Loading Quantities	Container Load (20'/40'/40'H)	12/24/24		6/14/14
Alarms	High/Low Temperature	Y		Y
	Remote Alarm	Y		Y
	Power Failure	Y		Y
	Sensor Error	Y		Y
	Low Battery	Y		Y
	High Ambient Temperature	Y		Y
	Door Ajar	Y		Y
Accessories	Castor	Y		Y
	Foot	Y		Y
	Porthole	Y		Y
	Drawers	-/3	6/-	12
	USB Interface	Y	Optional	Y
	RS485	Optional		Y
Certification	CE	Y	/	Y

F suffix - Forced air cooling
Product appearance and specifications are subject to change without notice

-30°C Smart Frequency Conversion Biomedical Freezer

Typical Installation and Application

Suitable for sample storage within blood banks, hospitals, disease control centres, research institutes, electronic, chemical and other industries, cryopreservation of plasma, biologics and other products, also suitable for cold tests for components and materials.

Key Features

Energy-efficient Variable Frequency Inverter Technology
Optimized refrigeration system with a high efficiency inverter compressor to reduce energy consumption.

Large Capacity Storage with Excellent Temperature Uniformity
The unit offers a large storage space with adjustable shelves, the built-evaporator ensures quick temperature pull down times and excellent temperature uniformity of ±3°C

Low Noise
Sound reduction design lowers the sound level to 37dB(A) at 220V/50Hz.

Environment Friendly
1) HC refrigeration system contains zero chlorine and fluorine,which is better for the environment.
2) Urethane foam insulation complies with European ROHS regulation.

DW-30L818BP

Product Advantages

Ergonomic Design: document holding compartment for storing size A4 paper and pens.

Optional USB port allows users to download temperature data saved up to 10 years for compliance and auditing purposes.

Double door seals for better insulation performance.

Microprocessor temperature control: LED displays cabinet temperature with 0.1°C resolution, ambient temperature, and input voltage.

Pressure equalization port for easy door opening.

Ergonomic handle design: easy access to storage space, built in lock and padlock features.

Inner door design reduces loss of cold air to improve energy efficiency and stable temperature.

Casters and leveling legs for ease of maneuvering and positioning.

DW-30L818BP

Optional stainless steel shelves or coated steel are adjustable.

Power coating galvanized interior with large round corner design, corrosion resistance and easy to clean.

Plastic ABS drawer (optional): 25 blood bags (450ml/bag) can be loaded for one drawer, totally 750 blood bags for 30 drawers. (Note: The dimension of one blood bag is 125*26*190mm)

-30°C Smart Frequency Conversion Biomedical Freezer

Microprocessor Control System

- Microprocessor-based temperature control.
- Large LED displays cabinet temperature with 0.1 °C resolution with adjustable temperature setting from -10 °C to -30 °C.
- Cabinet temperature, ambient temperature and voltage are shown on the panel.
- Alarm conditions include high and low temperature, sensor error, power failure, low battery, door ajar and high ambient.
- Alarm modes are audible and flashing lights. Remote alarm terminals are available.
- Battery supports display and alarm system for forty eight hours after power outage.
- Optional features are IoT module, USB port, temperature recorder and NFC swipe card functions.

Insulation

- 70 mm thick insulation.
- Inner doors for better thermal efficiency.

Porthole

Two standard portholes allow ease of temperature testing.

Security Lock

Lock is standard. Magnetic lock is optional for added protection and security

Temperature Recorder

Optional temperature recorder for temperature recording and compliance.

Typical Performance Characteristics at 25°C ambient

— Ambient Temp.
— Center Temp.

Time (min)

Time (min)

-30°C Biomedical Freezer (Direct Cooling)

Typical Installation and Application

For use in blood banks, hospitals, research institutions, electronics, chemical and other industries, for the preservation of plasma and biological products and cryogenic test of components and materials.

DW-30L818

Key Features

Energy Efficient Hydrocarbon (HC) Refrigeration System
Optimised refrigeration system, utilising high-efficiency HC compressor significantly reduces energy consumption.

Greener By Design
HC refrigerants are natural non-toxic and more environmentally friendly than HFC refrigerants. This alongside the HC compressor technology and LBA foamed polyurethane insulation layer, make this unit greener and in-line with European ROHS directives and environmental protection guidelines.

Large Capacity, Superior Uniformity
Built-in evaporator for faster cooling speed and uniform temperature throughout the cabinet, ±3°C. Large internal space with adjustable shelves for flexible configuration.

Low Noise
Optimised system and cabinet design ensures low noise emissions, less than 44dB.

Typical Performance Characteristics at 25°C ambient

Cooldown curve

Warm up curve

Comprehensive curve

— Ambient Temp.
— Cabinet Temp.

Biomedical Freezer

-30°C Biomedical Freezer (Direct Cooling)

Product Advantages

Easy to clean and Corrosion Resistant
Electric zinc plate powder sprayed internal liner and large round corner design and coated steel plate exterior design ensure reliable corrosion prevention which is easy to clean.

Ergonomic Handle Design: easy access to storage space, built in lock and padlock features.

Double Seal Design Provides better insulation and saves energy.

Inner doors prevent rapid loss of cold air, saving energy and reducing temperature fluctuations.

4 multi-directional casters and 2 lockable feet make it easy to move, level and lock in place.

DW-30L818

Microcomputer electronic thermostat, LCD digital display of inside tempera-ture, with 0.1°C display accuracy.

Flexible Internal Storage
Equipped with 5 plastic coated steel wire shelves with optional stainless steel shelves, which are adjustable to meet the different requirements of users.

Plastic ABS drawer (optional): 25 blood bags (450ml/bag) can be loaded for one drawer, totally 750 blood bags for 30 drawers.
(Note: The dimension of one blood bag is 125*26*190mm)

Specifications

	Model		DW-30L818	DW-30L818BP
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		SN N	SN N
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level (dB(A))		44	37（220V/50Hz）
Performance	Cooling Performance (°C)		-30	-30
	Temp Range (°C)		-10~-30	-10~-30
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LED
Electrical Data	Power Supply (V/Hz)		220~240/50	100~230/50/60
	Power (W)		380	680
	Electrical Current (A)		2.8	7.7
	Power Consumption (kWh/24h)		3.5	3.3
Construction	Capacity (L/Cu.Ft)		818/28.8	818/28.8
	Net/Gross Weight (approx)	kg	205/235	210/240
		lbs	451.9/518.1	463.0/529.1
	Interior Dimension (W*D*H)	mm	750*755*1460	750*755*1460
		in	29.5*29.7*57.5	29.5/29.7/57.5
	Exterior Dimension (W*D*H)	mm	988*951*1980	988*951*1980
		in	38.9/37.4/78.0	38.9/37.4/78.0
	Packing Dimension (W*D*H)	mm	1040*1060*2150	1040*1060*2150
		in	40.9/41.7/84.6	40.9/41.7/84.6
Loading Quantities	Container Load (20'/40'/40'H)		10/22/22	10/22/22
Alarms	High/Low Temperature		Y	Y
	Remote Alarm		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		/	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
Accessories	Castor		Y	Y
	Foot		Y	Y
	Porthole		Y	Y
	Inner Doors		3	3
	Temperature Recorder		Optional	Optional
	USB Interface		Optional	Optional
	RS485 Port		Optional	Y
Certification	CE		Y	Y

BP suffix - Variable frequency invertor compressor

Product appearance and specifications are subject to change without notice

-30°C Biomedical Freezer (Direct Cooling)

Haier Biomedical -30℃ biomedical freezer with smart control and energy-saving hydrocarbon refrigeration system for safe and reliable product storage.

DW-30L278

DW-30L508

Application

Biomedical and life science laboratories within blood banks, hospitals, disease control centres and research institutes as well as electronics and chemical industries. Used for cryopreservation of plasma, biological samples and other products and cold tests for components and materials.

Advantages

• **High-efficiency and energy-saving compressor and refrigeration system**
 Industrial grade energy-saving compressor and optimized cooling system reduces power consumption by more than 55% compared with older models.

• **Green and environmentally friendly**
 Hydrocarbon refrigerant compressor system and use of hydrocarbon refrigerants makes the refrigeration system completely green and environmental friendly. Built with isopentane foam polyurethane insulation, which complies with European RoHS Directive.

• **Superior temperature uniformity**
 Evaporator-shelf design speeds up the cooling process and provides a more uniform temperature distribution. The temperature uniformity at specific points throughout the unit is ±4℃.

• **Low sound level**
 Sound-reducing design with optimized system eliminates high-pitch noise to reduce sound level and deliver a smoother operation

Key Features

Microprocessor control system:
• Microprocessor temperature controller, LCD temperature display, display accuracy at 0.1℃.
• Adjustable temperature setting from -10 ℃ to -30 ℃
• Multiple alarm functions including high temperature alarm, low temperature alarm, sensor error alarm and power failure alarm
• Sound and flash alarm
• Alarm lasts for more than 24 hours after power failure

Excellent temperature-retaining ability
High efficient insulation and double-sealing design improves temperature performance, energy efficiency and system reliability

Lock
Lock latch and key lock double-lock design provides an extra level of security

Porthole
Porthole design is standard

Recorder
Optional chart temperature recorder available

-30°C Biomedical Freezer (Double Doors Type)

PS(Polystyrene) interior, painted steel plate exterior, rust-proof, and easy to clean

Padlock design, multi-user, independent management, latch-lock high security

10 interior plastic drawers with facility for labelling for efficient sample organisation and identification

Microprocessor temperature control, LCD temperature display with display accuracy of 0.1°C

Aluminum alloy handle, stable and durable

Standard casters and levelling feet for ease of manoeuvring and positioning

DW-30L508

DW-30L508 | TYPICAL PERFORMANCE CHARACTERISTICS AT 25°C AMBIENT

Temperature Cool Down Curve

Temperature Recover Curve

Pulldown and Warmup Curve

—— center air temp

Specifications

	Model		DW-30L278	DW-30L508	
Technical Data	Cabinet Type		Upright	Upright, Double Door	
	Climate Class		SN N	SN N	
	Cooling Type		Direct Cooling	Direct Cooling	
	Defrost Mode		Manual	Manual	
	Refrigerant		HC	HC	
	Sound Level (dB(A))		40	41	43
Performance	Cooling Performance (°C)		-30	-30	
	Temperature Range (°C)		-10~-30	-10~-30	
Control	Controller		Microprocessor	Microprocessor	
	Display		LCD	LCD	LED
Electrical Data	Power Supply (V/Hz)		220~240/50	220~240/50	115/60
	Power (W)		330	530	600
	Electrical Current (A)		2	3	5.4
	Power Consumption (kWh/24h)		2.3	2.8	2.8
Construction	Capacity (L/Cu.Ft)		278/9.8	490/17.3	
	Net/Gross Weight (approx)	kg	115/135	164/200	
		lbs	253.7/297.7	361.6/440.9	
	Interior Dimension (W*D*H)	mm	520*435*1230	685*610*1228	
		in	20.5*17.1*48.4	27.0*24.0*48.3	
	Exterior Dimension (W*D*H)	mm	745*675*1810	915*810*1860	
		in	29.3*26.6*71.3	36.0*31.9*73.2	
	Packing Dimension (W*D*H)	mm	805*725*1970	980*905*2040	
		in	31.7*28.5*77.6	38.6*35.6*80.3	
Loading Quantities	Container Load (20'/40'/40'H)		23/46/46	12/26/26	
Alarms	High/Low Temperature		Y	Y	
	Remote Alarm		/	/	Y
	Power Failure		Y	Y	/
	Sensor Error		Y	Y	
	Low Battery		/	/	
	High Ambient Temperature		/	/	
	Door Ajar		/	/	
Accessories	Caster		Y	Y	
	Foot		Y	Y	
	Porthole		Y	Y	
	Drawers/Inner Doors		6/-	10/-	
	Temperature Recorder		Optional	Optional	
	USB Interface		/	/	
	RS485		/	/	
Certifications	CE		Y	Y	/
	UL		/	/	Y

Product appearance and specifications are subject to change without notice

-30°C Biomedical Freezer

Specifications

	Model	DW-30L278	DW-30L298J	DW-30L508		DW-30L528D		DW-30L818	DW-30L818BP	DW-30L420F		DW-30L1280F
Technical Data	Cabinet Type	Upright	Upright	Upright, Double Door		Upright, Double Door		Upright	Upright	Upright		Upright
	Climate Class	SN N	SN N	SN N		SN N		4	SN N	SN N		SN N
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling		Direct Cooling		Direct Cooling	Direct Cooling	Forced air cooling		Forced air cooling
	Defrost Mode	Manual	Manual	Manual		Manual		Manual	Manual	Automatic (Evaporator), Manual (Inner cabinet & Door frame)		Automatic (Evaporator), Manual (Inner cabinet & Door frame)
	Refrigerant	HC	HC	HC		HC		HC	HC	HC		HC
	Sound Level (dB(A))	40	41	41	43	39	43	44	37 (220V/50Hz)	46		46
Performance	Cooling Performance (°C)	-30	-30	-30		-30		-30	-30	-30		-30
	Temperature Range (°C)	-10~-30	-10~-30	-10~-30		-10~-30		-10~-30 (-35°C at 25°C Ambient Temperature)	-10~-30	-10~-30		-10~-30
Control	Controller	Microprocessor	Microprocessor	Microprocessor		Microprocessor		Microprocessor	Microprocessor	Microprocessor		Microprocessor
	Display	LCD	LCD	LCD	LED	LCD		LCD	LED	LED		LED
Electrical Data	Power Supply (V/Hz)	220~240/50	220~240/50	220~240/50	115/60	220~240/50	115/60	220~240/50	100~230/50/60	220~240/50	208~230/60	220~240/50
	Power (W)	330	330	530	600	460	420	/	680	460/1000 (Defrost)		900W (220V/50Hz)
	Electrical Current (A)	2	2.5	3	5.4	3.1	5	2.8	7.7	4.0/5.8 (Defrost)		4.0/5.8 (Defrost)
	Power Consumption (kWh/24h)	2.3	/	2.8	2.8	/		/	/	4.6	5.3	5
Construction	Capacity (L/Cu.Ft)	278/9.8	298/10.5	490/17.3		531/18.8		818/28.9	818/28.9	420/14.8		1280/45.2
	Net/Gross Weight (approx) kg	115/135	125/140	164/200		180/205		205/235	210/240	195/225		420/480
	lbs	253.7/297.7	275.6/308.6	361.6/440.9		396.8/451.9		451.9/518.1	463/529.1	429.9/496.0		925/1057
	Interior Dimensions (W*D*H) mm	520*435*1230	541*443*1218	685*610*1228		704*620*1230		750*755*1460	750*755*1460	685*610*1028		1320*752*1260
	in	20.5*17.1*48.4	21.3*17.4*48.0	27.0*24.0*48.3		27.7*24.4*48.4		29.5*29.7*57.5	29.5*29.7*57.5	27.0*24.0*40.5		52/29.6/49.6
	Exterior Dimensions (W*D*H) mm	745*675*1810	770*710*1828	915*810*1860		940*845*1878		988*951*1980	988*951*1980	950*920*1900		1520*1065*1996
	in	29.3*26.6*71.3	30.3*28.0*72.0	36.0*31.9*73.2		37.0*33.3*73.9		38.9*37.4*78.0	38.9*37.4*78	37.4*36.2*74.8		59.8/41.9/78.6
	Packing Dimensions (W*D*H) mm	805*725*1970	832*757*1992	980*905*2040		997*927*2044		/	/	980*935*2040		1570*1080*2130
	in	31.7*28.5*77.6	32.8*29.8*78.4	38.6*35.6*80.3		39.3*36.5*80.5		/	/	38.6*36.8*80.3		61.8/42.5/83.8
Loading Quantities	Container Load (20'/40'/40'H)	23/46/46	21/42/42	12/26/26		12/24/24		/	/	12/24/24		6/14/14
Alarms	High/Low Temperature	Y	Y	Y		Y		Y	Y	Y		Y
	Remote Alarm	/	Y	/	Y	Y		Y	Y	Y		Y
	Power Failure	Y	Y	Y	/	Y		Y	Y	Y		Y
	Sensor Error	Y	Y	Y		Y		Y	Y	Y		Y
	Low Battery	/	N	/		N		N	Y	Y		Y
	High Ambient Temperature	/	Y	/		Y		Y	Y	Y		Y
	Door Ajar	/	Y	/		Y		Y	Y	Y		Y
Accessories	Caster	Y	Y	Y		Y		Y	Y	Y		Y
	Foot	Y	Y	Y		Y		Y	Y	Y		Y
	Porthole	Y	Y	Y		Y		/	Y (2)	Y		Y
	Drawers/Inner Doors	6/-	N	10/-		/		5/3	5/3	-/3	6/-	12
	USB Interface	/	Optional	/		Optional		Optional	Optional	Y	Optional	Y
	RS485	/	Optional	/		Optional		Y	Y	Optional		Optional
	Temperature Recorder	Y	Optional	Y	/	Optional		/	/	/		/
Certification	CE	/	CE	/	Y	CE	UL	Y	Y	Y	/	Y

Product appearance and specifications are subject to change without notice

-25°C Biomedical Freezer

The Haier Biomedical -25°C biomedical freezer maximises storage space. Integrated cold shelf and evaporator design provides maximum refrigeration efficiency.

DW-25L92/262

Pull down test at 25°C ambient

Specifications

Model		DW-25L92		DW-25L262	
Technical Data	Cabinet Type	Upright		Upright	
	Climate Class	SN N		SN N	
	Cooling Type	Direct Cooling		Direct Cooling	
	Defrost Mode	Manual		Manual	
	Refrigerant	HC		HC	
	Sound level ((dB(A))	27	28	34	34
Performance	Cooling Performance (°C)	-25		-25	
	Temperature Range (°C)	-10~-25		-10~-25	
Control	Controller	Microprocessor		Microprocessor	
	Display	LCD		LCD	
Electrical Data	Power Supply (V/Hz)	220~240/50	115/60	220~240/50	115/60
	Power (W)	255	125	270	135
	Electrical Current (A)	1.2	1.8	1.4	2.6
	Power Consumption (kWh/24h)	0.65	0.49	0.95	0.73
Construction	Capacity (L/Cu.Ft)	92/3.2		262/9.3	
	Net/Gross Weight (appox) kg	46/51		88/93	
	lbs	101.4/112.4		194.0/205.0	
	Interior Dimensions (W*D*H) mm	435*410*635		480*465*1430	
	in	17.1*16.1*25.0		18.9*18.3*56.3	
	Exterior Dimensions (W*D*H) mm	640*610*810		700*705*1665	700*705*1730
	in	25.2*24.0*31.9		27.6*27.8*65.6	27.6*27.8*68.1
	Packing Dimensions (W*D*H) mm	660*700*900		775*760*1880	775*760*1890
	in	26.0*27.6*35.4		30.5*29.9*74.0	30.5*29.9*74.4
Loading Quantities	Container Load (20'/40'/40'H)	48/108/108		21/45/45	
Alarms	High/Low Temp	Y		Y	
	Sensor Error	Y		Y	
	Door Ajar	Y		Y	
	Remote Alarm	Y		Y	
Accessories	Caster	Y		Y	
	Foot	Y		Y	
	Porthole	Y		Y	
	Drawers	3		7	
	USB Interface	Optional	/	Optional	/
	RS485	Optional		Optional	
Certifications	CE	Y	/	Y	/
	UL	/	Y	/	Y

Product appearance and specifications are subject to change with out notice

Key Features

- Chemically stable, HC commercially available and environmently safe refrigerant
- High density foam insulation for rigidity and stable storage temperature
- Microprocessor control, digital display, adjustable temperature range: -10°C~-25°C
- LED digital display for clear observation
- Wide voltage tolerance design with applicable voltage range of 187~242 V/AC

Safety

- Multiple malfunction alarms including high low temperature, sensor error
- Two types of alarm indications: audible buzzing and visible flashing light
- Door lock for storage safety
- Storage drawer

Spark Free
Refrigerator/Freezer

Spark Free Refrigerator

Typical Installation

Spark free refrigerators are installed typically in many different laboratories and research facilities to store chemical or experimental reagents that are flammable, explosive, evaporative or corrosive.

Product Advantages

ATEX II C-T6 E.U. Explosion Proof Certification

Explosion proof features include antistatic liner, gasket, explosion proof fan motor, over current and voltage protection. ATEX II C-T6 explosion proof certification for Haier's laboratory refrigerator ensures safety in your work place.

3~16°C Setting Temperature Range

Smart temperature control system limits the temperature variance within ±3°C. Adjustable set point for the range of 3°C ~16°C, factory default set temperature is 5°C, controlling the temperature inside the chamber is 2~8°C.

One-touch Search for Historic Data

The highest and lowest historic temperature data is saved and can be checked with one key stroke.

High Efficiency HC Cooling Technology

The hydrocarbon refrigeration system operates at a much higher efficiency and reduces the energy consumption by about 50 percent.

Ergonomic Design

High Strength Glass Shelves

Tempered glass shelves hold 40 kg of products per shelf.

Low Noise
Noise cancelling technology reduces the sound level to less than 40 dB(A) for a much-improved environment.

Dual Lock Design with Multiple Alarm Systems

A mortise lock is standard on the door. Standard alarms include high and low temperature, door ajar, and sensor errors.

Cabinet Structure

Glass Shelve
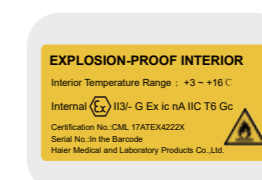
ATEX Certification Label

Explosion Proof Cabinet/Fan

EXPLOSION-PROOF INTERIOR
Interior Temperature Range : +3 ~ +16 C
Internal II3/- G Ex ic nA IIC T6 Gc
Certification No. CML 17ATEX4222X
Serial No. In the Barcode
Haier Medical and Laboratory Products Co.,Ltd.

Anti-static operating instruction
1.Clean plastic parts with a damp cloth only.
2.Do not use a dry cloth to clean plastic parts.
3.Danger of sparks due to electrostatic discharge.
4.Warning - potential electrostatic charging hazard - see instructions.
WARNING

Spark Free Refrigerator

Application Range

Haier spark free refrigerators are ATEX certified in the application range II 3G Ex ic nA II T6, which means the appliances can be found in the whole II zone environment (including II A and II B, II C), a typical environment within many biochemistry laboratories.

Explosive-proof Rating

I	**Coal mine (gas)**					
II C	hydrogen water gas	ethyne		carbon disulfide	ethyl nitrate	
II B	allylene acrylonitrile dimethyl ether hydrogen cyanide city gas	butadiene epoxy acetylene ethylene furan	dimethyl ether acrolein hydrogen sulfide	butyl oxide diethyl ether ethyl methyl ether tetrafluoroethylene		
	Spark Free Area					
II A	methane , methylbenzene , methyl ester , ethane , dimethylmethane , acetone , crylic acid , benzene , styrene , carbonic oxide , acetic ether , acetic acid , chlorobenzene , methyl acetate , ammonia	methyl alcohol , ethyl alcohol , ethylbenzene , propyl alcohol , propylene , butanol , butane , n-butyl acetate , amyl acetate , cyclopentane	pentane , amyl alcohol , hexane , hexyl alcohol , heptane , octane , cyclohexyletha- noids , turpentine oil , naphtha , oil (including gasoline) , fuel oil , Pentaerythrityl tetrachloride	acetaldehyde trimethylamine	ethyl nitrite	
III	**Dust environment**					**Temperature**
	T1(450°C)	T2(300°C)	T3(200°C)	T4(135°C)	T5(100°C)	T6(85°C)

Warning: Do not store open containers of volatile substances in this refrigerator.

Specifications

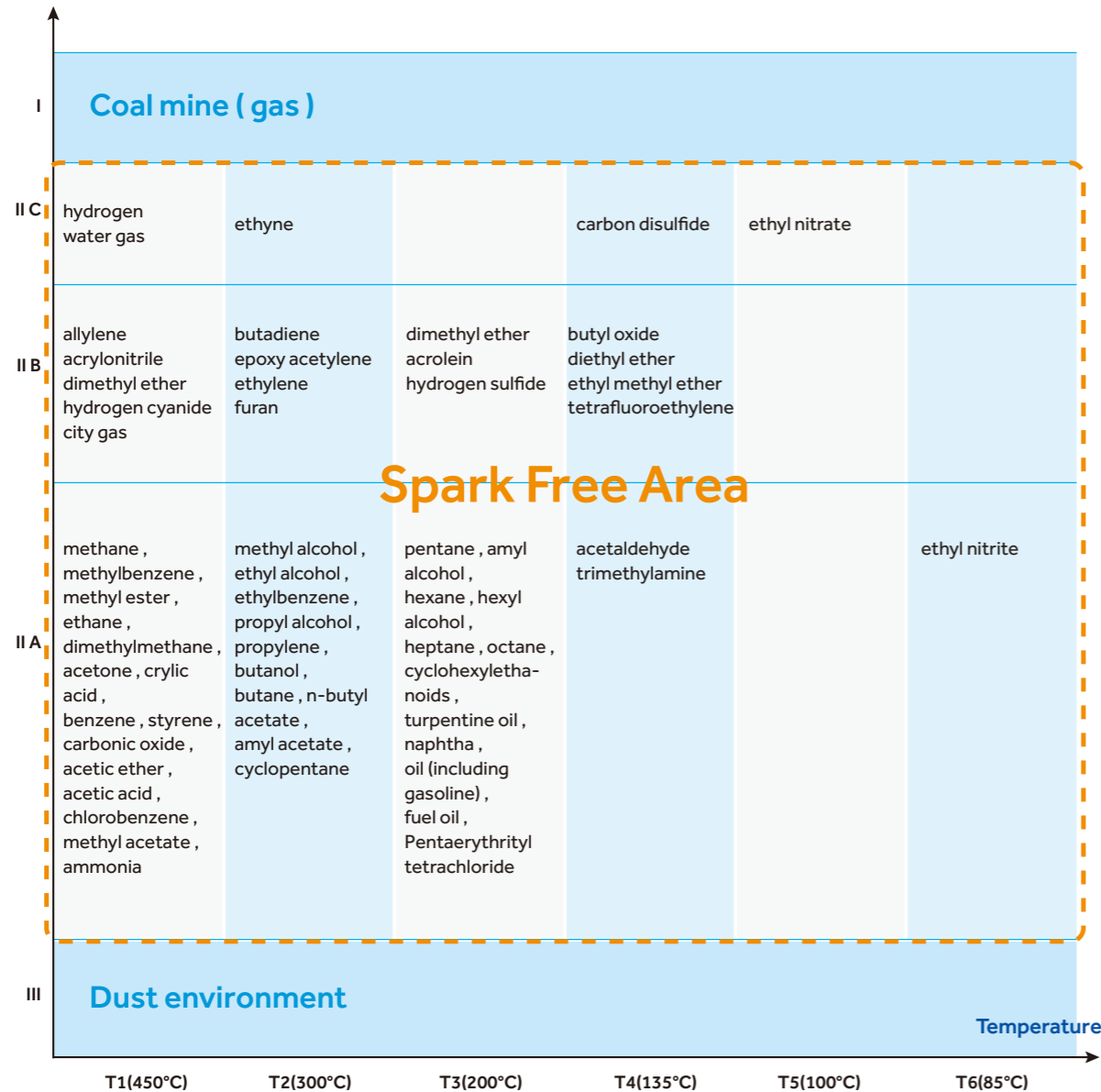|	Model		HLR-118SF	HLR-310SF	HLR-118FL	HLR-310FL
Technical Data	Type		Under-Counter	Upright	Under-Counter	Upright
	Climate Class		N	N	N	N
	Cooling Type		Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling
	Defrost Mode		Auto	Auto	Auto	Auto
	Refrigerant		R600a	R600a	R600a	R600a
	Sound Level (dB(A))		40	40	40	40
Performance	Temperature Range (°C)		3~16°C Adjustable	3~16°C Adjustable	3~16°C Adjustable	3~16°C Adjustable
	Ambient Temperature (°C)		16~32	16~32	16~32	16~32
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)		220-240/50	220-240/50	220-240/50	220-240/50
	Power (W)		55	210	55	210
	Electrical Current (A)		1.2	1.26	1.2	1.26
	Power Consumption (kWh/24h)		0.56	1.05	0.56	1.05
Construction	Capacity (L/Cu.Ft)		118/4.2	310/10.9	118/4.2	310/10.9
	Net/Gross Weight (approx)	kg	44/49	72/83	44/49	72/83
		lbs	97/108	158.7/183	97/108	158.7/183
	Interior Dimensions (W*D*H)	mm	515*415*630	560*500*1290	515*415*630	560*500*1290
		in	20.3*16.3*24.8	22.0*19.7*50.8	20.3*16.3*24.8	22.0*19.7*50.8
	Exterior Dimensions (W*D*H)	mm	597*635*810	605*598*1840	597*635*810	605*598*1840
		in	23.5*25*31.9	23.8*23.6*73.6	23.5*25*31.9	23.8*23.6*73.6
	Packing Dimensions (W*D*H)	mm	680*690*910	660*670*2020	680*690*910	660*670*2020
		in	26.8*27.2*35.8	26*26.4*79.5	26.8*27.2*35.8	26*26.4*79.5
Loading Quantities	Container Load (20'/40'/40'H)		48/96/96	24/51/51	48/96/96	24/51/51
Alarms	High/Low Temperature		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
Accessories	Caster		2	4	2	4
	Foot		2	2	2	2
	Shelves/Baskets		2/1	4/0	2/1	4/0
	Water Tray		1	1	1	1
	Padlock Adapter Kit/Quantity		/	1	/	1
	Built-in Key Door Lock/Quantity		1	1	1	1
Certification	CE		Y	Y	Y	Y
	ATEX		Y	Y	Y	Y

Product appearance and specifications are subject to change without notice

Typical Installation

It can be used for safe storage of potentially flammable items and other temperature sensitive samples at low temperatures. Applications found within life science, medical, electronics and chemical industries.

DW-30L278SF/FL

DW-30L278SF

Product Advantages

Explosion Proof Interior

The SF series is composed of a non-anti-static liner, door lining and drawers; the FL series is composed of an anti-static liner, door lining and drawers. Equipped with an overcurrent and overvoltage protection system with all components earthed to ensure static is discharged safely. Certified to ATEX IIC-T6 EU and can be used in zone 2 environments.

Hydrocarbon Energy-saving

- Utilizing a hydrocarbon compressor and hydrocarbon refrigerant resulting in a more eco-friendly refrigeration system.
- Cyclo-isopentane foaming polyurethane insulation and manufactured with materials that comply with the European ROHS directive for environmental protection.
- The hydrocarbon energy-saving and high-efficiency compressor results in an optimized refrigeration system which is more energy efficient than older models.

Excellent Temperature Uniformity

An evaporator shelf design is adopted inside the freezer whereby the evaporation plate serves as a shelf, to ensure faster cooling and a more uniform temperature. The temperature uniformity at points throughout the unit is ±4°C.

Laboratory Deep Freezer with explosion-proof interior
Interior Temp. Range : -10 ~ -25℃ (DW-25L92FL/SF)
-10 ~ -30℃ (DW-30L278FL/SF)
Internal ⟨Ex⟩ II3/- G Ex ic IIC T6 Gc
Certification No. :CML 18ATEX4058X
Serial No.:In the Barcode
Haier Medical and Laboratory Products Co.,Ltd.

Low Noise

Cabinet structure and refrigeration system noise reduction design lowers noise level to less than 40dB(A) and eliminating any harsh high-frequency noises.

Anti-static operating instruction
1.Clean plastic parts with a damp cloth only.
2.Do not use a dry cloth to clean plastic parts.
3.Danger of sparks due to electrostatic discharge.
WARNING 4.Warning - potential electrostatic charging hazard - see instructions.

Key Features
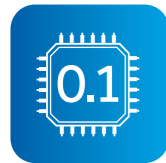
Microprocessor-controlled system

- Microprocessor electronic thermostat, LCD temperature display to an accuracy of 0.1°C;
- Adjustable set point of between -10~-30°C;
- Alarm functions include a high and low temperature alarm, sensor error alarm and power failure alarm;
- Audible and visual alarm;
- Display/Alarm is battery backed up for 24 hours in the event of a power failure.

Good thermal insulation

The super-thick insulation layer and removable door gasket design improves the thermal insulation and energy-saving effects to enhance the reliability of the freezer.

Safety lock

Dual-lock design of lock catch and key lock. An external padlock can be added for additional security.

Warning sticker

The SF series adopts the non-anti-static liner and front-operated yellow warning sticker to warn users about safe operation requirements and ensure safe use.

Drawers

The SF series of freezer are provided with six plastic drawers and the FL series are provided with six drawers made of anti-static materials. Each drawer has a warning sticker slot to meet different storage and identification requirements.

Caster

Caster and levelling feet design, easy to move and fix in place.

Specifications

	Model		DW-30L278SF	DW-30L278FL
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		SN N	SN N
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level(dB(A))		40	40
Performance	Cooling Performance(°C)		-30	-30
	Temperature Range (°C)		-10~-30	-10~-30
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LCD
Electrical Data	Power Supply(V/Hz)		220~240/50	220~240/50
	Power(W)		330	330
	Electrical Current(A)		2.0	2.0
Construction	Capacity(L/Cu.Ft)		278/9.8	278/9.8
	Net/Gross Weight(approx)	kg	115/135	115/135
		lbs	254/298	254/298
	Interior Dimensions(W*D*H)	mm	520*435*1230	520*435*1230
		in	20.5*17.1*48.4	20.5*17.1*48.4
	Exterior Dimensions(W*D*H)	mm	745*675*1810	745*675*1810
		in	29.3*26.6*71.3	29.3*26.6*71.3
	Packing Dimensions(W*D*H)	mm	805*725*1970	805*725*1970
		in	31.7*28.5*77.6	31.7*28.5*77.6
Loading Quantities	Container Load (20'/40'/40'H)		23/46/46	23/46/46
Alarms	High/Low Temperature		Y	Y
	Remote Alarm		/	/
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Door Ajar		/	/
Accessories	Caster		Y	Y
	Foot		Y	Y
	Drawers/Inner Doors		6/-	6/-
Others	Certification		CE ATEX	CE ATEX
	Interior Material/Colour		PS Plate/Grey	Antistatic PS Plate/Black

Product appearance and specifications are subject to change without notice

Haier Biomedical
Intelligent Protection of Life Science

Laboratory Refrigerator

Laboratory Refrigerator

Typical Installation

Used to store chemicals, reagents and consumables within laboratories and research facilities.

Product Advantages

Precise Control of Temperature

Adjustable set temperature range is 3°C to 16°C. A smart temperature control system keeps the internal temperature variation within ±3°C inside the chamber.

High Efficiency HC Cooling Technology

The hydrocarbon refrigeration system operates at a much higher efficiency and reduces the energy consumption by about 50 percent.

Ergonomic Design

One-touch search for historic data

The highest and lowest historic temperature data is saved and can be checked with one key stroke.

Low Noise

Noise cancelling technology reduces the sound level to less than 40 dB(A) for an improved working environment.

Automatic Door Closing Function

High Strength Glass Shelves

Tempered glass shelves hold 20 kg of products per shelf.

Dual lock design with multiple alarm systems

A mortise lock is standard on the door with option to add a padlock for additional security. Standard alarms include high and low temperature, door opening, and sensor errors.

Cabinet Structure   Glass Shelve   Fan/Interior Light   Display Board

Specifications

	Model		HLR-310F
Technical Data	Type		Upright
	Climate Class		N
	Cooling Type		Forced Air Cooling
	Defrost Mode		Auto
	Refrigerant		R600a
	Sound Level (dB(A))		40
Performance	Temperature Range (°C)		3~16 Adjustable
	Ambient Temperature (°C)		16~32
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply (V/Hz)		220-240/50
	Power (W)		225
	Electrical Current (A)		1.6
	Power Consumption (kWh/24h)		1.05
Construction	Capacity (L/Cu.Ft)		310/10.9
	Net/Gross Weight (approx)	kg	72/83
		lbs	158.7/183
	Interior Dimensions (W*D*H)	mm	560*500*1290
		in	22.0*19.7*50.8
	Exterior Dimensions (W*D*H)	mm	605*598*1840
		in	23.8*23.6*73.6
	Packing Dimensions (W*D*H)	mm	660*670*1920
		in	26.0*26.4*75.6
Loading Quantities	Container Load (20'/40'/40'H)		24/51/51
Alarms	High/Low Temperature		Y
	Sensor Error		Y
	Door Ajar		Y
Accessories	Caster		4
	Foot		2
	Porthole		Y
	Shelves		4
	Temperature Setting Mode		Password Protection
	Temperature Sensor		1 Resistance Thermometer
Certification	CE		Y

Product appearance and specifications are subject to change without notice

Fluid Warming Cabinet

Application

Heating applications include warming of liquid medicine, nutrient solution, rinsing liquid and physiological saline. Installations can be found in operating rooms, ICU, emergency rooms, wards and other related areas.

Product Features

• Fast heating speed: variable power PTC heating module with fast heating speed and energy saving.
• UV sterilization: UV light sterilization in the cabinet with a variety of optional sterilization methods for effective prevention of possible contamination.
• Multiple overheat protections: electronic control + mechanical temperature control + overheat protection, multiple temperature control to ensure heating safety.
• Environmentally friendly: no compressor or external fan, extremely quiet with no disturbance to the airflow in the operating room and no effect on temperature, reduces risks of cross-contamination.

Product Advantages

• Fast and efficient heating.
• Standard UV sterilization for effective sterilization and other sterilization options available.
• Multiple over heating protections to ensure product viability.
• Two-sensor.

Ergonomic Design

• Large and clear 7-inch LCD touch screen.
• Easy to clean stainless steel interior and flat external surfaces.
• Multiple alarms for over-heating protection.

Internal Structure   7 Inch LCD Screen   UV Sterilization Lamp

Specifications

	Model		HYR-111
Technical Data	Cabinet Type		Upright, one glass door
	Climate Class		SN
	Warming Type		Forced air warming
	Sound Level (dB(A))		42
Performance	Temperature Range (°C)		26°C~50°C, above ambient temperature
Control	Controller		Microprocessor
	Display		LCD Touch Screen
Electrical Data	Power Supply (V/Hz)		220/50
	Power(W)		130
	Power Consumption (kWh/24h)		0.59
Construction	Capacity (L/Cu.Ft)		111/3.9
	Net/Gross Weight (approx)	kg	58/68
		lbs	127.6/149.6
	Interior Dimensions (W*D*H)	mm	477*528*462
		in	18.67*20.67*18.1
	Exterior Dimensions (W*D*H)	mm	597*682*833
		in	23.37*26.7*32.61
	Packing Dimensions (W*D*H)	mm	680*742*913
		in	26.6*29.1*35.7
Loading Quantities	Container load (20'/40'/40'H)		48/96/96
Alarms	High/Low Temperature		Y
	Sensor Error		Y
	Door Ajar		Y
Accessories	Caster		Y
	Foot		Y
	Porthole		Y
	Shelves		Y

Product appearance and specifications are subject to change without notice

Haier Biomedical
Intelligent Protection of Life Science

Pharmacy
Refrigerator

Pharmacy Refrigerator

Combined Refrigerator and Freezer

This product is designed to store frozen plasma, biomaterials, vaccines, electronic devices and low temperature tests of special materials, in blood stations, hospitals, epidemic prevention stations, universities, scientific research institutes, electronic chemical industry and other enterprise laboratories.

HYCD-319A

Ergonomic Design

Equipped with padlocks in both refrigerator and freezer to ensure storage safety

Equipped with electrically heated glass to prevent condensation effectively

Two test holes for both refrigerator and freezer as standard, allow independent testing of cabinet temperature

Refrigerator and freezer are equipped with self-closing hinges to avoid door ajar (less than 90° self-closing)

Multipurpose and Space Efficient
- One cabinet with two independent chambers, both are self-contained and independently controlled with individual doors
- Refrigerator chamber is equipped with a double-paned glass viewing window and LED interior lighting

Environment Friendly
Hydrocarbon refrigerant (R600a for refrigerator / R290 for freezer) and CFC-free polyurethane insulation for reduced global warning potential

Stainless Steel Interior
The interior of refrigerator and freezer are both made of stainless steel, which is easy to clean and corrosion-proof

Microprocessor Controller with Digital Display
- Refrigerator temperature 2~8°C with resolution of 0.1°C
- Freezer temperature -40~-10°C with resolution of 1°C
- Multiple alarm functions with remote alarm contact to ensure safe monitoring

High Performance
- Refrigerator: Forced-air cooling system with cycle defrost, temperature uniformity±3°C
- Freezer: Cold wall cooling system, manual defrost, temperature uniformity±5°C
- Standard USB port & optional printer, easy to get temperature record

Product Performance

Refrigerator Cool Down Curve

Temperature(°C)

Time (min)

Freezer Cool Down Curve

Temperature(°C)

Time (min)

Refrigerator Stability Curve

Temperature(°C)

Time (min)

Freezer Stability Curve

Temperature(°C)

Time (min)

Combined Refrigerator and Freezer

Main Application

This product is designed to store blood plasma, biological products, vaccines, medicines and chemical reagents.

HYCD-469

Temperature Control

Security Guaranteed

Variable Frequency Hydrocarbon Refrigeration System
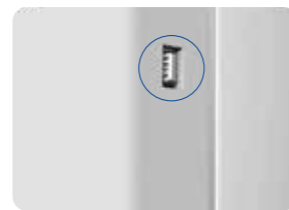
Data Storage

Key Features

Temperature Control

•Refrigerator temperature ranges from 2℃ to 8℃.
•Freezer temperature ranges adjustable from -10℃ to -40 ℃.
•Microprocessor temperature control accuracy 0.1℃ (refrigerator) and 1℃ (freezer) .

Safety

•Separate doors for refrigerator and freezer with independent lock catches, dual padlocks available to ensure product safety.
•Multiple alarm functions including high or low temperature, sensor error, high ambient temp, power failure and remote alarm.
•Two types of alarm indications: audible buzzer and visible flashing light.

Refrigerator System

•Refrigerator and freezer have independently controlled variable frequency refrigeration systems, standalone displays as well as separate on and off controls.
•Robust compressor system operating with environmentally friendly hydrocarbon refrigerant.
•Refrigerator with high quality and high efficiency cooling fan provides better temperature uniformity and stability.

Ergonomic Design

•Large LED screen display for excellent user interface experience.
•USB port automatically saves temperature data for up to 10 years for convenient inquiry and record keeping.
•Optional printer to simultaneously print out temperatures of the refrigerator and the freezer.
•Four casters and two levelling legs design for ease of maneuvering.

Specifications

	Model		HYCD-319A	HYCD-469	HYCD-469A	HYCD-469A (115V)
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright
	Climate Class		N	N (16-32°C)	N (16-32°C)	N (16-32°C)
	Cooling Type		Refrigerator: Forced air cooling Freezer: Direct cooling	Refrigertor: Forced air cooling Freezer: Direct cooling	Refrigertor: Forced air cooling Freezer: Direct cooling	Refrigerator: : Forced air cooling Freezer: Direct cooling
	Defrost Mode		Refrigerator: Auto / Freezer: Manual	Refrigerator: Auto / Freezer: Manual	Refrigerator: Auto / Freezer: Manual	Refrigerator: : Auto / Freezer: Manual
	Refrigerant		Refrigerator: R600a 45g/ Freezer: R290 60g	Refrigerator: R600a / Freezer: R290	Refrigerator: R600a / Freezer: R290	Refrigerator: : R600a / Freezer: R290
	Sound Level (dB(A))		50	45	45	52
Performance	Temperature Range (°C)		Refrigerator: 2-8 / Freezer: -15--40	Refrigerator: 2-8 / Freezer: -10--40	Refrigerator: 2-8 / Freezer: -10--40	Refrigerator: 2-8 / Freezer: -15--40
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)		115/60	220-240/50/60	220-240/50/60	115V/60
	Power (W)		640	640	640	640
	Electrical Current (A)		6	3	3	7
Dimensions	Capacity (L/Cu.Ft)		Refrigerator: 200/7.06; Freezer: 100/3.53	Refrigerator: 269/9.5; Freezer: 200/7.1	Refrigerator: 269/9.5; Freezer: 200/7.1	Refrigerator: 245/8.65; Freezer: 200/7.1
	Net/Gross Weight (approx)	kg	145/160	176/207	176/207	176/207
		lbs	319.7/352.7	388.0/456.4	388.0/456.4	388.0/456.4
	Interior Dimensions (W*D*H)	mm	Refrigerator: 605*510*720 Freezer: 515*465*440	Refrigerator: 593*585*800 Freezer: 553*545*660	Refrigerator: 593*585*800 Freezer: 553*545*660	Refrigerator: : 593*585*800 Freezer: 553*545*660
		in	Refrigerator: 23.8*20*28.3 Freezer: 20.2*18.3*17.3	Refrigerator: 23.3*23.0*31.5 Freezer: 21.8*21.5*26.0	Refrigerator: 23.3*23.0*31.5 Freezer: 21.8*21.5*26.0	Refrigerator: : 23.3*23.0*31.5 Freezer: 21.8*21.5*26.0
	Exterior Dimensions (W*D*H)	mm	735*660*1810	738*834*1975	738*834*1975	738*834*1975
		in	28.9*26.0*71.3	29.1*32.8*77.8	29.1*32.8*77.8	29.1*32.8*77.8
	Packing Dimensions (W*D*H)	mm	775*720*1930	800*875*2100	800*875*2100	800*875*2100
		in	30.5*28.3*76	31.5*34.4*82.7	31.5*34.4*82.7	31.5*34.4*82.7
	Container Load (20'/40'/40'H)		21/43/43	14/28/28	14/28/28	14/28/28
Alarms	High/Low Temperature		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
	Remote Alarm		Y	Y	Y	Y
	High Ambient Temperature		Y	Y	Y	Y
	Low Battery		Y	Y	Y	Y
Accessories	Caster		Y/4	Y	Y	Y
	Foot		Y/2	Y	Y	Y
	Porthole		Y/2	Y	Y	Y
	Shelves/Drawers		Refrigerator: 3/1; Freezer: 1 (For supporting the upper drawer)/2 (without sliding rack)	Refrigerator: 3/0 Freezer: 3/0 (Max 3 Drawers optional, without sliding rack)		
	USB Interface		Y	Y	Y	Y
Others	Certification		UL,NSF/ANSI 456	CE	CE	UL

Combined Refrigerator and Freezer

Scope of Application

This product is designed to store frozen plasma, biomaterials, vaccines, electronic devices and low temperature tests of special materials, in blood stations, hospitals, epidemic prevention stations, universities, scientific research institutes, electronic chemical industry and other enterprise laboratories.
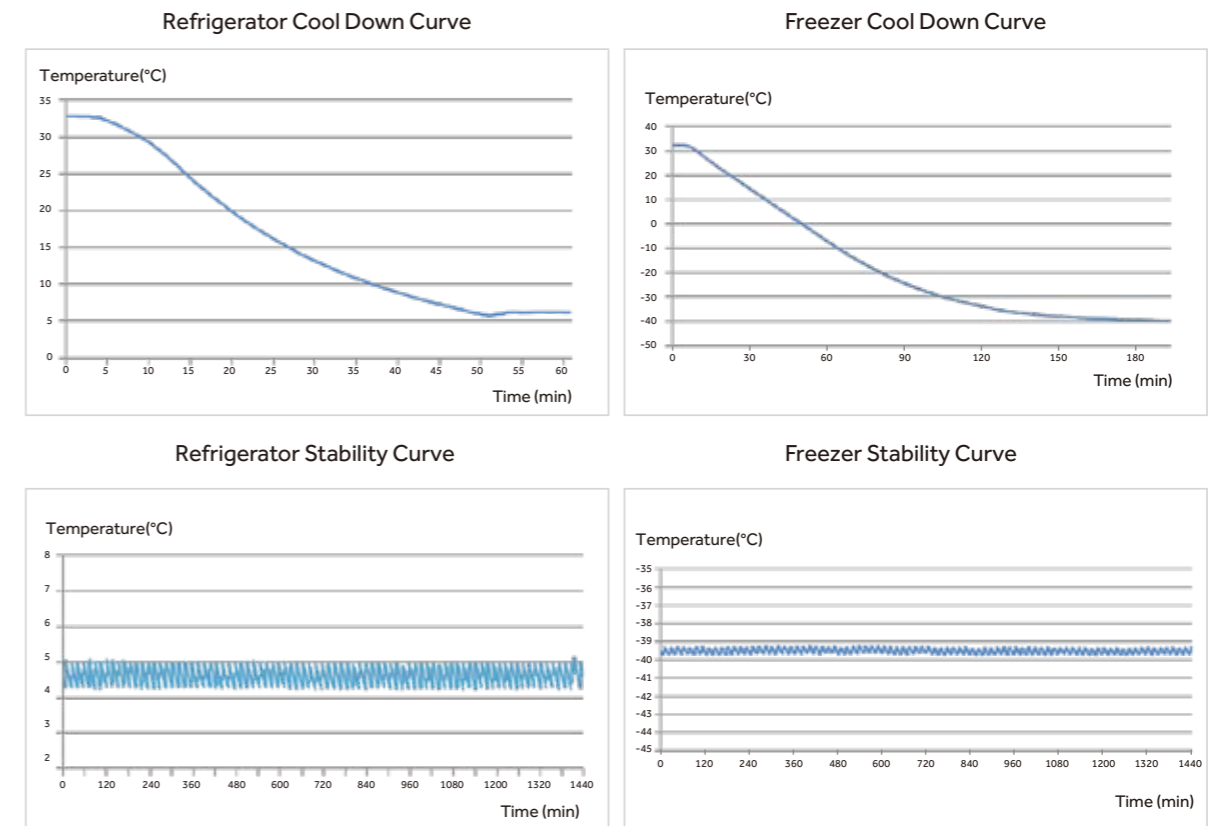
HYCD-282
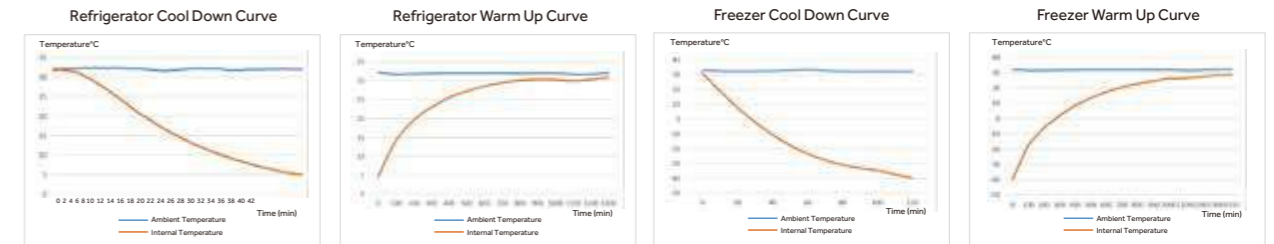
HYCD-282A

Product Advantages

Refrigerator & Freezer Combination
Independent control panel display for refrigerator section and freezer section

Energy Conservation and Environmental Protection
Frequency conversion compressor and hydrocarbon system, Energy conservation and environmental protection

Multiple Alarms
High/low temperature, door ajar, power failure, sensor error, low battery, high ambient temperature and remote alarm

High Display Precision
Refrigerator room display precision is 0.1℃

Product Performance

Refrigerator Cool Down Curve	Refrigerator Warm Up Curve	Freezer Cool Down Curve	Freezer Warm Up Curve

Specifications

	Model		HYCD-282	HYCD-282A
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		N	N
	Cooling Type		Refrigertor: Forced air cooling Freezer: Direct cooling	Refrigertor: Forced air cooling Freezer: Direct cooling
	Defrost Mode		Refrigerator: Auto / Freezer: Manual	Refrigerator: Auto / Freezer: Manual
	Refrigerant		Refrigerator: R600a / Freezer: R290	Refrigerator: R600a / Freezer: R290
	Sound Level (dB(A))		43	43
Performance	Temperature Range (°C)		Refrigerator: 2~8 / Freezer: -10~-40	Refrigerator: 2~8 / Freezer: -10~-40
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply (V/Hz)		220~240/50/60	220~240/50/60
	Power (W)		410	410
	Electrical Current (A)		2.5	2.5
Dimensions	Capacity (L/Cu.Ft)		Refrigerator: 185/6.5; Freezer: 97/3.4	Refrigerator: 185/6.5; Freezer: 97/3.4
	Net/Gross Weight (approx)	kg	145/160	145/160
	Interior Dimensions (W*D*H)	mm	Refrigerator: 605*510*720 Freezer: 515*465*440	Refrigerator: 605*510*720 Freezer: 515*465*440
	Exterior Dimensions (W*D*H)	mm	735*660*1810	735*660*1810
	Packing Dimensions (W*D*H)	mm	775*720*1930	775*720*1930
	Container Load (20'/40'/40'H)		21/43/43	21/43/43
Alarms	High/Low Temperature		Y	Y
	Door Ajar		Y	Y
	Remote Alarm		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temp		Y	Y
Accessories	Caster		Y/4	Y/4
	Foot		Y/2	Y/2
	Porthole		Y/2	Y/2
	Shelves/Drawers		Refrigerator: 3/1; Freezer: 0/2	Refrigerator: 3/1; Freezer: 0/2
	Stylus Printer		Optional	Optional
	USB Interface		Y	Y
Others	Certification		CE	CE
	Compressor Type		Frequency Conversion Compressor	Frequency Conversion Compressor
	Compressor Quantity		2	2

Product appearance and specifications are subject to change without notice

Pharmacy Refrigerator

Smart Management of Medicine and Reagents Starts with IoT Technology

Perform statistical analysis of market data and medicine or reagents usage to report on market trends providing highly useful feedback to production and sales.

Smart RFID label

Smart RFID shelf

Industrial-grade IoT Network Module Group

Smart IoT System Makes Storage Management Simple, Precise and Effective
RFID based smart IoT management system permits automatic management of stored products are automatically
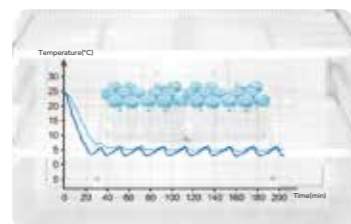
Authorized Management for Material Flow at Controllable Risk
NFC authorized management system is traceable.

Statistical Analysis of Test Data, Precise Verification and Scientific Instruction

Precise Temperature Control Ultimate Safety of Test Reagents
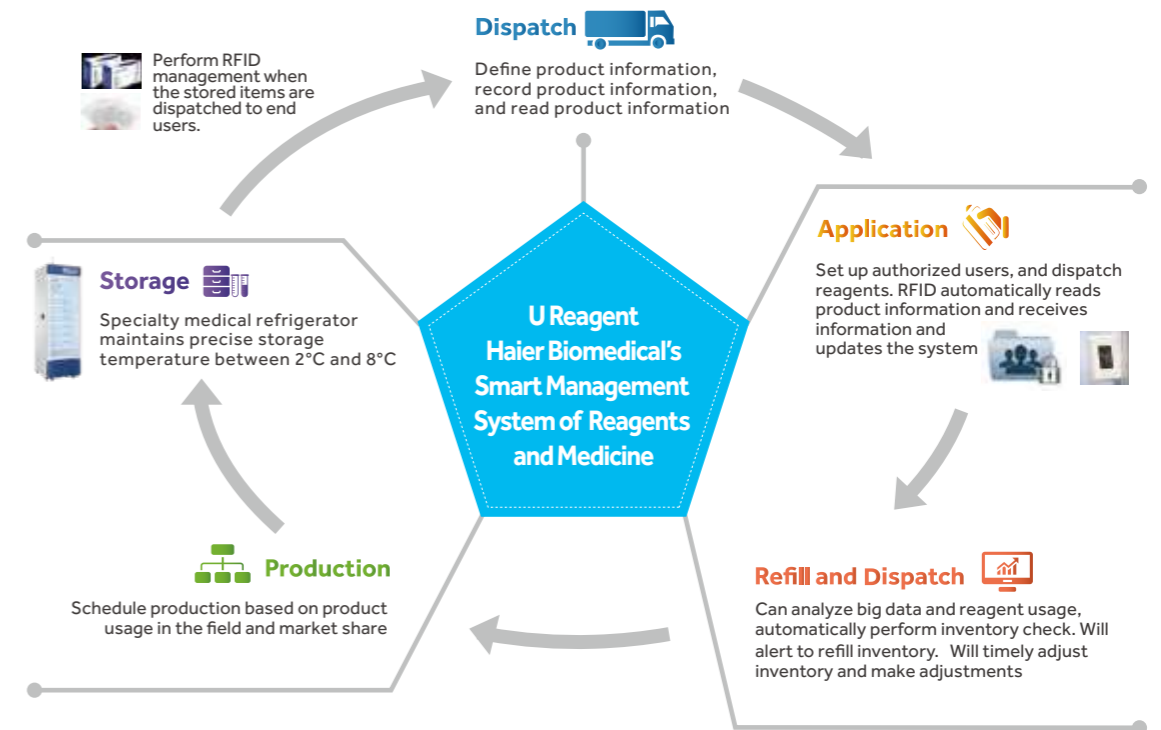2°C - 8°C storage temperature,real-time monitoring of cabinet temperature

Intelligent Accurate Recording
Intelligent touch screen for quick check of warehouse in-and-out records
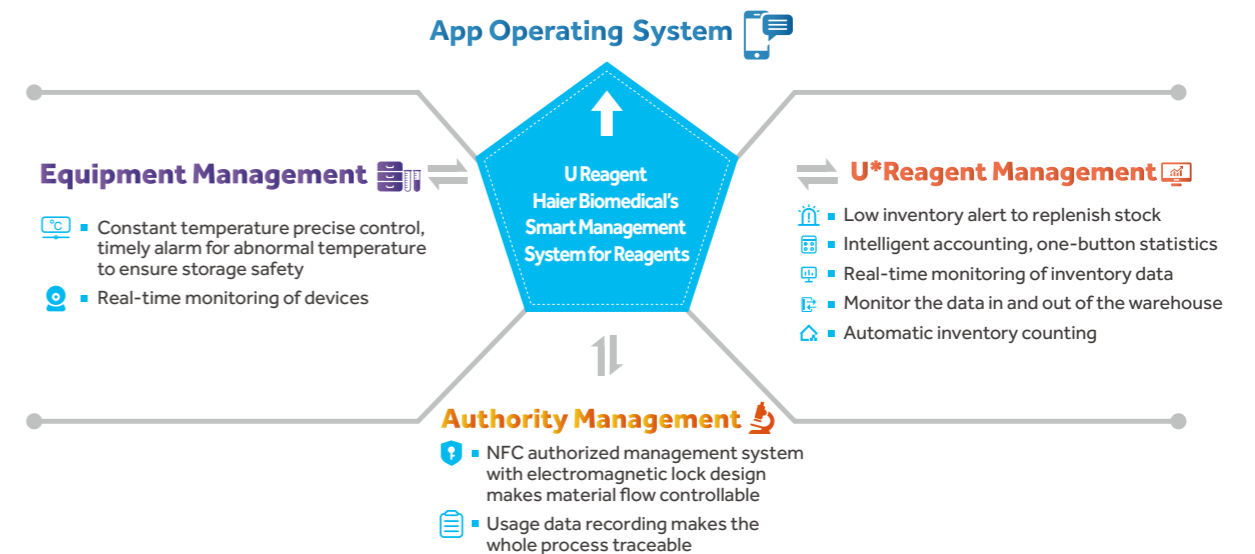
HYC-509R

Manage Market Data to Support Scientific Production Scheduling
Perform statistical analysis of market data and medicine or reagents usage to report on market trends providing highly useful feedback to production and sales.

Effective Management of Sales Channels
Sales channels can provide timely feedback information to improve shipping, refilling, dispatching and inventory control, to provide continuity on supply and to optimize inventory level.

Reagent Handling Process is Traceable and Controllable
Shipping and receiving processes of reagents are automatically monitored and controlled for authorized users. Every box of reagents is traceable.

Smart Management of Products
(It is suitable for manufacturing industry)

Dispatch
Define product information, record product information, and read product information

Perform RFID management when the stored items are dispatched to end users.

Application
Set up authorized users, and dispatch reagents. RFID automatically reads product information and receives information and updates the system

Storage
Specialty medical refrigerator maintains precise storage temperature between 2°C and 8°C

U Reagent Haier Biomedical's Smart Management System of Reagents and Medicine

Production
Schedule production based on product usage in the field and market share

Refill and Dispatch
Can analyze big data and reagent usage, automatically perform inventory check. Will alert to refill inventory. Will timely adjust inventory and make adjustments

From storage to use, the entire process is automatically and smartly controlled
(It is suitable for pharmaceutical factories, laboratories and hospitals)

App Operating System

Equipment Management
- Constant temperature precise control, timely alarm for abnormal temperature to ensure storage safety
- Real-time monitoring of devices

U Reagent Haier Biomedical's Smart Management System for Reagents

U*Reagent Management
- Low inventory alert to replenish stock
- Intelligent accounting, one-button statistics
- Real-time monitoring of inventory data
- Monitor the data in and out of the warehouse
- Automatic inventory counting

Authority Management
- NFC authorized management system with electromagnetic lock design makes material flow controllable
- Usage data recording makes the whole process traceable

Product Specification

Model	Voltage (V/Hz)	Power (W)	External Dimensions (W*D*H) (mm)	Internal Dimensions (W*D*H) (mm)	Effective Volume (L)	Net Weight / Gross Weight (Kg)	Shelf	Touch Screen
HYC-509R	220~240/50/60	470	693*813*1981	593*585*1500	509	180/215	6	Yes
HYC-390R	220~240/50/60	380	720*710*1965	530*555*1380	390	116/139	5	No

Pharmacy Refrigerator

Advanced Pharmacy Refrigerator with Touchscreen

HYC-1099TF   HYC-509T   HYC-1099T   HYC-509TF

Product Advantages

Intelligent and Interactive Touchscreen Control

• An intelligent, high definition liquid crystal touch screen control system, allows users to view temperature graphs, operation status, events and alarm records

Data Storage

• Standard USB, optional printer, capable of storing 10 years' temperature data, historical data can be checked and traced

Secure Access and Authorized Management

• NFC authority system works with a magnetic lock system to ensure product safety. In addition, access to unit and stored products is traceable
• Finger print module is optional for additional safety

Advanced Pharmacy Refrigerator with LED Display

HYC-1099F   HYC-509   HYC-1099   HYC-509F

Product Advantages
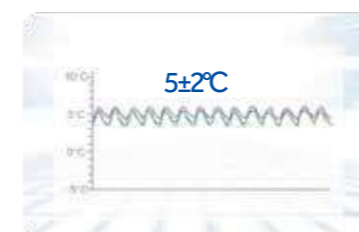
Precise Temperature Control and Reliable Operation

5±2℃

• Advanced control system
• Six sensors
• High efficiency air flow system
• Precise temperature control
• Uniform temperature distribution
• VFD driven compressor
• High-efficiency fan motor

Multiple Features for Sample Security And Protection

• Audible buzzer and visual flashing lights for alarm system as standard
• Alarm system includes door ajar, temperature, sensor malfunction, battery, loss of power and clogged condenser
• Remote alarm contact terminals as standard
• Supplied with mechanical lock as standard, there is an optional magnetic lock for added product safety

Environmentally Friendly Refrigeration

• R600a Hydrocarbon refrigeration system does not have any negative impacts of the ozone layer, with zero global warming effect

Pharmacy Refrigerator

Specifications

	Model	HYC-509	HYC-509F	HYC-509T	HYC-509TF	HYC-1099	HYC-1099F	HYC-1099T	HYC-1099TF
Technical Data	Cabinet Type	Upright, single glass door	Upright, single solid door	Upright, single glass door	Upright, single solid door	Upright, double glass door	Upright, double solid door	Upright, double glass door	Upright, double solid door
	Climate Class	N	N	N	N	N	N	N	N
	Cooling Type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
	Defrost Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
	Refrigerant	HC	HC	HC	HC	HC	HC	HC	HC
	Sound Level (dB(A))	40	40	40	40	43	43	43	43
Performance	Temperature Range (°C)	2~8	2~8	2~8	2~8	2~8	2~8	2~8	2~8
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	Touchscreen	Touchscreen	LED	LED	Touchscreen	Touchscreen
Electrical Data	Power Supply (V/Hz)	220~240/50/60	220~240/50/60	220~240/50/60	220~240/50/60	220~240/50/60	220~240/50/60	220~240/50/60	220~240/50/60
	Power (W)	370	315	370	315	470	440	470	440
	Electrical Current (A)	1.85	1.75	1.85	1.75	2.5	2.25	2.5	2.25
	Power Consumption (kWh/24h)	5.9	5.3	5.9	5.3	6.8	6	6.8	6
Construction	Capacity (L/Cu.Ft)	509/17.97	509/17.97	509/17.97	509/17.97	1099/38.5	1099/38.5	1099/38.5	1099/38.5
	Net/Gross Weight (approx) kg	180/215	175/210	180/215	175/210	340/400	330/390	340/400	330/390
	Net/Gross Weight (approx) lbs	396/473	385/462	396/473	385/462	748/1000	726/858	748/1000	726/858
	Interior Dimensions (W*D*H) mm	593*585*1500	593*585*1500	593*585*1500	593*585*1500	1295*585*1500	1295*585*1500	1295*585*1500	1295*585*1500
	Interior Dimensions (W*D*H) in	23.21*22.9*58.8	23.21*22.9*58.8	23.21*22.9*58.8	23.21*22.9*58.8	50.7*22.9*58.8	50.7*22.9*58.8	50.7*22.9*58.8	50.7*22.9*58.8
	Exterior Dimensions (W*D*H) mm	693*813*1981	693*813*1981	693*813*1981	693*813*1981	1395*813*1981	1395*813*1981	1395*813*1981	1395*813*1981
	Exterior Dimensions (W*D*H) in	27.1*31.9*77.7	27.1*31.9*77.7	27.1*31.9*77.7	27.1*31.9*77.7	54.7*31.9*77.7	54.7*31.9*77.7	54.7*31.9*77.7	54.7*31.9*77.7
	Packing Dimensions (W*D*H) mm	800*875*2100	800*875*2100	800*875*2100	800*875*2100	1525*900*2100	1525*900*2100	1525*900*2100	1525*900*2100
	Packing Dimensions (W*D*H) in	31.3*34.3*82.3	31.3*34.3*82.3	31.3*34.3*82.3	31.3*34.3*82.3	59.8*35.3*82.3	59.8*35.3*82.3	59.8*35.3*82.3	59.8*35.3*82.3
Loading Quantities	Container Load (20'/40'/40'H)	14/28/28	14/28/28	14/28/28	14/28/28	7/14/14	7/14/14	7/14/14	7/14/14
Alarms	High/Low Temperature	Y	Y	Y	Y	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y	Y	Y	Y	Y
	Foot	Y	Y	Y	Y	Y	Y	Y	Y
	Porthole	Y	Y	Y	Y	Y	Y	Y	Y
	Shelves/Drawers	6/Optional	6/Optional	6/Optional	6/Optional	12/Optional	12/Optional	12/Optional	12/Optional
	USB Interface	Y	Y	Y	Y	Y	Y	Y	Y
Certification	CE	Y	Y	Y	Y	Y	Y	Y	Y

T suffix - Advanced with touchscreen

Product appearance and specifications are subject to change without notice

Standard Pharmacy Refrigerator

The Haier pharmacy refrigerators are suitable for pharmacies, drug stores, pharmaceutical companies, hospitals, clinics and other pharmaceutical storage areas such as storage and logistics.

Microprocessor control panel and digital display

Permanently lubricated condenser fan motor

Locks

Hermetically sealed compressor

Access port

Door handles

Dual-pane glass door design, convenient and aesthetic

Leveling leg and caster

HYC-1378

Durable and Reliable - Key Features

• Energy efficient hydrocarbon (HC) refrigeration system
• Permanently lubricated cooling fan for safety and longevity
• Forced-air cooling with optimized air distribution system designed to achieve maximum temperature uniformity and stability
• Optimized refrigeration system design for more effective cooling and speedy recovery
• Temperature variation within ± 3°C
• Chamber temperature range 2~8°C
• Microprocessor control with large digital display. Adjustable temperature with an increment of 0.1°C
• Wide voltage tolerance suitable for regions with an unstable voltage supply
• Designed for ambient temperature 10°C~32°C with humidity below 85%

Safety

• Equipped with a complete temperature alarm system featuring audible buzzer and visible flashing light
• Capable of alerting failures due to high or low temperature, sensor error, door ajar, remote alarm, power failure and low battery

Ergonomic Design

• Optimized space utilization design with multi-level and adjustable shelf height to accommodate the different storage requirements of varied sized pharmaceutical products.
• Safety lock to prevent unauthorized access
• Caster design and levelling feet
• Interior light
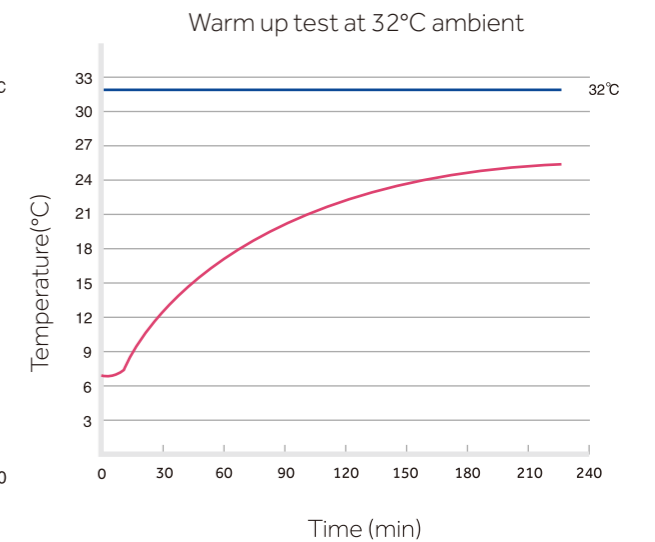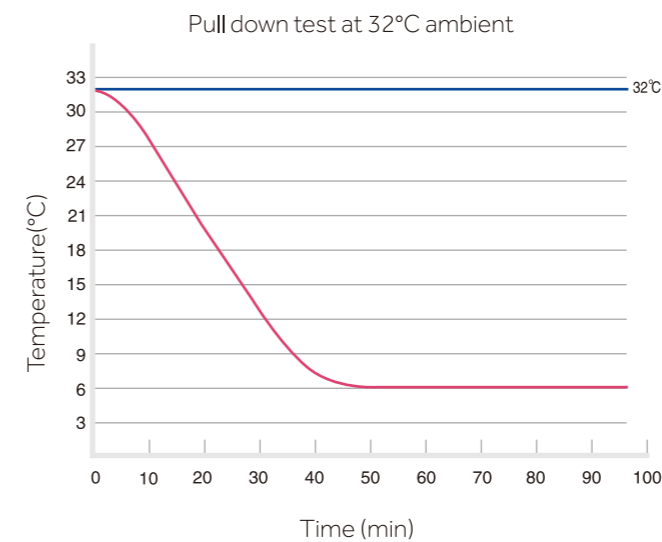
Pull down test at 32°C ambient

Warm up test at 32°C ambient

Temperature(°C)

Time (min)

Pharmacy Refrigerator

Used for storage of medicines, vaccines, reagents, biological products and other items that require a temperature between 2-8°C in hospitals, pharmacies, pharmaceutical factories, clinics and laboratories etc.

Microcomputer control display

Built-in key lock

Porthole, easy for users to test interior temperature

Three-layer tempered glass door

Self-closing hinge

Optional USB interface

LED light

Adjustable shelves

Full-length door handle

4 casters+2 adjustable leveling leg

HYC-1031GD

Pharmacy Refrigerator

Product Advantages

Low energy consumption: 2.5 kWh/day [1]

Excellent performance: temperature uniformity ≤±1°C [2]

Quiet operation: 39dB (A)

Intelligent anti-condensation: triple-paned tempered glass door with door frame heater, effectively reduces condensation even at 32°C, 80% RH ambient temperature

Optional USB, RS485 and printer, easy to export temperature data; all events and alarms will be recorded by the USB module

Eco-friendly hydrocarbon refrigerant (R290)and CFC-free polyurethane insulation for reduced global warming

Hermetically sealed compressor, forced-air circulation and automatic defrost to ensure high cooling performance

Microprocessor controller, display with resolution of 0.1°C

Self-closing door with magnetic gasket for positive seal

Multiple alarm functions for safer monitoring

* [1]&[2]: Tested by TUV according to DIN13277
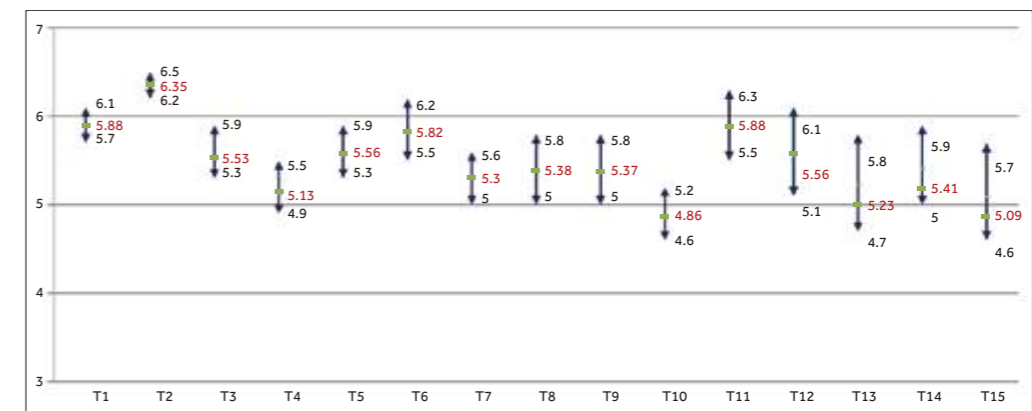
Cabinet Temperature

■ Average ⊥ Extended Measurement Uncertainty

* Tested by TUV according to DIN13277 (Ambient Temperature: 25°C Setpoint: 5°C Unloaded)

Product Dimension

1990mm 1205mm 730mm 1205mm 1115mm 1670mm 590mm
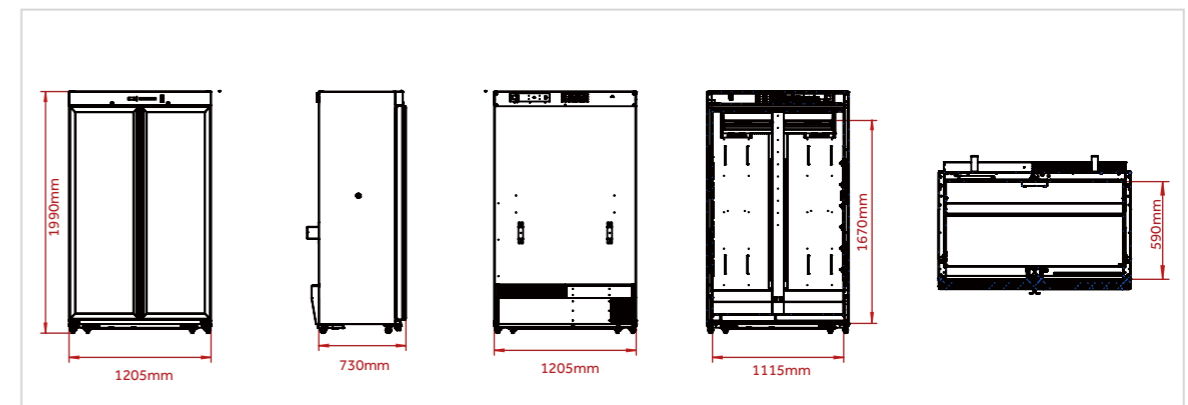
Standard Pharmacy Refrigerator

The product is applicable to pharmacies, pharmaceutical factories, quarantine stations, health centers and hospitals, used to store biological products and those need to be stored at a temperature between 2-8°C.

220V/50HZ   115V/60HZ

HYC-639

Energy Saving
70mm thick foam layer, optimized refrigeration system, low power consumption, less than 6 kWh per day.

Environmentally-friendly
Hydrocarbon refrigerant, truly completely environmental protection refrigeration system.
Polyurethane insulation layer, the whole series adopts European ROHS directive materials, environmental protection.

Better Uniformity
Finned evaporator, double fan system.
The temperature is more uniform, the characteristic point temperature uniformity is ±2°C.

Low Noise
Optimized system and structure noise reduction design.

Multi-channel Sensor, Reliable and Safe
Equipped with upper display sensor, lower display sensor, defrosting sensor, control sensor, ambient temperature sensor, condenser dirty sensor.

Microprocessor control system:
Microcomputer electronic temperature controller, LED temperature display, the display accuracy is 0.1 °C
Multiple alarm functions like high temperature alarm, low temperature alarm, sensor error alarm, power failure alarm, low battery alarm, door ajar, condensor dirty alarm, high ambient temperature alarm, etc
Audio and visual alarm. The equipment can connected to the remote alarm interface.

Insulation
70mm-thick foam insulation layer to provide better insulation

Porthole
Standard equipped with a porthole to facilitate the user to test

Security lock
Equipped with safety lock , safe storage of drugs

Temperature Recorder
Standard equipped with USB port, the printer and RS485 interface are optional.

Typical Performance Characteristics in 32°C Ambient Temp.

Cool down curve

Warm up curve

—— Center Temp(For 220V/50HZ)
—— Ambient Temp(For 220V/50HZ)

Material
The inner liner is equipped with spraying steel plate for easy cleaning

Casters and levelling leg design
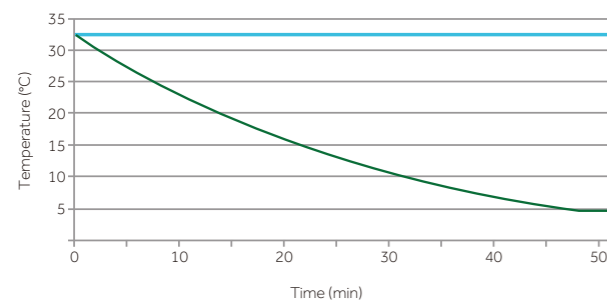Standard equipped with 4 universal casters and 2 adjustable feet to move and fix the equipment

Shelves
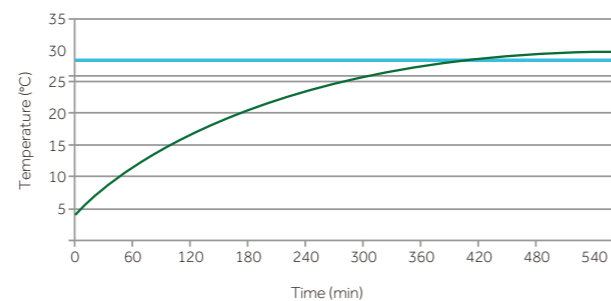Standard equipped with 4 shelves

Standard Pharmacy Refrigerator

Used for storage of biological products, vaccines, drugs, reagents, etc., the unit is widely used in pharmacies, pharmaceutical factories, hospitals, CDC, laboratories as key examples.

HYC-410

Superior Performance

● Microcomputer controller, LED temperature display, accuracy 0.1°C

● Fin type evaporator and double fan system, temperature uniformity ±2°C

● R600a hydrocarbon refrigerant, LBA foaming agent, energy saving and environmental protection

● Optimized system and structure design, noise down to 41 dB(A)

● Panoramic glass door, LED lighting, goods are clear at a glance

● Heated door to prevent condensation

● Standard with 1 test hole, convenient for user to test

Safe

● Equipped with built-in lock and security latch to accommodate a padlock, safe and reliable storage

● Multiple alarms: High and low temperature, sensor error, power failure, low battery, door ajar, high ambient temperature and communication fault alarm

● Alarm mode: audible buzzer and flashing light, remote alarm. The alarm will continue for 24 hours after power failure

Product Details

Material:
HIPS adsorption liner, sprayed steel case

Shelves:
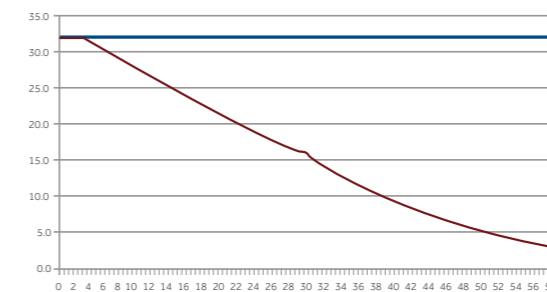Standard with 6 shelves

Caster and foot:
Standard equipped with 4 universal casters and 2 adjustable feet, ensure the refrigerator moving and fixed

*Optional: USB, printer, RS485/232 interface

Product Performance

Cool down curve

Warm up curve
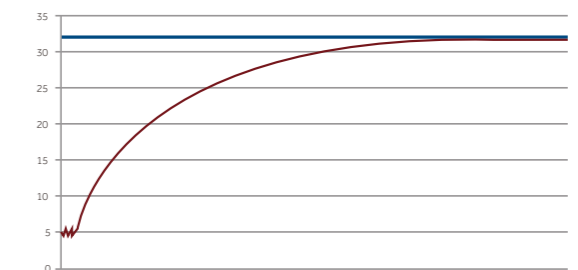
At 32°C ambient temperature, the cooling time is about 50 minutes, the heating time is about 8 hours

―――― Ambient Temp.

―――― Test point Temp.

Standard Pharmacy Refrigerator

New and improved Haier pharmacy refrigerators now offer an improved temperature profile and more user-friendly control features.

Optional Printer

Lock

Evaporator Fan

Padlock

Electric heated glass door

Caster

HYC-390

Display Panel

Optional USB Port

Access Port

Adjustable Shelf

Sealing Strip

Leveling Leg and Caster

Technical Advantages
• Accurate temperature control maintains 2°C to 8°C throughout the unit with an adjustable increment at 0.1°C
• Improved user interface includes a data storage capacity of up to 10 years
• Oversized air–cooled condenser improves the robustness of the refrigeration system, reliability and refrigeration efficiency

Ergonomic Design
• The temperature data of the newly improved storage management system is downloadable from the USB port
• Traceability of temperature data
• Heated double-pane glass door allows a clear view of stored products without condensation at 32°C and 85% relative humidity ambient conditions
• LED interior light saves energy and provides bright lighting of interior for easy product location and identification
• Shelves with label holders meet demands required for quick and effective product archiving and retrieving

Safety
• Microprocessor control with digital display
• Temperature uniformity within 3°C
• Malfunction alarms include high/low temperature, door ajar, sensor error, power failure, low battery and remote alarm interface

HYC-390 Warm up test at 25°C ambient

HYC-390 Pull down test at 25°C ambient
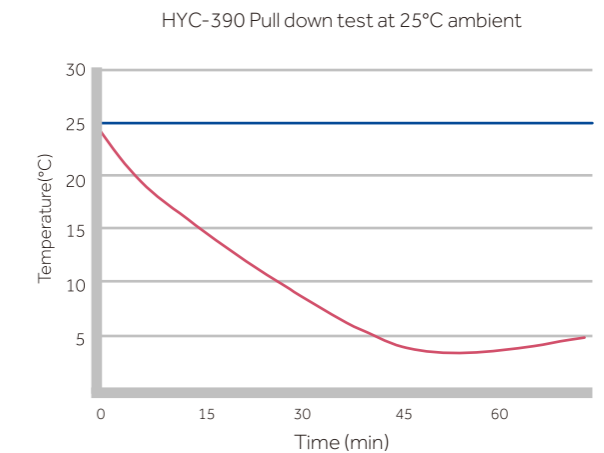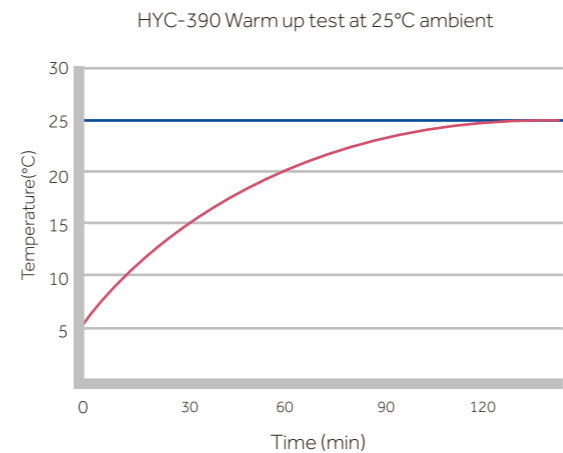
Standard Pharmacy Refrigerator

The product is used to store biological drugs and items at a temperature of 2-8°C. Typically used within pharmacy, pharma production, public health, hospitals and other life science laboratories.

Superior performance

- Microcomputer controller, display/control accuracy 0.1°C

- Temperature range 2~8°C, temperature uniformity ±2°C

- Energy-efficient conversion compressors and non-toxic, environmentally-friendly hydrocarbon refrigerant

- Self-closing door design

- Electrically heated glass door prevents condensation

- Multiple interface options - USB, RS485 and printer

HYC-309

Safe and reliable

- Key lock and provision for padlock to ensure safe and secure product storage

- Multiple alarms: High/Low temperature alarm, high ambient temperature alarm, door ajar alarm, power failure, low battery, sensor error, comms error and remote alarm contacts

- Alarm mode: Audible/visual and remote alarm with battery back-up which continuously alarms for up to 48 hours in the event of a power failure

Product Details

Microcomputer control
Display/control accuracy
0.1°C

Optional USB, easy
to export data

Built-in key lock for
secure storage

LED light, illuminate
interior for easier
product selection

2 temperature
sensors

Electrically heated
glass door prevents
condensation

Self-closing door
design

Padlock

4 casters, easy to
move

Adjustable feet
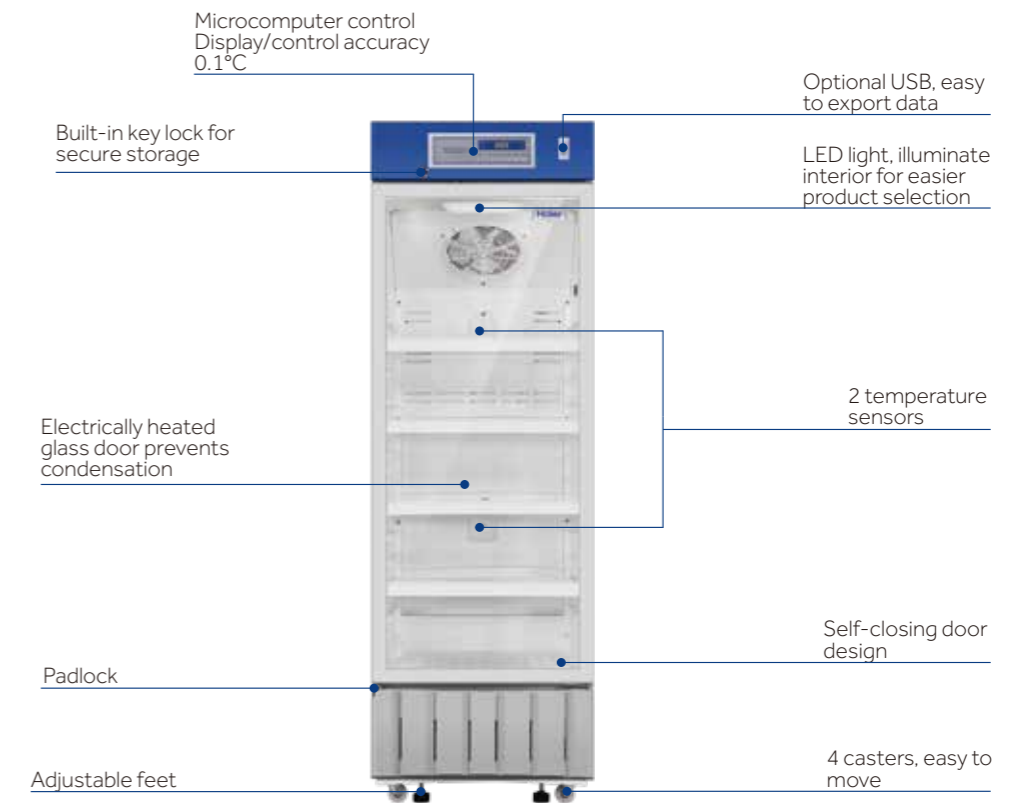
Temperature Curve

**Cool Down Curve
at 32°C Ambient temperature**

Temperature(°C)

Time (min)
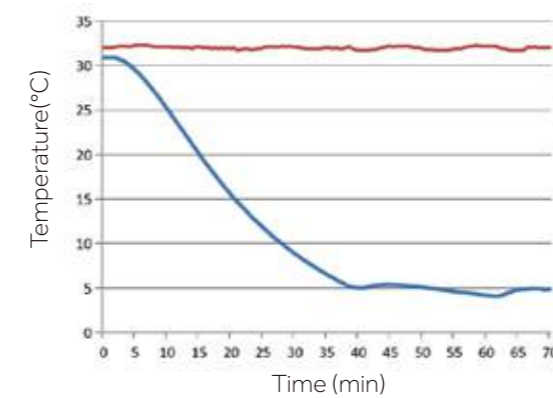
**Stability Curve
at 32°C Ambient temperature**

Temperature(°C)

Time (min)

———— Ambient Temperature

———— Internal Temperature
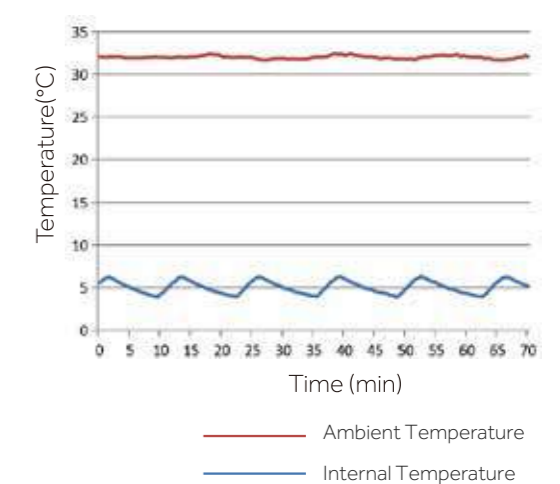
Under-Counter Pharmacy Refrigerator

Easy to Install, Ergonomic and Reliable

Haier are pioneers in under-counter pharmacy refrigerator design and manufacturing, offering ultra-low noise system, safety lock, complete alarm system for sample safety and protection.

HYC-118   **HYC-118A**

Reliability and Key Features

- Energy efficient hydrocarbon (HC) refrigeration system
- Permanently lubricated cooling fan for safety and longevity
- Forced-air cooling with optimized air distribution system designed to achieve maximum temperature uniformity and stability
- Optimized refrigeration system design for more effective cooling and speedy recovery
- Temperature variation within ±3°C
- Chamber temperature range 2~8°C
- Microprocessor control, digital display and temperature adjustment with an increment of 0.1 °C
- Designed for ambient temperature 10~32°C with humidity below 70%

Safety

- Equipped with a complete temperature alarm system featuring audible buzzer and visual flashing light
- Capable of alerting failures due to high and low temperature, sensor error, door ajar, power failure, and remote alarm interface

Ergonomic Design

- Interior LED light
- Safety lock to prevent unauthorized access

HYC-118 Warm up test at 25°C ambient

HYC-118 Pull down test at 25°C ambient
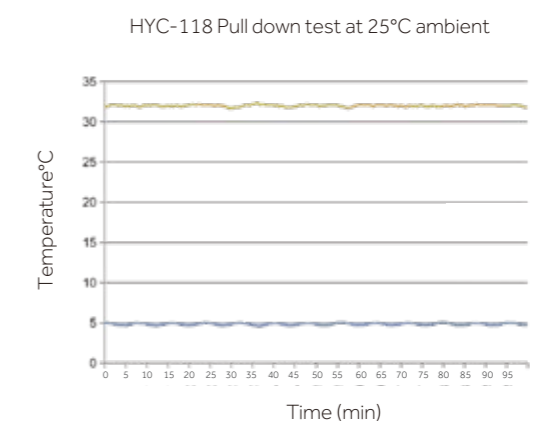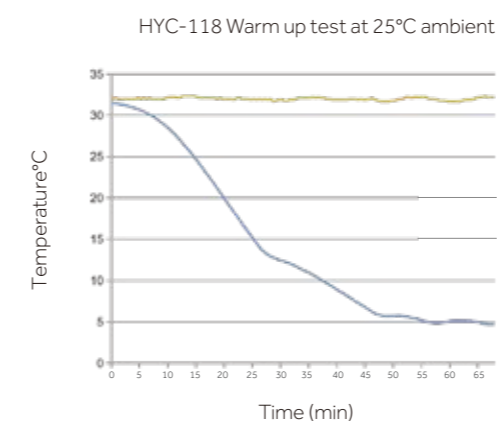
Ambient Temperature ───── Internal Temperature

Pharmacy Refrigerator

Pharmacy Refrigerator

Used for storage of medicines, vaccines, reagents, biological products and other items that require a temperature between 2-8°C in hospitals, pharmacies, pharmaceutical factories, clinics and laboratories etc.

User reversible hinge

Built-in door handle

Product simulator

Three-layer tempered glass door

Magnetic gasket

LED light

Dual fans

Porthole, easy for users to test interior temperature

Adjustable shelves

1 Basket convenient storage

Adjustable feet
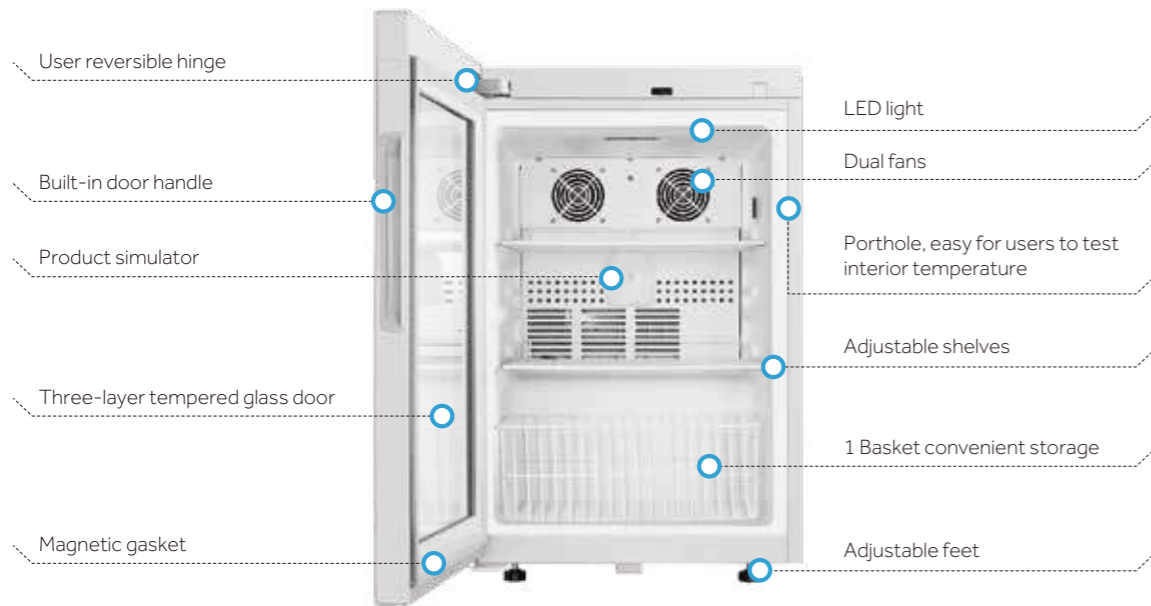
HYC-85GD

Product Advantages

User reversible door hinge

Excellent performance: temperature uniformity ≤±1°C [1]

Quiet operation: 35dB (A)

Intelligent anti-condensation: triple-paned tempered glass door with door frame heater, effectively reduces condensation even at 32°C, 80% RH ambient temperature

Optional USB and RS485, easy to export temperature data

Eco-friendly hydrocarbon refrigerant (R600a) and CFC-free polyurethane insulation for reduced global warming

Hermetically sealed compressor, forced-air circulation and automatic defrost to ensure high cooling performance

Microprocessor controller, display with resolution of 0.1°C

Magnetic gasket for positive seal

Multiple alarms for safer monitoring

* [1]Tested by TUV according to DIN13277
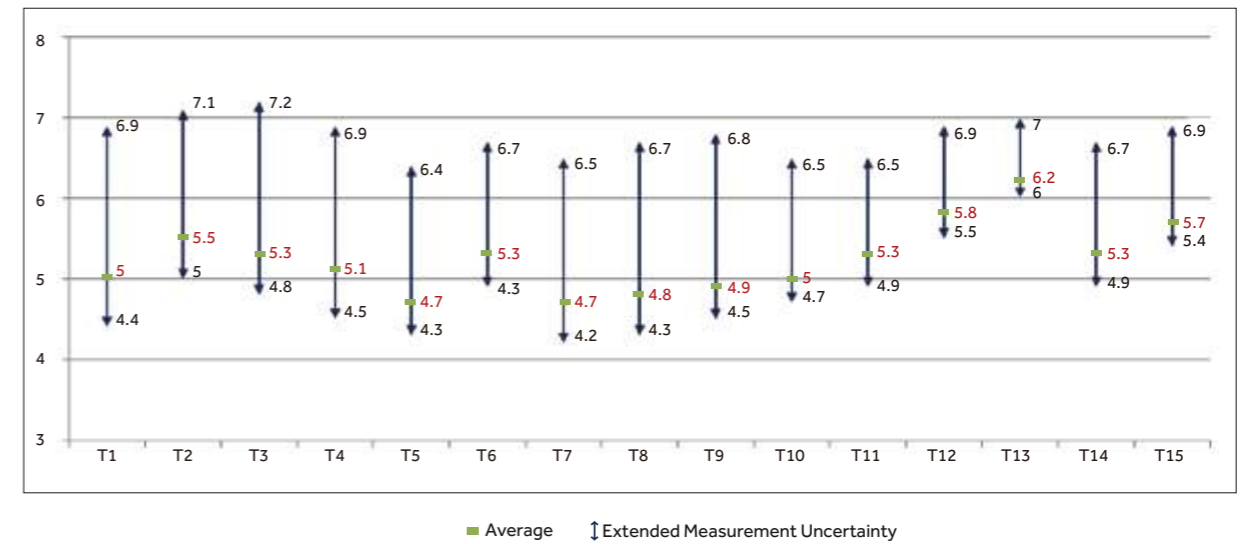
Cabinet Temperature

■ Average ↕ Extended Measurement Uncertainty

* Tested by TUV according to DIN13277 (Ambient Temperature: 25°C Setpoint: 5°C Unloaded)

Product Dimension

Pharmacy Refrigerator

Specifications

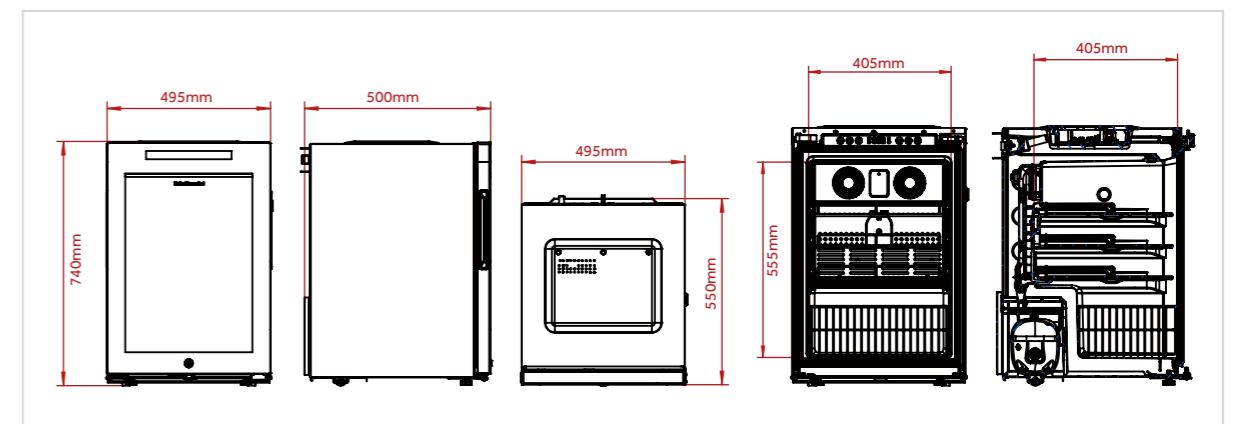|	Model	HYC-68		HYC-68A		HYC-118		HYC-118A		HYC-85GD	HYC-290		HYC-309	HYC-390		HYC-410
Technical Data	Cabinet Type	Upright, Solid Door		Upright, Glass Door		Upright, Solid Door		Upright, Glass Door		Table-top/Under-counter	Upright, Single Door		Upright	Upright,Single Door		Upright,Single Door
	Climate Class	N		N		N		N		N, 16–32°C	N		N	N		N
	Cooling Type	Forced Air Cooling		Forced Air Cooling		Forced Air Cooling		Forced Air Cooling		Forced Air Circulation	Forced Air Cooling		Forced Air Cooling	Forced Air Cooling		Forced Air Cooling
	Defrost Mode	Auto		Auto		Auto		Auto		Auto defrost	Auto		Auto	Auto		Auto
	Refrigerant	HC		HC	HC	HC	HC	HC	HC	R600a	HC		HC	HC		HC
	Sound Level (dB(A))	41		41		41		41		35	43	43	41	43	43	41
Performance	Temperature Range (°C)	2–8		2–8		2–8		2–8		2–8	2–8		2–8	2–8		2–8
Control	Controller	Microprocessor		Microprocessor		Microprocessor		Microprocessor		Microprocessor	Microprocessor		Microprocessor	Microprocessor		Microprocessor
	Display	LED		LED		LED		LED		Digital	LED		LED	LED		LED
Electrical Data	Power Supply (V/Hz)	220–240/50	115/60	220–240/50	115/60	220–240/50/60	115/60	220–240/50/60	115/60	220–240/50	115/60	220–240/50/60	220–240/ 50/60	115/60	220–240/50/60	220–240/50
	Electrical Current (A)	0.85	1.7	0.85	1.7	1.4	1.4	1.5	1.5	0.98	2.2	1.8	1.5	2.4	1.8	2.0
Dimensions	Capacity (L/Cu.Ft)	68/2.4		68/2.4		118/4.2		118/4.2		85	290/10.2		309/10.91	390/13.8		410
	Net/Gross Weight (approx) kg	38/40		38/40		41/46		46/51		36/41	105/127		77/87	116/139		116/139
	lbs	83.8/88.2		83.8/88.2		90.5/101.5		101.5/112.5		/	231.6/280.1		169.76/191.80	255.8/306.6		255.7/306.4
	Interior Dimensions (W*D*H) mm	415*385*505		415*385*505		515*415*630		515*415*630		405*405*555	530*555*1080		525*500*1290	530*590*1380		530*590*1380
	in	16.3*15.2*19.9		16.3*15.2*19.9		20.3*16.3*24.8		20.3*16.3*24.8		/	20.9*21.9*42.5		20.67*19.69*50.79	20.9*21.9*54.3		20.9*22.8*54.3
	Exterior Dimensions (W*D*H) mm	495*580*660		495*580*660		597*635*810		597*635*810		495*550*740	665*710*1665		600*630*1840	665*710*1965		665*710*1965
	in	19.5*22.8*26.0		19.5*22.8*26.0		23.5*25.0*31.9		23.5*25.0*31.9		/	26.2*28.0*65.6		23.62*24.80*72.44	26.2*28.0*77.4		26.2*28.0*77.4
	PackingDimensions (W*D*H) mm	540*640*710		540*640*710		680*690*910		680*690*910		570*630*810	690*790*1810		660*670*2060	690*790*2110		675*790*2115
	in	21.3*25.2*28.0		21.3*25.2*28.0		26.8*27.2*35.8		26.8*27.2*35.8		/	27.1*31.0*71.1		25.98*26.38*81.10	27.1*31.0*82.9		26.6*31.1*83.3
	Container Load (20'/40'/40'H)	102/204/204		102/204/204		48/96/96		48/96/96		74/152/228	22/44/44		24/48/48	22/44/44		23/48/48
Alarms	High/Low Temperature	Y		Y		Y		Y		Y	Y		Y	Y		Y
	Remote Alarm	Y		Y		Y		Y		Y	Y		Y	Y		Y
	Power Failure	Y		Y		Y		Y		Y	Y		Y	Y		Y
	Sensor Error	Y		Y		Y		Y		Y	Y		Y	Y		Y
	Low Battery	Y		Y		Y		Y		Y	Y		Y	Y		Y
	Door Ajar	Y		Y		Y		Y		Y	Y		Y	Y		Y
Accessories	Caster	N		N		Y/2		Y/2		/	Y		4	Y		4
	Foot	Y/2		Y/2		Y/2		Y/2		2	Y		2	Y		2
	Porthole	Y		Y		Y		Y		1	Y		1	Y		Y
	Shelves/Drawers	2/1		2/1		3/1		3/1		2/1	5/-		5/-	7/-		6
	USB Interface	Optional		Optional		/		/		Optiona	Y	Optional	Optional	Y	Optional	Optional
	Printer	N/A		N/A		N/A		N/A		N/A	Optional		Optional	Optional		Optional
	Temperature Recorder	N/A		N/A		N/A		N/A		/	/		/	/		N/A
Others	Certification	CE	UL	CE	UL	CE	UL	CE	UL	CE, DIN13277 (Optional)	UL	CE	CE	UL	CE	CE, ENERGY STAR

Product appearance and specifications are subject to change without notice

Specifications

	Model	HYC-639		HYC-390F		HYC-610		HYC-940		HYC-940C	HYC-940F	HYC-1378		HYC-1031GD
Technical Data	Cabinet Type	Upright, Single Door		Upright, Single Door		Upright,Single Door		Upright, Double Glass Door		Upright, Double Glass Door	Upright, Double Solid Door	Upright, Double Door		Upright
	Climate Class	ST		N		N		N		N	N	N		N, 16-32℃
	Cooling Type	Forced air cooling		Forced Air cooling		Forced Air Cooling		Forced Air Cooling		Forced Air Cooling	Forced Air Cooling	Forced Air Cooling		Forced air circulation
	Defrost Mode	Auto		Auto		Auto		Auto		Auto	Auto	Auto		Auto defrost
	Refrigerant	HC		HC		HC		HC		HC	HC	HC		R290, 80g
	Sound Level (dB(A))	43	46	43	43	43	45	43	45	45	43	43	45	39
Performance	Temperature Range (°C)	2-8		2-8		2-8		2-8		2-8	2-8	2-8		2~8
Control	Controller	Microprocessor		Microprocessor		Microprocessor		Microprocessor		Microprocessor	Microprocessor	Microprocessor		Microprocessor
	Display	LED		LED		LED		LED		LED	LED	LED		LED
Electrical Data	Power Supply (V/Hz)	220-240/50	115/60	220-240/50/60	115/60	220-240/50/60	115/60	220-240/50/60	115/60	115/60	220~240/50/60	220-240/50/60	115/60	220~240; 50/60
	Electrical Current (A)	2.15	2.5	1	1.5	3	6.2	3.5	7.5	11.5	2.7	3	7.5	2.2
Dimensions	Capacity (L/Cu.Ft)	639/22.6	600/21.2	390/13.8		610/21.6		890/31.4		890/31.4	890/31.4	1378/48.7		1031
	Net/Gross Weight (approx) kg	200/240		106/129		204/227		227/279		207/259	207/259	310/360		255/265
	lbs	551.15/639.33		233.8/284.5		449.7/500.4		500.4/615.1		456.4/571.1	456.4/571.1	683.4/793.7		/
	Interior Dimensions (W*D*H) mm	620*706*1520		530*555*1380		680*640*1400		1030*590*1425		1030*590*1425	1030*590*1425	1320*700*1500		1115*590*1670
	in	24.4*27.8*59.8		20.9*21.9*54.3		26.8*25.2*55.1		40.6*23.2*56.1		40.6*23.2*56.1	40.6*23.2*56.1	52.0*27.6*59.1		/
	Exterior Dimensions (W*D*H) mm	760*897*1993		665*710*1965		780*840*1945		1130*755*1980		1130*755*1980	1130*755*1980	1440*950*1980		1205*730*1990
	in	29.9*35.3*78.5		26.2*28.0*77.4		30.7*33.1*76.6		44.5*29.7*78.0		44.5*29.7*78.0	44.5*29.7*78.0	56.7*37.4*78.0		/
	Packing Dimensions (W*D*H) mm	873*997*2143		690*790*2110		865*945*2090		1250*850*2130		1250*850*2130	1250*850*2130	1570*1010*2120		1260*905*2110
	in	34.5*39.3*84.4		27.1*31.0*82.9		34.1*37.2*82.3		49.2*33.5*83.9		49.2*33.5*83.9	49.2*33.5*83.9	61.8*39.8*83.5		/
	Container Load (20'/40'/40'H)	12/26/26		22/44/44		12/26/26		11/23/23		11/23/23	11/23/23	7/14/14		10/22/22
Alarms	High/Low Temperature	Y		Y		Y		Y		Y	Y	Y		Y
	Remote Alarm	Y		Y		Y		Y		Y	Y	Y		Y
	Power Failure	Y		Y		Y		Y		Y	Y	Y		Y
	Sensor Error	Y		Y		Y		Y		Y	Y	Y		Y
	Low Battery	Y		Y		Y		Y		Y	Y	Y		Y
	Door Ajar	Y		Y		Y		Y		Y	Y	Y		Y
Accessories	Caster	Y/4		Y		Y		Y		Y	Y	Y		4
	Foot	Y/2		Y		Y		Y		Y	Y	Y		2
	Porthole	Y		Y		Y		Y		Y	Y	Y		2
	Shelves/Drawers	4/-		7/-		6/-		12/-		12/-	12/-	12/-		12/-
	USB Interface	Y		Optional	Y	Optional		Optional		Optional	Optional	Y		Optiona
	Printer	Optional		Optional		N/A		Optional		Optional	Optional	Optional		Optiona
	Temperature Recorder	/		Optional		Optional		Optional		Optional	Optional	Optional		/
Others	Certification	CE	UL, ENERGY STAR, ANSI 456	CE, ENERGY STAR		CE	UL	CE	UL	UL	CE	CE	UL	CE, DIN13277 (Optional)

Product appearance and specifications are subject to change without notice

Haier Biomedical
Intelligent Protection of Life Science

Blood Bank Solutions

Automated Blood Management Refrigerator

HXC-429TR

HXC-629TR

HXC-1369TR

Microcomputer Control

The temperature inside the unit is controlled within 4±1°C with temperature control accuracy of 0.1°C and the large high-definition LCD touch screen display makes it convenient to observe.

Inverter Compressor

High efficiency and energy saving, low noise and long service life.

Three-layer Glass Foam Door

With large viewing three-layer glass foam door design, surface glass with LOW-E film to reduce heat transfer efficiency with no condensation at 25°C and 85% humidity environment.

Standard USB Port

With optional disc temperature recorder.

Multiple Fault Alarms

High/low temperature alarm, power failure alarm, door ajar, sensor error alarm, and low battery alarm. It is configured with remote alarm interface with two alarm modes (sound buzzer alarm and light flashing alarm).

Speed Control Condenser Fan

High efficiency and energy saving, low noise and long service life.

Double Protection of Mechanical Door Lock and Electromagnetic Lock

Electromagnetic lock can realize NFC card punching unlocking and fingerprint unlocking function.

Information Flow

Place the blood bag with RFID tag in blood basket

Using built-in RFID read & write board of the refrigerator to read blood bag information

RFID Tag Information

Server

RFID Tag Information

Refrigerator Screen APP

Operation Instructions

Blood Bag Inbound:

Card swiping to open the door ›› Blood Bag Inbound ›› Close the door ›› Automatic Inventory Checking ›› Outbound/inbound and inventory information pop-up display and upload

Blood Bag Outbound:

Card swiping to open the door ›› Blood Bag Outbound ›› Close the door ›› Automatic Inventory Checking ›› Outbound/inbound and inventory information pop-up display and upload

Specifications

Product Model No.	Voltage (V/Hz)	Internal Temperature (°C)	External Dimension (W*D*H mm)	Internal Dimension (W*D*H mm)	Effective Volume (L)	NW / GW (Kg)	Stainless Steel Shelf (layers)	Loading Capacity (400 ml blood bag)
HXC-429TR	230V-50/60Hz	4±1	625*940*1830	505*680*1315	429	190/230	5	120
HXC-629TR	230V-50/60Hz	4±1	765*940*1980	645*680*1455	629	235/280	6	192
HXC-1369TR	230V-50/60Hz	4±1	1545*940*1980	1425*680*1455	1369	430/490	12	384

Automated Blood Management

Scope of Application

Suitable for blood transfusion departments, operating rooms, and emergency rooms, etc. of the hospitals

Product Advantages

Drastically Improves the Speed of Delivery

Innovative blood bank system, enables the blood to be advanced to the operating room to achieve 1-minute rapid blood collection.

Reduce Waste and Improve Efficiency

Electronic blood matching within 1 minute, reducing the cross matching time and reagent consumption. Quick and precise blood matching, combined with intelligent lighting indicators guide, guarantees the accurate identification and safe use of blood, without waste.

Intelligent Blood Management System

Allows integration and coordination of blood recovery within hospitals and blood allocation between hospitals and even across regions through the blood network cloud platform. Enabling the rational use of blood upon demand, thus reducing resource consumption.

Intelligent Blood Management System

Quickly and accurately identify blood bag location using onboard blood information management system.

The patient's blood matching information is shown and a blood bag automatically selected and a request for the bag is sent.

The system reads the blood information and light up indicators guide the user to the correct blood bag location.

Blood information is cross-checked and blood is issued. Inventory is automatically updated within the blood management system.

Specifications

	Model	HXC-149R	HXC-429R	HXC-629R	HXC-629RB
Technical Data	Type	Drawer-Type	Drawer-Type	Drawer-Type	Drawer-Type
	Climate Class	N	N	N	N
	Cooling Type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
	Defrost Mode	Auto	Auto	Auto	Auto
	Refrigerant	R600a	R600a	R600a	R600a
	Sound Level (dB(A))	40	41	41	41
Performance	Temperature Range (°C)	4±1	4±1	4±1	4±1
	Ambient Temperature (°C)	16-32	16-32	16-32	16-32
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LCD Touchscreen	LCD Touchscreen	LCD Touchscreen	LCD Touchscreen
Electrical Data	Power Supply (V/Hz)	220~240/50/60	220~240/50/60	220~240/50/60	115/60
	Power (W)	250	280	300	300
	Electrical Current (A)	1.5	1.8	1.9	3
	Power Consumption (kWh/24h)	2.6	2.9	3.1	3.6
Construction	Capacity (L/Cu.Ft)	149/5.3	429/15.1	629/22.2	629/22.2
	Blood Storage Capacity (450ml blood bags)	18	60	88	88
	Net/Gross Weight (approx) — kg	129/179	245/280	295/335	295/335
	Net/Gross Weight (approx) — lbs	283.8/ 393.8	539/616	649/737	649/737
	Interior Dimensions (W*D*H) — mm	505*560*610	505*680*1315	645*680*1455	645*680*1455
	Interior Dimensions (W*D*H) — in	19.7*32.3*23.8	19.7*26.5*51.3	25.2*26.5*56.7	25.2*26.5*56.7
	Exterior Dimensions (W*D*H) — mm	625*820*1425	925*940*1830	1065*940*1980	1065*940*1980
	Exterior Dimensions (W*D*H) — in	24.4*30.2*55.6	36.1*36.7*71.4	41.5*36.7*77.2	41.5*36.7*77.2
	Packing Dimensions (W*D*H) — mm	740*945*1575	725*985*1940	875*995*2090	875*995*2090
	Packing Dimensions (W*D*H) — in	28.9*36.9*61.4	28.3*38.4*75.7	34.1*38.8*81.5	34.1*38.8*81.5
Loading Quantities	Container load (20'/40'/40'H)	18/36/36	18/35/35	12/26/26	12/26/26
Alarms	High/Low Temperature	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
Accessories	Caster	4	4	4	4
	Foot	2	2	2	2
	Porthole	Y	Y	Y	Y
	Drawers	9	30	44	44
	USB Interface	Y	Y	Y	Y
	Temperature Recorder	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y
	RS485	Y	Y	Y	Y
Certifications	CE	Y	/	Y	/	Y	/	/
	UL	/	Y	/	Y	/	Y	Y

R suffix - RFID with IoT model for blood bag management

Product appearance and specifications are subject to change without notice

Unattended Self-service Blood Distribution Refrigerator

Self-Service Blood Distribution with Smart IoT Technology

Self-service blood distribution for blood transfusion departments

- After blood cross matching is completed for the blood bags, specified blood collection permissions will be allocated to the different blood using departments to achieve self-help blood distribution; self-help blood collection at night can save labor cost and improve efficiency.

Mobile blood storage points set up by blood stations

- The refrigerators may be used as mobile blood storage points in hospitals to guarantee the applications of emergency blood use, achieve zero waiting for blood use, and guarantee the timely blood use of patients.

HXC-629ZZ

Product Advantages

Electronic checking and bar code management

- Blood bag warehouse-in and warehouse-out management can be achieved by scanning the blood donation codes and the product codes on the bags.

- The system can take the specified blood bags for the work staff accurately after identifying the operators and checking the blood bags to be error-free.

A drawer corresponds to a lock

Safe and reliable, making blood collection process traceable

- Equipped with fingerprint module and NFC card punching module, providing dual permission modes to open the electromagnetic lock;

- Each drawer is equipped with an independent electronic lock to ensure that only the unique and correct blood bag can be taken out in each blood collection operation;

- The camera module can take photos of the operators automatically and transmit them to the platform to achieve operation information traceability.

Ergonomic design

- Smart dual screen setting realizes simple and intuitive LCD screen display and better user-machine interactions.

- Upon checking of the warehouse-out blood bag's information, self-help printing of Blood Collection Sheet for Clinical Blood Transfusion and Blood Distribution Record Sheet is available.

Self-service printing

User-machine interaction, making management visual

- The intelligent blood management system can display the blood donation codes, product codes, blood types, blood quantities, expiry dates and other information of the stored blood bags in real time, realizing one-key query of the stock blood information.

- It can clearly show the storage location of the blood bag with the closest expiry date and follow the first-in-first-out management practices.

Real-time control of freezer temperature

- Double temperature control composed of 6 high precision sensors and mechanical thermostat against low temperature makes control more accurate and maintains the refrigerator temperature constant at 4±1°C.

Specifications

Model	Voltage (V/Hz)	Power (W)	Temperature inside the refrigerator (°C)	Uniformity (°C)
HXC-629ZZ	220-240/50/60	300	2-6	4±1

External dimensions (W*D*H mm)	Internal dimensions (W*D*H mm)	Effective volume (L)	Blood bag volume (400ml blood bag)	Overall construction
1290*940*1980	645*680*1455	629	72	Single door

Advanced Blood Bank Refrigerator with LCD Touchscreen

Advanced Blood Bank refrigerator with LED Display

HXC-1369T   HXC-629T   HXC-429T   HXC-149T

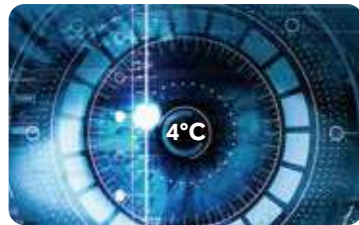

HXC-1369   HXC-629   HXC-429   HXC-149

Product Advantages

Control Interface

• The simple and intuitive high-definition LCD touch screen can display temperature graph, working status, events and alarm record.

Microprocessor Control

• A dual control system of six high-precision sensors and mechanical thermostat ensures that the temperature inside the cabinet is maintained at 4±1°C.

Stable and Reliable Operation

• The refrigeration system is powered with a high-quality, energy-efficient inverter compressor and variable speed fan motors. Temperature control responses quickly and reliably for a more uniform temperature using less power and lower noise.

Multiple Safety Protection

• Multiple alarms include high and low temperature, power failure, door ajar, sensor error, and low battery. Sound buzzer, visual flashing light and remote contacts are standard alarm features. Built-in battery provides power to the alarm system in the event of a main power failure. Fingerprint and standard NFC swipe card module are optional.
• Optional fingerprint and standard NFC swipe card module.

Product Advantages

With Multiple Temperature Control to Guarantee Constant and Precise Temperature

• The inside temperature is constant within 4±1°C, the digital temperature display resolution at 0.1°C.
• Equipped with 6 high-precision sensors and a mechanical thermostat which enables more accurate air cooling and temperature control to ensure uniform temperature inside the unit, maintained within the specified temperature range. The multi-layer inner door design reduces thermal loss after door openings and further ensures the temperature stability inside the cabinet.

With Multiple Safety Guarantees to Provide Worry-Free Service

• Equipped with complete alarm function, including alarm on high and low temperature, power failure, door ajar, sensor error, and low battery. Two alarm modes including audible buzzer and visual lights with remote alarm interface.
• Back-up battery design ensures alarm and temperature readings continue to operate in the event of a main power failure.
• NFC swipe card module, with safer storage management.

Standard USB Interface

• Ability to record temperature data for ten years by using the USB interface, an optional disc temperature recorder is also available

Specifications

	Model	HXC-149	HXC-429	HXC-629	HXC-629B	HXC-1369	HXC-149T	HXC-279T	HXC-429T	HXC-629T	HXC-629TB	HXC-1369T
Technical Data	Type	Basket-Type	Basket-Type	Basket-Type	Basket-Type	Basket-Type	Drawer-Type	Basket-Type	Drawer-Type	Drawer-Type	Drawer-Type	Drawer-Type
	Climate Class	N	N	N	N	N	N	N	N	N	N	N
	Cooling Type	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling
	Defrost Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
	Refrigerant	R600a	R600a	R600a	R600a	R600a	R600a	R600a	R600a	R600a	R600a	R600a
	Sound Level (dB(A))	39	40	40	41	41	39	41	40	40	41	41
Performance	Temperature Range (°C)	4±1	4±1	4±1	4±1	4±1	4±1	4±1	4±1	4±1	4±1	4±1
	Ambient Temperature (°C)	16-32	16-32	16-32	16-32	16-32	16-32	16-32	16-32	16-32	16-32	16-32
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED	LED	LCD	LCD Touchscreen	LCD	LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)	220~240/50/60	220~240/50/60	220~240/50/60	115/60	220~240/50/60	220~240/50/60	220/50	220~240/50/60	220~240/50/60	115/60	220~240/50/60
	Power (W)	240	245	255	255	400	240	400	245	255	255	400
	Electrical Current (A)	1.4	1.5	1.5	3	2	1.4	2.6	1.5	1.5	3	2
	Power Consumption (kWh/24h)	2.5	2.8	2.9	3.6	3.5	2.5	5.1	2.8	2.9	3.6	3.5
Construction	Capacity (L/Cu.Ft)	149/5.3	429/15.1	629/22.2	629/22.2	1369/48.3	149/5.3	279/9.85	429/15.1	629/22.2	629/22.2	1369/48.3
	Blood Storage Capacity (450ml blood bags)	60	195	312	312	624	60	135	195	312	312	624
	Net/Gross Weight (approx) kg	97/125	169/204	187/217	187/217	345/410	108/136	113/136	182/217	212/252	212/252	380/445
	Net/Gross Weight (approx) lbs	213.4/275	371.8/448.8	411.4/477.4	411.4/477.4	759/902	237.6/299.2	249/299.2	400.4/477.4	466.4/554.4	466.4/554.4	836/979
	Interior Dimensions (W*D*H) mm	505*560*610	505*680*1315	645*680*1455	645*680*1455	1425*680*1455	505*560*610	505*410*1365	505*680*1315	645*680*1455	645*680*1455	1425*680*1455
	Interior Dimensions (W*D*H) in	19.7*32.3*23.8	19.7*26.5*51.3	25.2*26.5*56.7	25.2*26.5*56.7	55.6*26.5*56.7	19.7*32.3*23.8	19.8*16.1*53.7	19.7*26.5*51.3	25.2*26.5*56.7	25.2*26.5*56.7	55.6*26.5*56.7
	Exterior Dimensions (W*D*H) mm	625*820*1150	625*940*1830	765*940*1980	765*940*1980	1545*940*1980	625*820*1150	660*705*1750	625*940*1830	765*940*1980	765*940*1980	1545*940*1980
	Exterior Dimensions (W*D*H) in	24.4*30.2*44.9	24.4*36.7*71.4	29.8*36.7*77.2	29.8*36.7*77.2	60.3*36.7*77.2	24.4*30.2*44.9	26.0*27.8*68.9	24.4*36.7*71.4	29.8*36.7*77.2	29.8*36.7*77.2	60.3*36.7*77.2
	Packing Dimensions (W*D*H) mm	720*920*1220	725*985*1940	875*995*2090	875*995*2090	1610*995*2090	720*920*1220	730*760*1940	725*985*1940	875*995*2090	875*995*2090	1610*995*2090
	Packing Dimensions (W*D*H) in	28.1*35.9*47.6	28.3*38.4*75.7	34.1*38.8*81.5	34.1*38.8*81.5	62.8*38.8*81.5	28.1*35.9*47.6	28.7*30.0*76.4	28.3*38.4*75.7	34.1*38.8*81.5	34.1*38.8*81.5	62.8*38.8*81.5
Loading Quantities	Container load (20'/40'/40'H)	18/38/76	18/35/35	12/26/26	12/26/26	7/14/14	18/38/76	24/48/48	18/35/35	12/26/26	12/26/26	7/14/14
Alarms	High/Low Temperature	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Dirty condenser	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Accessories	Caster	4	4	4	4	4	4	Y	4	4	4	4
	Foot	2	2	2	2	2	2	Y	2	2	2	2
	Porthole	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Baskets	6	15	24	24	48	6	15	15	24	24	48
	Shelves/Drawers	2/0	5/0	6/0	6/0	12/0	0/2	5/0	0/5	0/6	0/6	0/12
	Inner doors	2	5	6	6	12	0	5	0	0	0	0
	USB Interface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Temperature Recorder	Optional	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Certifications	CE	Y /	Y /	Y /	/	Y /	Y /	/	Y /	Y /	/	Y /
	UL	/ Y	/ Y	/ Y	Y /	/ Y	/ Y	/	/ Y	/ Y	Y /	/ Y

T suffix - Advanced with touchscreen
Product appearance and specifications are subject to change without notice

4°C Blood Bank Refrigerator

Haier Biomedical's 4 °C Medical Blood Bank Refrigerator

High efficiency, energy-saving, safe and reliable, smart control.

HXC-106

Microprocessor Control System
The temperature range is 4±1°C, with temperature accuracy of 0.1°C.

Air Cooling Design
The temperature in all corners of the cabinet is maintained within the calibrated temperature range, and the test hole design is added to meet the actual needs of the user.

Multiple Fault Alarms
High and low temperature alarm, power failure alarm, door ajar alarm, sensor error alarm, low battery with a remote alarm interface, two alarm modes (sound beeping alarm and light flashing alarm).

Multiple Protection
Startup delay protection, stop interval protection, display panel password protection, power failure memory data protection, sensor error protection.

Remote Alarm Function
Can connect alarm to other rooms to achieve alarm function.

Automatic Evaporation of Condensed Water after Collection
Avoid the trouble of manual treatment of condensed water.

Product Features

Door design
Vertical single door design, double layer electric heated glass door and self - closing function.

Materials
The shell and inner liner are sprayed with steel plate, which is anticorrosive and bacteriostatic.

Compressor
Deeply optimized refrigeration system, international brand compressor, energy saving, low noise, long service life.

Interior lighting:
The cabinet is equipped with LED lights and external independent light switches.

Door lock and door lock alarm:
Prevent random door opening.

Door handle:
Easy to open

Foot:
Stable and adjustable

LED digital display:
The internal temperature 2-6°C, digital display of upper and lower temperature, the average temperature display and the resolution of 0.1°C.

Air cooling design:
Ensure that the temperature in any corner of the box is maintained within the calibration temperature range.

The temperature measuring box is used to monitor the temperature in the cabinet in real time.

3 shelves, 4 blood baskets, blood basket with a label slot, easy to label. Capable of storing 54 bags of 400ml blood totally .

Temperature drop and insulation curve
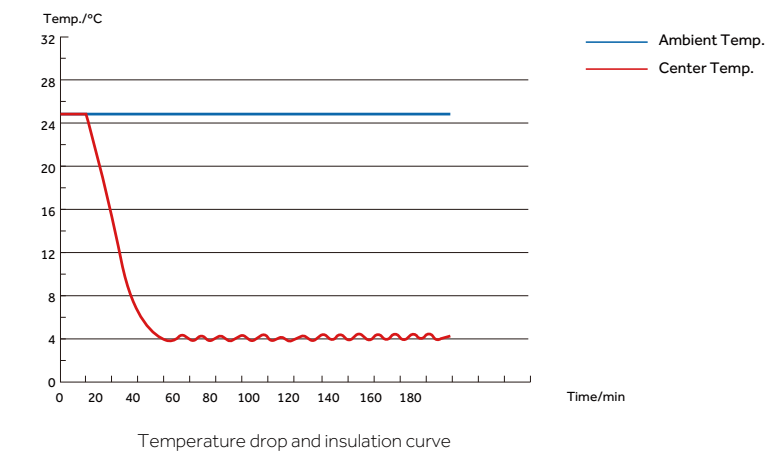
4°CBlood Bank Refrigerator

The blood bank refrigerator is designed for blood collection housing, providing a safe and secure 2~6°C storage environment after the blood has been collected.
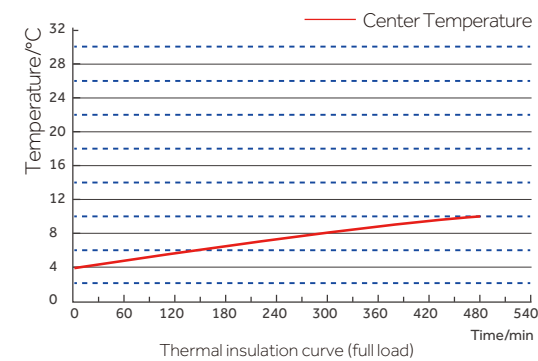
HXC-279

Safe storage and optimum operation experience

• 60mm thick foam layer, superior insulation, ensuring the temperature is stable in the refrigerator;
• Five shelves and five inner doors design minimizes the cold loss;
• 15 blood baskets with labels. The maximum blood storage capacity is 135 bags (400/450ml);
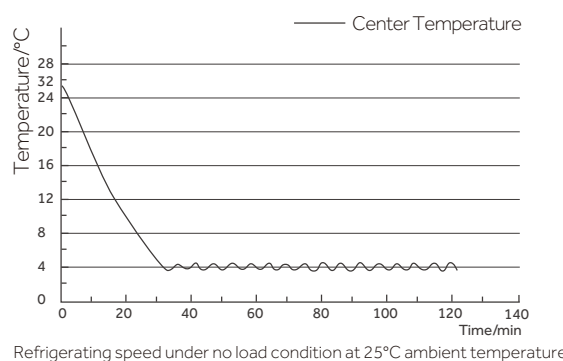
Long insulation time

Under full load and power off conditions, holdover time for 4°C to 6°C is more than 150 minutes, more secure.

Rapid refrigeration, high efficiency

It can reach set temperature within 35 mins under no load condition at room temperature.

Thermal insulation curve (full load)

Refrigerating speed under no load condition at 25°C ambient temperature

Specifications

	Model		HXC-106	HXC-279
Technical Data	Type		Basket-Type	Basket-Type
	Climate Class		N	N
	Cooling Type		Forced air cooling	Forced air cooling
	Defrost Mode		Auto	Auto
	Refrigerant		HC	R134A
	Sound level (dB(A))		42	41
Performance	Temperature Range (°C)		4±1	4±1
	Ambient Temperature (°C)		10-38	16-32
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply (V/Hz)		220~240/50/60	220/50
	Power (W)		253	400
	Electrical Current (A)		1.6	2.6
	Power Consumption (kWh/24h)		3.8	5.1
Construction	Capacity (L/Cu.Ft)		106/3.75	279/9.85
	Blood Storage Capacity		54 (400ml blood bags)	135
	Net/Gross Weight (approx)	(kg)	49/52	113/136
		(lbs)	108.03/114.64	249/299.2
	Interior Dimensions (W*D*H)	(mm)	430*350*830	505*410*1315
		(in)	16.93*13.78*32.68	19.8*16.1*51.8
	Exterior Dimensions (W*D*H)	(mm)	500*514*1055	660*705*1700
		(in)	19.69*20.24*41.54	26.0*27.8*67.0
Loading Quantities	Packing Dimensions (W*D*H)	(mm)	565*615*1145	730*760*1890
		(in)	22.24*24.21*45.08	28.7*30.0*74.4
	Container load (20'/40'/40'H)		36/72/72	24/48/48
Alarms	High/Low Temperature		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y	Y
	Shelves/Baskets		3/4	5/0
	Inner doors		/	5
	Remote Alarm		Y	Y
	USB Interface		/	N
Certification	CE		Y	/

Product appearance and specifications are subject to change without notice

Blood Bank Refrigerators

Applicable for the storage of blood and blood related products and other items that need to be stored at 2-6°C in hospitals and blood stations.

Product Advantages

Adjustable Shelves
The shelves are adjustable to any hright to fulfill different requirements

Three Types of Alarm
Audible buzzer, visible flashing light, remote alarm

Five Alarm Functions
High/low temperature, power failure, senor error, low battery, door ajar

Superior Performance
Adopting air cooling technology for the inside temperature uniformity and stability

HXC-158

Specifications

Model			HXC-158	HXC-158B
Technical Data	Type		Basket-Type	Drawer-Type
	Climate class		ST	ST
	Cooling type		Forced air cooling	Forced air cooling
	Defrost mode		Auto	Auto
	Refrigerant		HC	HC
	Noise (dB(A))		42	42
Performance	Temperature range (°C)		4±1	4±1
	Ambient temperature (°C)		10-38	10-38
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power supply (V/Hz)		220-240/50/60	220-240/50/60
	Power (W)		320	320
	Electrical current (A)		2.6	2.6
Dimensions	Capacity (L/Cu.Ft)		158/5.6	158/5.6
	Blood storage capacity (450ml blood bags)		84	84
	Net/Gross weight (approx)	kg	107/120	113/126
		lbs	235.9/264.6	249.1/277.8
	Interior dimensions (W*D*H)	mm	460*370*950	460*370*950
		in	18.1*14.6*37.4	18.1*14.6*37.4
	Exterior dimensions (W*D*H)	mm	560*570*1530	560*570*1530
		in	22.0*22.4*60.2	22.0*22.4*60.2
	Packing dimensions (W*D*H)	mm	645*675*1680	645*675*1680
		in	25.4*26.6*66.1	25.4*26.6*66.1
	Container load (20'/40'/40'H)		27/54/54	27/54/54
Alarms	High/Low temperature		Y	Y
	Power failure		Y	Y
	Sensor error		Y	Y
	Low battery		Y	Y
	Door ajar		Y	Y
	Remote alarm		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Test hole		Y	Y
	Shelves/Basket		4/4	-
	Drawers/Inner doors		-/2	4/-
	USB interface		Optional	Optional
	Temp recorder		Optional	Y
Others	Certification		CE	CE

Innovative Design

- Frequency Conversion Compressor
- Condensation Free Design
- Adjustable Shelf And Basket
- Intelligent Alarm

RFID Solution with Real-Time IoT Technology

DW-30L1280FT

- RFID radio frequency, accurate management of plasma information, with automatic inventory and quick inquiry function.

- Hydrocarbon refrigeration, efficient and quick.

- Mobile terminal bio-link APP ensures real-time monitoring.

- Multiple alarms, safe and reliable.

- 10-inch large screen, easy to operate and more intuitive display.

- NFC permission management system combined with an electromagnetic lock, controllable flow direction and traceable information.

Multi-compartment Storage Basket

- Multi-compartment storage basket design, streamlines plasma storage and placement, easy to access.

10-inch large touch screen, easy to operate, intuitive display.

- The 10-inch large touch screen ensures an easier operating experience. Capable of displaying interior real-time temperature, ambient temperature, temperature set point, input voltage, network status, user login status, temperature curve and new message/notebook, etc. Query interface can display plasma donation code, product code, blood type, blood volume, period of validity, etc.

Dual Cooling System, Frost Free

- Equipped with dual cooling system, if one system fails, the other system can maintain the interior temperature at -25°C for an extended period, safe and reliable.

Equipped with IoT function, ensuring real-time temperature monitoring.

- Equipped with IoT function, capable of sending users the equipment alarm information in the form of text messages. Download bio-link APP to monitor and check cabinet temperature, alarms and event logs from anywhere at anytime.

- RFID read-write board can read plasma label information, providing inventory plasma information statistics. Supports automatic inventory, one-key inventory and plasma in-out stock storage information.

Bottom air inlet system, low noise

- Equipped with a special filter, ensuring the cleanness and safety of interior air.

Specifications

Model	Voltage (V/Hz)	Interior Temperature (°C)	Exterior Dimension (W*D*H mm)	Interior Dimension (W*D*H mm)	Effective Volume (L)	N.W./G.W. (kg)	loading Qty (bag)
DW-30L1280FT	220/50	-10~-35	1520*1065*1980	1320*752*1260	1280	440/505	576

The process is completely traceable with intelligent interconnection methods, this design improves the safety and security for the donor.

The whole process of blood component (plasma) separation is traceable

- The whole process can be automatically monitored and managed.
- Automatic recording and uploading data.
- Precise control of data is immediate.

Identity Recognition

Built-in intelligent identity recognition system can identify a person immediately and accurately through multiple sources, such as face, ID card and fingerprint as key examples.

Intelligent identification, safe and effective error prevention system

Precise control and accurate identification of the anticoagulant bags, improved safety, reliability and security.

Smart IoT

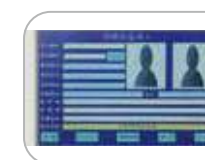Intelligent interconnection with the management system, data at a glance, clear and convenient.

Ergonomic

Suitable for plasma stations and mobile collections with limited space.

Data and identity protection system

The separator can collect information in multiple dimensions including ID card, face, fingerprint and bar code. Then the system will recognize the accurate information from the database, ensuring no inaccuracy of donor or recipient information being contaminated.

The monitor prevents manual process errors

The separator will emit an alarm sound and corresponding text prompt when there is any mishanging of anticoagulant. If this occurs the system is unable to carry out the next operation, which completely eliminates the risk of infusion error, and avoids any accident that endangers the safety of the plasma donor.

The pioneer to maintain blood activity perfectly

Centrifuge cup adopts new patented technology to gently protect blood activity so that blood is safer.

A messenger who automatically processes data information

The separator can record and upload consumables and collect data automatically and intelligently without manpower, this improves efficiency and prevents errors, which saves medical staff precious time and reduces stress.

Comprehensive monitoring surveillance system

All-directional multi-angle monitoring plasma collection process. Exclusive design of blood pump and anticoagulation pump. Adaptive compensation function is more compatible with consumables from different manufacturers. No wearing parts. Stable flow. Accurate control of blood cell access ratio. Multi-level alarm system can find any errors.

Compatible with accurate capacity optimization

It can be used with 160ml anticoagulant bags to accurately match actual needs, which means cost reduction and environmentally friendly improvements. Consumables are versatile and compatible with multiple models.

Ergonomic Design

- Intelligent connectivity which ensures automatic data collection and processing.
- Large color touch screen, easy to operate.
- The unit is small in size, movable and easy to use, which reduces the burden of users.
- Optimized system and structural noise reduction design, low operating noise.

Specifications

Model	Power supply (V/Hz)	Exterior dimensions (W*D*H) (mm)	Gross weight (kg)
XJ-II	220~/50	540*510*770	29

Parameters	Amount collected per cycle (g)	Total plasma collection (g)	Pump speed (ml/min)	Return speed (ml/min)	Anticoagulant (Citrate) to whole blood ratio	Centrifuge speed (r/mim)
Range	0~300	0~1000	20~100	20~100	1:12~1:16	7000
Preset	230	600	80	80	1:16	7000
Precision	1	1	≤2	≤2	<1	≤2.5%

This product is composed of a mainframe (Centrifuge, blood pump, anticoagulant pump, weighing scale, display screen, air detector, pressure detector, control panel) and a pressure cuff, excluding the matching disposable pipe consumables.

Plasma Blast Freezer

Mainly applicable to the quick-frozen treatment of plasma products in blood stations or medical institutions.
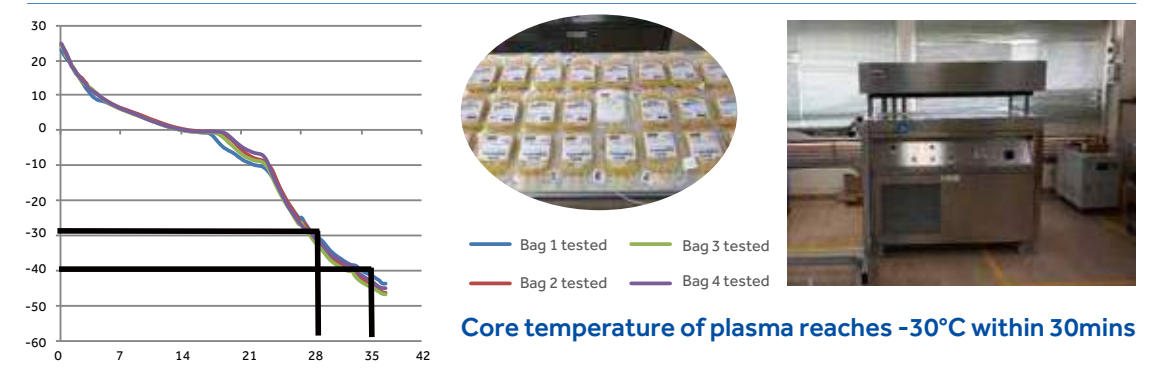

XSD-24FL

Features

- Traceability of each freezing cycle
- Maximum freezing efficiency
- Able to freeze all types and different sized plasma bags
- Easy-to-use interface
- Fast pre-cooling process

- Pneumatic lift
- Rollable, ready-to-plug in or external solution
- Night storage control
- Stainless steel plates
- Air cooled solutions

Performance Curve

Bag 1 tested	Bag 3 tested
Bag 2 tested	Bag 4 tested

Core temperature of plasma reaches -30°C within 30mins

Specifications

Model	Climate type	Power supply	Freezing capacity	Cooling method	Power cord	Dimension (head cover open) (mm)	Dimension (head cover close) (mm)	G.W/N.W (kg)
XSD-24FL	N	3N 400V/50hz/60hz	16 bags of 1000ml plasma or 24 bags of 500ml plasma	Forced air cooling	Crimp PTB	1455*915*1575	1455 *915*1375	480/550

Standard Parts List

Picture	Description	Basic Solution	Premium Solution	List of Configuration	Features & Functions
	Blast Freezerr	●	●	1. XSD-24FL Blast Freezer 2. Analog sensor × 1 3. User's Manual × 1 4. Plug-in power cord × 1 5. Host computer software × 1 6. Dummy bag × 2	1. Rapid freezing of plasma, defrosting and locking 2. Pulls down the central temperature of blood bag to -30°C within 30mins 3. Standard software for host computer, to support query and printing of refrigeration data

Optional Parts List

Picture	Description	Basic Solution	Premium Solution	List of Configuration	Features & Functions
	Scanner	●	●	Wireless scanner × 1	1. Enables the user to input the barcode of blood bag 2. Wireless device for more convenient operation 3. Ensures accurate and quick scanning
	Pallet Cart	○	●	Pallet cart for plasma transfer × 1	1. Made of aluminum alloy sections, firm and durable 2. Universal wheels, for convenient operation
	Tray	○	●	Tray for plasma transfer × 1	1. Made of aluminum to ensure high thermal conductivity 2. Put in and take out conveniently and effectively plasma by using the tray
	Analog Sensor	○	●	Analog sensor × 1	Supports the accurate regulation of blood bag
	Dummy Bag	○	●	Dummy bag × 1	Equipped with internal temperature measuring tube, convenient for determining the temperature at the center of blood bag

Plasma Blast Freezer

Mainly applicable to the quick-frozen treatment of plasma products in blood stations or medical institutions.

XSD-48WFL

Ergonomic Design

Flexible set up
The storage temperature, freezing time, and defrosting time can be flexibly set as required

Simple operation
All pre-cooling, freezing, defrosting procedures are controlled by PLC control module, simple operation, avoid wrong operation, ensure plasma safety

Rapid-freezing tray design
Rapid-freezing tray design, not only to improve the efficiency of plasma rapid-freezing, but also easy to save labor

Electric lifting system
Height control is more accurate and quieter than pneumatic lifting system

Password protection
Parameter setting is password protected to ensure plasma safety

Friendly interface
Friendly interface display design, clearer temperature observation

Product Advantages

Low rapid-freezing temperature
Rapid-freezing temperature can be reduced to -60°C, superior performance

Data is printable and the information traceable
Plasma storage data and corresponding curves can be exported via USB, which is convenient for information traceability

Precise temperature control, control precision 1°C
PLC control module, the system is stable and reliable, temperature control precision 1°C, to ensure the safety of plasma

Plate Rapid-Freezing, efficient Cooling
The central temperature of full-load plasma can be quickly frozen to below -30°C within 45 minutes, which effectively guarantees the activity of factor VIII
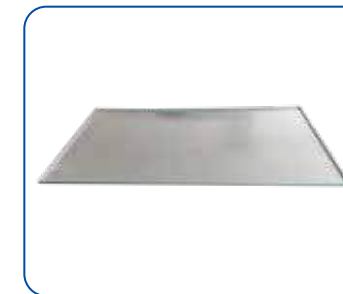
Efficient core components, energy saving
High efficiency compressor and dual-cooling system, better performance; Hydrocarbon refrigerant, energy saving and environmental protection

Optional Accessories

Trolley

Tray

Temperature Curve

Cooling Down Curve

Upper plate temperature
Lower plate temperature
Bag temperature
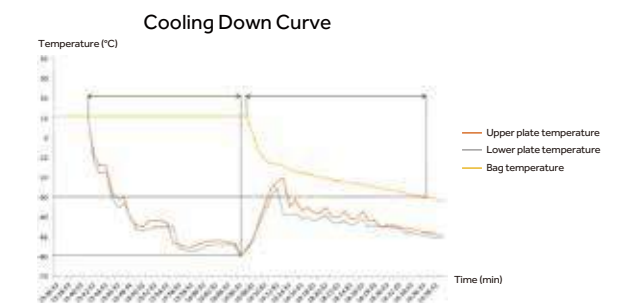
Specifications

Model	Cooling Type	Power Supply	Cooling Method	Power Cord
XSD-48WFL	Plate contact quick-freezing	3N 380V-50HZ/60HZ	Forced air cooling	Plug and play

External Dimensions (mm)		Weight (kg)		Plasma Bag Capacity		
Indoor machine	Outdoor machine	Indoor machine	Outdoor machine	1000ml bag	350ml bag	250ml bag
2040*880*1895	1500*860*1850	320	360	32	80	80

Product appearance and specifications are subject to change without notice

Plasma Blast Freezer

Mainly applicable to the quick-frozen treatment of plasma products in blood stations, plasma stations or medical institutions

XSD-24WFL

Ergonomic Design

Rapid-freezing tray design
Rapid-freezing tray design, not only to improve the efficiency of plasma rapid-freezing, but also easy to save labor

Simple operation
All pre-cooling, freezing, defrosting procedures are controlled by PLC control module, simple operation, avoid wrong operation, ensure plasma safety

Electric lifting system
Height control is more accurate and quieter than pneumatic lifting system

Password protection
Parameter setting is password protected to ensure plasma safety

Flexible setup
The storage temperature, freezing time, and defrosting time can be flexibly set as required

Friendly interface
Friendly interface display design, clearer temperature observation

Product Advantages

Plate rapid-freezing
Contact refrigeration of upper and lower cold plates. Blood bags are placed between the upper and lower cold plates to achieve rapid freezing through contact and heat conduction. The appearance of quick-frozen blood bags is smooth

Double stage cooling system
The refrigeration efficiency is 20% higher than that of single stage. Compared with single-stage compressor, double-stage compressor is more stable, more efficient and has a faster cooling speed at low temperature

Split-style design
By installing the compressor and fan outdoors, the indoor noise and heat dissipation are greatly reduced, and the working comfort of users is improved

Intelligent screen
The 10-inch touch screen is convenient to view the temperature curve and data, record the rapid-freezing time in real time, and adjust the temperature parameters through the display screen, which is efficient and quick

Cooling Down Curve

- Upper plate temperature
- Lower plate temperature
- Bag temperature
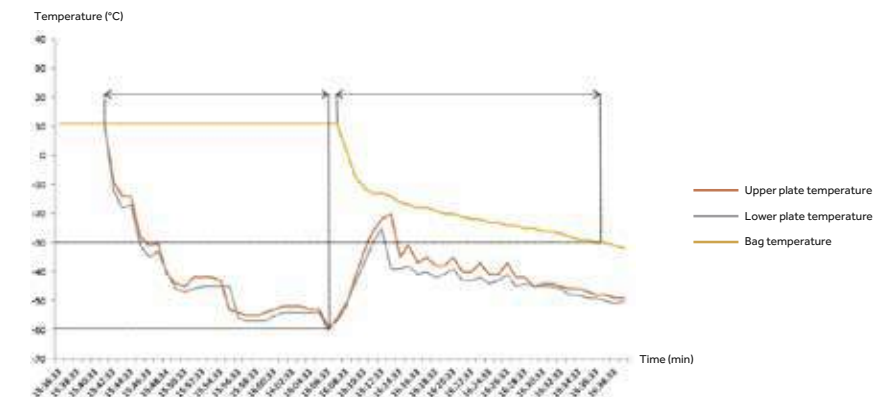
Specifications

Model	Rapid-cooling Type	Power Supply (V/Hz)	Cooling Method	Power Cord	Exterior Dimensions (W*D*H)(mm)	Weight (Kg)
XSD-24WFL	Plate contact quick-freezing	3N 380-50/60	Forced air cooling	Plug and play	(Indoor machine / Outdoor machine) 1455*915*1465 1340*760*1640	(Indoor machine / Outdoor machine) 320/360

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Platelet Incubator with Agitator

This incubator includes an integrated platelet agitator and is designed to create the optimal storage environment of platelets after collection. Suitable for hospitals, blood stations and research applications.
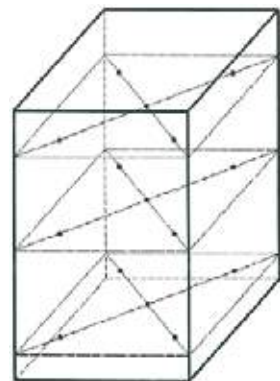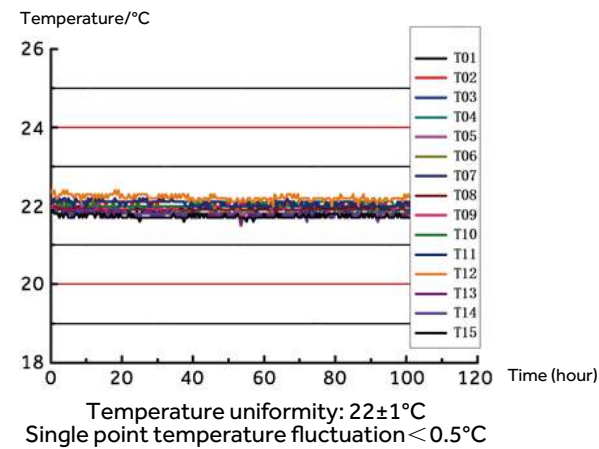
HXZ-149

HXZ-1369

Product Advantages

Data Traceability
- Real-time temperature monitoring, records and stores historical data, alarm records and events
- USB interface, convenient and safe data transfer

Energy Saving
Semiconductor temperature control technology, PID algorithm adjustment, energy saving 30% than the traditional compressor

Multiple Alarms
Multiple alarms including over temperature alarm, power failure alarm, sensor failure alarm, door ajar alarm, low battery alarm, abnormal alarm of oscillating motor, remote alarm ensures maximum safety

Superior Insulation Performance
60mm thickened foam layer. In the event of a power failure within a 25°C ambient and an empty load, the warm up time from 22°C to 24°C in the center of the chamber is more than 4 hours

Reliable Oscillation
The agitator mechanism is equipped with an alarm and calibration device to ensure platelet quality

Precise Temperature Control
Semiconductor temperature control, internal temperature is maintained at 22°C±1°C

Low Noise
Semiconductor and EBM oscillating motor provide a quiet working environment

Ultraviolet Disinfection
The UV disinfection function helps maintain a sterile environment

Product Performance

HXZ-149 15 test points

HXZ-149 Running temperature curve (Empty loaded)

Temperature uniformity: 22±1°C
Single point temperature fluctuation＜0.5°C

Specifications

Model	HXZ-149	HXZ-1369
Temperature (°C)	22 ± 1	22 ± 1
Oscillation Range (mm)	50	50
Oscillation Frequency (times/min)	60	60
Power Supply (V/Hz)	220/50	220/50
Exterior Dimensions (mm)	625*795*1050	1545*915*1945
Interior Dimensions (mm)	505*560*610	1425*680*1455
Effective Capacity (L)	149	1369
Tray	9	18
Maximum Storage Capacity (300ml blood bags)	36	216
Net Weight (kg)	114	345

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Transport
Cooler

Transport Cooler for Biological Products

Temperature Range 0~10°C

Active Cooling Solution ▶

HZY-8Z/8ZA

HZY-15Z/15ZA

- Accurate control of the temperature between 2-6°C
- PCM ice raft
- Constant temperature
- Complete process with cold chain monitoring
- Replace the traditional Insulation method with haier's transport cooler for transport
- Blood from blood transfusion department to clinical blood transfusion point

Low Noise
- The ultra-quiet fan is equipped with air outlets on both sides, noise level less than 34 dB providing a more comfortable environment.

Air Duct Structure

Easy to Clean
- The inner liner adopts aluminium oxidation process to make it smooth inside and easy to clean.

Internal Structure

Product Features

Semiconductor for active cooling, energy saving and environmental protection.
- Connect to power to cool unit to temperature, during transportation (without power) the unit will hold temperature. Small and easy to carry.

2~6 °C precise temperature control, suitable for storage of biological products such as blood, medicines and reagents etc.
- Temporary blood storage to ensure blood safety at clinical blood stations.

Embedded with 4 °C phase change PCM ice pack for cold storage, providing long insulation after power off to ensure blood safety during the transportation.

- The PCM ice pack uses a 4°C phase change material with a freezing point greater than 2°C to ensure the low temperature preservation of blood and other biological samples.
- At 25 °C under no load, the time for temperature inside the box rises to 10 °C is more than 1 hour.
- At 25 °C under full load, the time for temperature inside the box rises to 10 °C is more than 2 hour.

4 °C PCM Ice Pack

Multiple Fault Alarms, Making It Safer to Use.
- High/low temperature alarm, power failure alarm, and sensor error alarm.

The Power Supply Is Configured with Cigarette Lighter Plug, Easy for Vehicle Transportation.
- The power supply is configured to fit the vehicles internal power plug, easy for vehicle transportation.

Passive Cooling Solution ▶

- Multi-function handle with casters for easy transportation
- Multi dimensional binding of orders and blood, and whole process with cold chain monitoring
- From blood collection vehicle/blood donation house to blood center/blood station from blood center/blood station to hospital

Product Features

- LCD screen, real-time display of inside temperature, battery level and other information.
- Electromagnetic lock as standard, ability to scan QR code to open the unit, safeguarding the stored items.
- 4°C ice pack ensures cool storage temperatures with zero freezing to keep blood within safe storage temperature guidelines during transportation.

HZY-5B

Product Features

- Real-time display of inside temperature.
- Integrated cold storage ice pack box, easy to access ice pack.
- Rotational moulding shell, anti-knocking, easy to carry.
- Multifunctional handle, sided casters, easy to be transported on flat road.

HZY-35B

Transport Cooler

Transport Cooler for Biological Products

Specifications

Model	HZY-5B	HZY-8Z	HZY-15Z
Technical Data			
Storage Temperature (°C)	/	2~6	2~6
Operating Temperature (°C)	2~10	2~10	2~10
Construction			
Net / Gross Weight (kg)	2/3	3.5/5	6/8
Exterior Dimensions (W*D*H mm)	285x186x200	320×265×260	520×300×270
Interior Dimensions (W*D*H mm)	220x118x126	230x140x170	430×150×180
Packing Dimensions (W*D*H mm)	357x277x287	393x362x367	595x375x404
Blood Bag Capacity	5	8	15
Functions			
Foam material	High density foam	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
Refrigeration method	Passive cooling	Semiconductor active refrigeration	Semiconductor active refrigeration
Warm up time	3 hours (32°C ambient temperature load situation)	2 hours (32°C ambient temperature load situation)	2 hours (32°C ambient temperature load situation)
Shell/liner	ABS/ABS	ABS/ aluminium plate	ABS/ aluminium plate
Alarm	Low Battery	High temperature, sensor error, power off	High temperature, sensor error, power off
Battery	Lithium Battery	Rechargeable lithium battery	Rechargeable lithium battery
Certification			
CE	/	Y	Y

	HZY-8ZA	HZY-15ZA	HZY-35B
Technical Data			
Storage Temperature (°C)	2~6	2~6	/
Operating Temperature (°C)	2~10	2~10	2~10
Construction			
Net / Gross Weight (kg)	4/5	6/8	9/12
Exterior Dimensions (W*D*H mm)	320×265×260	520×300×270	550x328x370
Interior Dimensions (W*D*H mm)	230×140×170	430×150×180	450x232x295
Packing Dimensions (W*D*H mm)	393x362x367	595x375x404	674x455x490
Blood Bag Capacity	8	15	35
Functions			
Cold Chain Monitoring	Y	Y	/
NFC Unlock	/	Y	/
Foam material	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
Refrigeration method	Semiconductor active refrigeration	Semiconductor active refrigeration	Passive cooling
Warm up time	2 hours (32°C ambient temperature load situation)	2 hours (32°C ambient temperature load situation)	6 hours (43°C ambient temperature load situation)
Shell/liner	ABS/ aluminium plate	ABS/ aluminium plate	HDPE/HDPE
Alarm	High temperature, sensor error, power off	High temperature, sensor error, power off	/
Battery	Rechargeable lithium battery	Rechargeable lithium battery	Button battery
Certification			
CE	/	/	Y

Product appearance and specifications are subject to change without notice
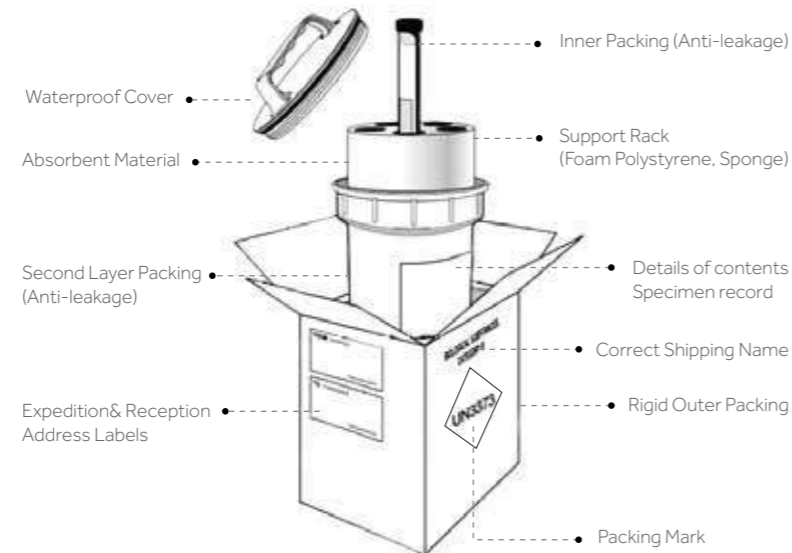
Transport Cooler for Infectious Products

Transport Cooler for the Infectious Material

The virus is high-risk specimen, and if there is collision during the transportation or transmission, there will be a risk of leakage and re-infection. A solution is urgently needed to ensure the viability of the samples and the safety of transport personnel.

Packaging System

Three-layer packaging:

· Main container
  Test tube with cap (user configures according to business)

· Auxiliary container
  ≥95kPa pressure sealed tank (EPS or EPE bracket for fixing test tube, 16 hole D10 test tube and 2 hole D15 test tube)

· Outer packaging
  Transfer box (ice row, foam used to fix sealed container, activated carbon and other adsorbed substances, sample labeling)

Inner Packing (Anti-leakage)

Waterproof Cover

Support Rack
(Foam Polystyrene, Sponge)

Absorbent Material

Second Layer Packing
(Anti-leakage)

Details of contents
Specimen record

Correct Shipping Name

Rigid Outer Packing

Expedition& Reception
Address Labels

Packing Mark

Active Cooling ▶

HZY-8Z (Specimen)

HZY-15Z (Specimen)

Product Advantages

Active semiconductor cooling, energy saving and environment friendly
Active semiconductor cooling, energy saving and environmental protection, built-in cooling function, cooling after power on.

Precise temperature control
Precise temperature control at 2°C ~ 6°C is suitable for the temporary storage of biological products such as serum and blood specimens.

Built-in, 4°C phase change PCM, ice row cooling, long-term insulation after power failure, to ensure the safety of specimen
Under the condition of no load at 25°C, the temperature of the air in the box rising to 10°C takes 1 hour; under the loading condition of 25°C, the air temperature in the box rising to 10°C takes 2 hours.

Multiple fault alarms, safer to use
High and low temperature alarm, power failure alarm, sensor error alarm.

The power supply is equipped with a car cigarette lighter plug, which is convenient for vehicle transport
The power supply can support 12V and 100~240V conversion, so the container can be put into the car to plug in and transfer.

Auxiliary Container ▶

HZY-8Z (Specimen)

HZY-15Z (Specimen)

Pressure sealed tank (EPS or EPE holder for fixing test tubes, 16-hole D10 test tube and 2-hole D15 test tube)

The pressure-sealed tank remains intact at the temperature of the refrigerant used, as well as the temperature and pressure that may occur after loss of refrigeration. Under the condition of no leakage, it can withstand the internal pressure of 95kPa, and can ensure that it will not be damaged in the temperature range of -40°C to + 55°C.

Transport Cooler for Infectious Materials

Passive Cooling ▶

UN2814 transport cooler
HZY-10B (P620)

Product Advantages

Passive cooling, long heat preservation time, suitable for air transportation;
At 32°C ambient temperature, the temperature inside the box (pre-cooled in advance) rising to 10°C takes 7 hours(P650) and 8 hours(P620) separately.

PCM ice row, frozen at 4°C, to ensure the safety of specimen storage;

The shell is made of aluminum-magnesium alloy, with high strength; Meeting the P620 packaging requirements of Class A infectious substances(HZY-10B) and the P650 packaging requirements of Class B infectious substances(HZY-10B) separately.

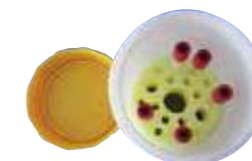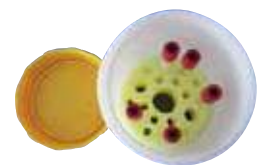## Auxiliary Container ▶

HZY-10B (P620)

Pressure sealed tank (EPS or EPE holder for fixing test tubes, 16-hole D10 test tube and 2-hole D15 test tube)

The pressure-sealed tank remains intact at the temperature of the refrigerant used, as well as the temperature and pressure that may occur after loss of refrigeration. Under the condition of no leakage, it can withstand the internal pressure of 95kPa, and can ensure that it will not be damaged in the temperature range of -40°C to + 55°C.

Specifications

Model	HZY-8Z	HZY-15Z
Use	Transfer of biological specimens, etc	Transfer of biological specimens, etc
Type	Active cooling, portable	Active cooling, portable
Internal dimensions (W*D*H mm)	230*140*170	430*150*180
External dimensions (W*D*H mm)	320*265*260	520*300*270
Loading quantity	1 transport tank	2 transport tanks
Effective volume	6L, 1 built-in specimen seal can	12L, 2 built-in specimen seal cans
Specimen seal can dimension (mm)	H160*D130	H160*D130
Tube storage capacity	16 pcs D10 test tubes (small), 2 pcs D15 test tubes (large)	
Net weight (kg)	3.5	6
Controller	Microprocessor control	Microprocessor control
Temporary storage temperature (℃)	2-6	2-6
Transfer temperature (℃)	2-10	2-10
Holdover time (25℃, no load) (h)	1	1
Holdover time (25℃, full load) (h)	2	2
External material	ABS, high-density EPS foam filling	ABS, high-density EPS foam filling
Internal material	Aluminum plate	Aluminum plate
Door material	ABS, high-density EPS foam filling	ABS, high-density EPS foam filling
Cold storage	PCM ice-pack for cold storage	PCM ice-pack for cold storage
Cooling type	Optimized semiconductor cooling	Optimized semiconductor cooling
Cooling fan	ADDA fan	ADDA fan
Temperature control and display	Microprocessor control, dual sensors for control and display, display accuracy 0.1 ℃	
Alarms	Sensor failure alarm, high temperature alarm, power failure alarm	

Specifications

Model	HZY-10B (P620)
Purpose	Disease control centers, hospitals, etc. are used for transport of infectious substance specimens (air transportation)
Type	Passive cooling
Internal dimensions (W*D *H mm)	345*225*182
External dimensions (W* D* H mm)	430*312*272
Loading quantity	2 transport tanks
Effective volume	14L with 2 built-in specimen sealed tanks
Specimen sealed tank size (mm)	H160*D130
Number of test tubes (Single tank)	16 test tubes D10 (small), 2 test tubes D15 (large)
Net weight (kg)	8
Transport temperature (℃)	2-10
Thermal insulation time (32℃ full load) (h)	8
Cabinet material	Aluminum magnesium alloy box shell
Thermal insulation material	EPP foam liner
Cool storage mode	PCM ice pack cold storage

Vaccine Transport Cooler

U-COOL Portable Transport Cooler

Medical Transport Cooler

High strength material, anti-collision, non-toxic and harmless, UV resistant.

The outer-unit body is equipped with an integrated handle, which is firmly installed and durable.

Real-time display of temperature inside the cooler, making the temperature monitoring more intuitive.

Specially positioned ice packs, partitioned storage, easy to operate.

Professional & innovative sealed design ensuring zero cold leakage to achieve safe, secure and reliable long-term cooling preservation.

Typical Application

Cold chain transportation for samples, reagents, blood products, specimens and drugs.

Specifications

Model	FS-12LS	FS-18LS	FS-35LS	FS-54LS	FS-100L	FS-110L
Temperature Range (°C)	0-10	0-10	0-10	0-10	0-10	0-10
Duration (h)	≥24	≥24	≥24	≥24	≥24	≥24
Exterior Dimensions (W*D*H)(mm)	440*262*308	440*262*308	570*305*365	615*395*450	680*500*540	832*515*524
Interior Dimensions (W*D*H)(mm)	325*170*225	363*203*244	475*245*270	520*310*355	580*400*440	732*421*425
Qty of Icepacks (Pcs)	4	4	4	4	4	6
Net Weight (kg)	6.2	6.5	9.5	18.5	22	19

Note: -25~-15°C and 15-25°C are available with optional ice packs. The standard ice packs can only achieve 0-10°C temperature storage.

Temperature Range -20~10°C

ALG50

- Low voltage battery protection
- LED lighting
- Widescreen LCD display
- Real-time voltage display
- Detachable temperature sensor
- Standard basket

BCD60

- Low voltage battery protection
- LED lighting
- Detachable temperature sensor
- Widescreen LCD display
- Real-time voltage display

U-COOL Portable Transport Cooler

Cold Chain Transport Cooler

BCD115

- Low voltage battery protection
- LED lighting
- Detachable temperature sensor
- Widescreen LCD display
- Real-time voltage display

Temperature Range -25~-10 /2-8/15-25°C

Intelligent Control Cold Chain Transport Cooler

Product Advantages

Check the insulation status at any time
Real-time upload setting parameters, operation parameters, operation curve, alarm record and event record. Monitor the operation of the transport cooler through the UCool system to visualize the complete process and traceability of information.

Stable performance, long service life
The product adopts VIP insulation technology which has an insulation performance of 5-8 times that of polyurethane foam, and significant extended time temperature control that handles the changing transportation conditions and environment; It has long service life by adopting nanometer core material.

Light weight, easy to carry
Light product with ergonomic design is easy to carry.

Specifications

		ALG50	BCD60	BCD115
Capacity (L)		50	60	115
Climate Type		T, ST, SN, N	T, ST, SN, N	T, ST, SN, N
Net Weight (Kg)		16.7	24.0	28.6
Operating Temperature (°C)		-20~ +10 (at 25°C)	-18~ +10 (at 32°C)	-18~ +10 (at 32°C)
Power (W)		55	70	70
Refrigerant		R134a	R134a	R134a
Insulation Material		C5H10/C-Pentane	C5H10/C-Pentane	C5H10/C-Pentane
Exterior Dimensions (W*D*H)	mm	630*404*530	621*485*569	811*482*672
Packing Dimensions (W*D*H)	mm	715*450*625	718*578*638	906*575*745
Voltage Power Supply		AC110-240V, 50/60Hz	AC110-240V, 50/60Hz	AC110-240V, 50/60Hz
		DC 12V/24V	DC 12V/24V	DC 12V/24V
Power Consumption (kWh/24h)		0.23	0.25	0.25

Temperature Curve Data: 150hrs

Temperature/°C

- Upper center point
- Dry-bulb temperature
- Middle center point
- Wet-bulb temperature
- Lower center point

VIP
PCM ice pack (optional)
Hollow outer box

Time/h

Temperature/°C

- Upper center point
- Middle center point
- Lower center point

Temperature Range -20~22°C

Active Cooling

Product Advantages

DC Frequency Conversion Technology

DC frequency conversion compressor, superior energy efficiency.

Tilt Protection Function

Electronic gyroscope in board, effective protection for compressors.

Integrated Main Body

Rotational molding body better adapted to complex transport environments.

Multiple Power Supply

Supports AC and DC power.

HZY-40Z

Unique Designs

- The body and door use integrated rotomolding.
- Using environmental LBA CFC-free foaming materials, thermal insulation performance is increased by up to 5%.
- The body is equipped with a handle for easy carry.
- Optional: Casters to facilitate transport.
- Optional: Electromagnetic lock, with password lock equipped; more secure.
- Forced air cooling method, the temperature is more uniform.
- Built-in UVC ultraviolet lamp for regular disinfection.
- 3 in 1 wide temperature range , multiple functions within one unit, greater cost savings.

Specifications

Model	BW25-8A	BW25-12A	BW50-12A	BW25-18A	BW25-36A	BW50-36A	BW25-64A
Temperature Range (°C)	-25~-15/2~8/ 15-25/-90~-60	-25~-15/2~8/ 15-25/-90~-60	-25~-15/2~8/ 15-25/-90~-60	-25~-15/2~8/ 15-25/-90~-60	-25~-15/2~8/ 15-25/-90~-60	-25~-15/2~8/ 15-25/-90~-60	-25~-15/2~8/ 15-25/-90~-60
Exterior Dimensions (W*D*H)(mm)	455*295*295	410*345*355	470*400*410	510*350*355	515*450*460	575*510*510	590*525*525
Packing Dimensions (W*D*H)(mm)	546*381*389	504*436*444	560*492*500	607*439*447	609*541*549	665*597*605	679*611*619
Interior net Dimensions (W*D*H)(mm)	310*215*215	270*270*270	270*270*270	370*270*270	370*370*370	370*370*370	440*440*440
Payload Size (with ice pack)(mm)(optional)	270*175*175 (8L)	230*230*230 (12L)	230*230*230 (12L)	330*230*230 (18L)	330*330*330 (36L)	330*330*330 (36L)	400*400*400 (64L)
Net Weight (kg)	4	4.8	9.8	5.6	8.2	16.4	11
Gross Weight (kg)	6	6.8	12.5	8.2	11.2	20	14.8
Recorder Monitoring	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Heat Insulating Material	VIP	VIP	VIP	VIP	VIP	VIP	VIP
Insulation Thickness (mm)	25	25	50	25	25	50	25
Daily Consumption of Dry Ice (kg)	1.5	1.6	0.75	1.85	2.5	1.5	2.7
Safety Margin (kg)	1	1	1	1	2	2	2

Note: The safety margin is the minimum amount of dry ice required to keep the temperature in the box not higher than -70°C.

Specifications

Model	Exterior Dimension (W*D*Hmm)	Interior Dimension (W*D*Hmm)	Capacity (L)	Door	Foam Materials	Compressor	Basket Load Bearing(KG)	Working Mode	Outer Shell/ Inner Liner	Condenser/ Evaporator
HZY-40Z	800*550*505	338*348*285	33	Rotational moulding integrated forming foam door	LBA	DC variable frequency compressor	≤35	Forced air cooling and heating	Rotational moulding	Microchannel/ Fin type

Controller	Refrigerant	Light	UV Lamp	Net Weight (KG)	Temperature Range(°C)	Power Supply	Max power (W)	Power Consumption (Kwh/24h)	Electro- magnetic Lock	USB
Microprocessor	HFC	LED 1W	UVC 1W	42	-20 to 22	AC 110-240V 50/60Hz DC12/24V	90	1.5	Optional coded lock	Optional

Mini ULT Freezer

It is suitable for biobanks, vaccination production and transportation users.

Temperature Range -80~-60°C

Product Advantages

HC Energy Saving
High quality HC high-efficiency compressor with optimized refrigeration system, which can save 50% on power consumption.

One Unit for Multiple Applications
*Vehicle-mounted transportation with 24V(DC) power supply
*Long-term storage with 220V power supply.

Superior Uniformity
Built-in evaporator, fast cool down refrigeration, the temperature is safe, secure and reliable with the uniformity of ±3°C at key characteristic points.

Ergonomic Design

Lightweight
The whole unit weighs 27kg, easy to carry.

Superior Insulation Performance
25mm VIP + 70mm thick LBA foam insulation layer design, dual seal strips for better insulation.

Safety Lock Catch
Simple adjustable mechanical lock with lock catch, and it can be equipped with an external lock to guarantee the safety of sample transportation and storage.

Metal Handle
Hidden metal handle, stylish and comfortable, safe and durable, easy to carry.

Specifications

Model	Power Supply	Temp Range (°C)	Exterior Dimensions (W*D*H mm)	Interior Dimensions (W*D*H mm)	Effective Capacity (L)	Net/Gross Weight (Kg)
DW-80WZ15	220V 50Hz DC24V	-80~-60	690*320*500	260*180*330	15	27/33

Low Temperature Transport Trolley YDC-3000H

Mobile Cryogenic Transfer Operation Platform

The unit can be used to preserve plasma and biomaterials during transportation. It is suitable for deep hypothermia operation and transportation of samples in hospitals, various biobanks and laboratories. High quality stainless steel in combination with the thermal insulation layer ensures the effectiveness and durability of the low temperature transport trolley.

Temperature and Liquid Level Monitor

The Insulation Cover can be Magnet Absorbed

Operating Bracket

Cryopreservation Box

Inlet System

Product Advantages

Touch Screen

LCD touch operation

USB Data Export

It has its own USB interface and supports USB data export.

Real Time Monitoring

The instrument monitors the temperature and liquid level in real time and displays the expected remaining service time. Continu- ous working hours up to 24 hours.

2020-02-15 15:26

-160℃   100 mm

480 min

Set

User Friendly Design

Appearance Spray
The appearance of spray, not easily affected by stains.

Caster Design
Integrated design, universal caster at the bottom, easy to move.

Polymer Materials
The new type of environmentally-friendly polymer material is used inside the cover plate, which is more appealing, more environment-friendly and more advanced than the commonly used pearl foam and polyurethane materials.

The Insulation Cover can be Magnet Absorbed
The insulation cover can be magnet absorbed to the side of vehicle, which is convenient to extract, and the space reserved at the bottom can be used to store other tools.

Technical Parameters

Product Model	Dimensions (L*W* H mm)	Frozen Storage Space (L *W*H mm)	Liquid Nitrogen Under Tray (L)	Maximum Storage				
				5*5 Freezing Boxes (ea)	10*10 Freezing Boxes (ea)	50ml Blood Bag Boxes (ea)	200ml Blood Bag Boxes (ea)	2ml Cryopreservation Tube (ea)
YDC-3000H	1295×523×1095	900×335×163	33	65	30	105	50	3000

Haier Biomedical
Intelligent Protection of Life Science

Vaccine
Storage Solution

Smart Vaccine refrigerator

Haier Smart Vaccine

Haier Biomedical developed the Smart Vaccination Solution, by improving the conventional vaccination process, adopting advanced refrigeration technology, automation and intelligent vaccine delivery by incorporating IoT technologies. By connecting and leveraging the existing digital outpatient service system, the vaccination process can be managed as follows:

• After the vaccination record is scanned, the IoT based vaccination refrigerator will automatically and immediately eject the required vaccine.
• A 'double check' scan of the medical code to confirm a "Correct" & "Valid" vaccine prior to patient administration.
• Standardised vaccination process produces zero error.
• The vaccination records will be uploaded in real-time to the system. Records are traceable, making it possible to trace a specific vaccine code back to a specific child.

Smart Vaccine Safe Vaccination Solution
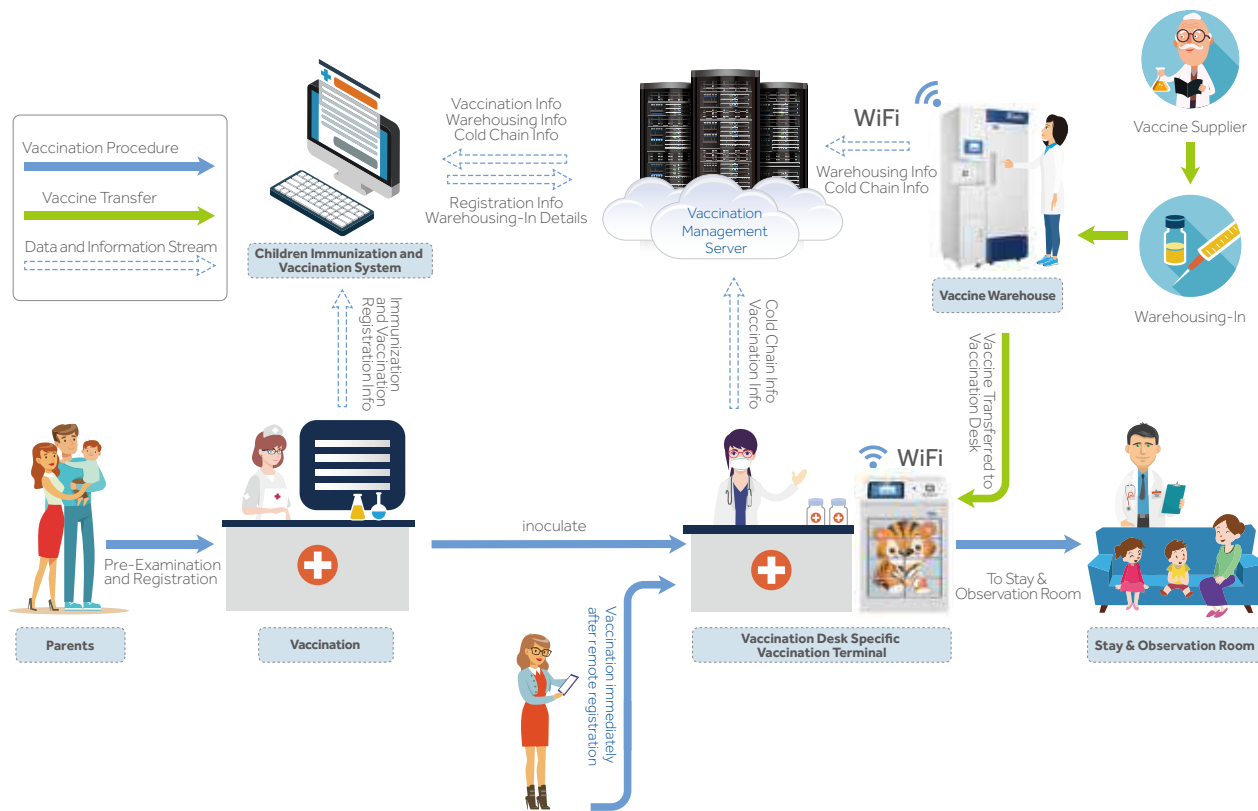
Safe, Worry-free and Intelligent Vaccine Management

3 Key Advantages

• Right patient-vaccine information management system (VIMS) confirms correct patient required for the vaccination
• Right vaccine-vaccine is automatically selected and delivered and double-checked by VIMS to ensure right medicine can and should be administered
• Exchange of vaccine, child and vaccination information, end-to-end visibility and transparency, plus immediate freezing of vaccines upon expiration or in question, ensure the high reliability of the vaccination programme.

Smart Vaccine Storage Solution

Vaccine storage management is an essential step to ensure vaccine safety. However, most of the vaccine storage refrigerators used by the vaccination stations are household refrigerators or ordinary medical refrigerators, without storage management functions, making it difficult to operate a first-in-first-out methodology. Haier's intelligent vaccine preservation refrigerator solves the problem of manual (pen and paper) vaccine management, which is time-consuming and laborious.

Smart Vaccine Refrigerator

Smart Vaccine Preservation Refrigerator and Smart Vaccination Refrigerator are provided with a VIMS (Vaccine Information Management System) software to improve the vaccination experience.

1 Smart Vaccine Preservation Refrigerator can improve the work efficiency of nurses by removing manual inventory-taking and warehouse operations by leveraging the classification based storage, electronic regulatory code based management, data and information stream management.

HYC- 361

Classification based storage	The smallest package units	Data and information streams
Each standard refrigerator is provided with 21 compartments in 7 layers. Each compartment can distinguish different lots of vaccines by applying specific first-in-first-out rules. Different kinds of vaccines can be stored upon such classification to effectively reduce the errors during the warehousing-in / out operations.	The warehousing-in/out operations are verified based on the electronic regulatory codes to realize the full digitalization and automation of vaccine management, and guarantee the accuracy and validity of vaccine storage data.	The data can be exchanged quickly between the vaccine warehouse and the vaccination desk. Vaccination program manager or disease control centre manager utilizes the vaccination management server, to monitor in real-time all vaccines stored by each vaccination station/centre.

2 The Smart Vaccination Refrigerator, used at vaccination stations, can reduce the workload of nurses during the dispensing and checking of vaccines. The automated accurate vaccine dispensing, minimum temperature fluctuation, reconfirmation of vaccine information, electronic information system, integrated nurse station and other functions ensure zero vaccination error.

HYC- 61

Automated accurate vaccine dispensing	Reduce temperature fluctuation	A Double Check	Integrated nurse workstation
The vaccine will be ejected automatically after the Vaccination Record is scanned; The Regulatory Code will be scanned automatically to reconfirm the information of vaccine, including the inventory, expiration dates and cold chain early warnings; The time of dispensing can be shortened, and the rate of vaccination errors can be reduced effectively.	The refrigerator is divided into 8 independent chambers, and the small door of each chamber can be opened for taking out the vaccine required as quick as possible, to minimize the door opening time. The internal temperature fluctuation can be minimized to ensure the safe storage of vaccines.	The warehousing-in/out and dispensing of vaccines can be verified by using the electronic regulatory codes. The vaccination can be conducted only after the vaccine to be used is verified by scanning the code. This function can guarantee the accurate vaccination effectively.	The queue management, vaccination management, vaccination information input, real-time cold chain control and authorization management are integrated into the vaccination desk vaccine refrigerator. Multiple tasks are centralized to streamline the overall management.

Smart Vaccine refrigerator

Specifications

	Model	HYC-61	HYC-361	HYC-361 Scanner Cabinet
Technical Data	Cabinet Type	upright	upright	upright
	Climate Class	N	N	N
	Cooling Type	Forced Air Cooling	Forced Air Cooling	/
	Defrost Mode	Manual+ Auto defrost	Manual+ Auto defrost	/
	Refrigerant	HC	HC	/
	Sound Level (dB(A))	≤41	≤41	/
Performance	Temperature Range (°C)	2~8	2~8	/
Control	Controller	Microprocessor	Microprocessor	/
	Display	10.1 inch touch screen	/	10.1 inch touch screen
Electrical Data	Power Supply (V/Hz)	220/50	220/50	/
	Power (W)	230	254	/
	Electrical Current (A)	1.5	1.6	/
	Power Consumption (kWh/24h)	1.8	1.5	/
Construction	Capacity (L/Cu.Ft)	61/2.15	361/12.75	/
	Net/Gross Weight (approx) kg	80/90	116/139	36/42
	Net/Gross Weight (approx) lbs	176/198	255.7/306.4	79.2/92.4
	Interior Dimensions (W*D*H) mm	560*460*630	530*555*1380	/
	Interior Dimensions (W*D*H) in	22*18.1*24.8	20.8*21.9*54.3	/
	Exterior Dimensions (W*D*H) mm	600*600*935	980*680*1980	315*710*1965
	Exterior Dimensions (W*D*H) in	23.5*22.6*37.1	38.6*26.8*78	12.4*28*77.4
	Packing Dimensions (W*D*H) mm	670*660*1110	1055*755*2110	420*744*2042
	Packing Dimensions (W*D*H) in	26.4*26*43.7	41.6*29.8*83.1	16.5*29.3*80.4
Loading Quantities	Container load (20'/40'/40'H)	54/102/102	23/46/46	/
Alarms	High/Low Temperature	Y	Y	/
	Remote Alarm	Y	Y	/
	Power Failure	Y	Y	/
	Sensor Error	Y	Y	/
	Door Ajar	/	Y	/
Accessories	Caster	Y	Y	/
	Foot	Y	Y	/
	Porthole	/	Y	/
	Shelves/Drawers	Y	Y	/
	USB Interface	/	Y	/
Certifications	Registeration certification for medical equipment	Y	Y	/
	CE	Y	Y	/

Product appearance and specifications are subject to change without notice

Solar Direct Drive Combined Refrigerator/Freezer

The combined refrigerator with freezer can be used to store vaccines, reagents and freeze ice packs. Suitable for remote and sunny regions where power shortages are common.

Display Panel

Lock Catch Designed to Match Padlock

Handgrip

HTCD-160

Storage Security
• The anti-freeze function ensures the internal temperature of the cooling chamber is not lower than 0℃.
• Guarantees the safe storage of vaccine even in the event of a power failure. Under an ambient temperature of 43 ℃, the inner box temperature will be no more than 8℃ in case of rainy or cloudy days for more than 121 hours (Autonomy time) and no more than 10℃ after power outage for more than 160 hours (Holdover time).
• The freezing chamber can freeze 2.08kg of ice every day, with storage of 10.68kg in total.
• Solar powered temperature display indicates clearly the internal temperature.
• Lockable catch designed for padlock for added security
• The cooling chamber meets the A level WHO requirements for anti-freezing protection.

Temperature Control
Microprocessor Control; accurate and precise temperature control

Ergonomic Design
• Equipped with USB charging socket, allows users to charge their mobile phone, etc.
• Eliminate storage battery and only provide solar energy power, which is better for the environment.
• Even when powered off the temperature display screen remains illuminated.
• The refrigerating chamber and freezing chamber both have separate refrigerating systems; the two independent cooling systems ensure safety of the vaccine storage.
• Sensor error alarm.
• Low noise.

Specifications

	Model		HTCD-160
Technical Data	Cabinet Type		Upright
	Ambient Temperature (℃)		5~43
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		38
Performance	Temperature Range (℃)		Freezer ≤-10 Refrigerator: 2~8
	Waterpack Storage Capacity (kg)		10.68
	Waterpack Freezing Capacity (kg/24h)		2.08
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		9
	Energy Consumption: Stable Running (kWh/24h)		0.86
	Energy Consumption: Cool Down Test (kWh/24h)		0.86
	Holdover time at 43℃		160hrs8mins
	Holdover time at 32℃		230hrs10mins
	Autonomy Time at 43℃		121hrs27mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		100/3.5
	Gross Volume (L/Cu.Ft)		Refrigerator：120/4.2 Freezer：40/1.4
	Net/Gross Weight (approx)	kg	170/197
		lbs	374.8/434.3
	Interior Dimensions (W*D*H)	mm	Cooling Chamber：545*500*530 Freezer Chamber：560*520*150
		in	Cooling Chamber: 21.5*19.7*20.9 Freezer Chamber: 22.0*20.5*5.9
	Exterior Dimensions (W*D*H)	mm	865*825*1700
		in	34.1*32.6*66.9
	Packing Dimensions (W*D*H)	mm	985*920*1860
		in	38.8*36.2*73.2
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24
Alarm	Sensor Error		Y
Accessories	Shelves		2(Refrigerator Room)
	Data Logger		Y
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Combined Refrigerator/Freezer

The combined refrigerator with freezer is designed to store vaccines, reagents and to freeze ice packs. Suitable for remote and sunny regions where power shortages are common. Freezers are only designed to freeze the ice packs and not applicable for the storage of vaccines.

HTCD-90

Safety System

- Sensor error alarm, high and low temperature alarm
- Alarm mode: sound buzzer alarm and light flashing alarm
- Key components such as compressors and fans are designed for purpose to ensure the reliability and safety of stored items

Environmental Protection

- Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA
- The shell is coated with cold rolled steel plate, and the inner liner is made of 1.0mm alumina, easy to recycle
- Ultra low GWP value
- Without any battery

Specifications

	Model		HTCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature (°C)		5~43
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		＜38
Performance	Temperature Range (°C)		Freezer ≤-10 Refrigerator: 2~8
	Waterpack Storage Capacity (kg)		12.52
	Waterpack Freezing Capacity (kg/24h)		2.43
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		7
	Energy Consumption: Stable Running (kWh/24h)		0.86
	Energy Consumption: Cool Down Test (kWh/24h)		0.81
	Holdover time at 43°C		137hrs47mins
	Holdover time at 32°C		169hrs6mins
	Autonomy Time at 43°C		114hrs 56mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		37.5/1.3
	Gross Volume (L/Cu.Ft)		Refrigerator: 58/2.1 Freezer：32 /1.1
	Net/Gross Weight (approx)	kg	83/113
		lbs	183.0/250.0
	Interior Dimensions (W*D*H)	mm	Cooling Chamber：270*345*555
			Freezer Chamber：170*370*555
		in	Cooling Chamber: 10.6*13.6*21.9
			Freezer Chamber: 6.7*14.6*21.9
	Exterior Dimensions (W*D*H)	mm	1128*720*875
		in	44.4*28.3*34.3
	Packing Dimensions (W*D*H)	mm	1190*770*1080
		in	46.9*30.3*42.5
Loading Quantities	Container Load (20'/40'/40'H)		26/56/56
Alarm	Sensor Error		Y
Accessories	Baskets		2
	Data Logger		Y
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Temperature Control

- Electronic temperature controller, digital temperature display, the display precision is 0.1°C and the control range is 2~8°C
- Solar energy temperature display system, without the need for a battery backup system

High Performance

- World Health Organization Certified (PQS certification)
- Class A anti-freeze
- Low temperature thermal compensation to prevent vaccine freezing
- 140mm insulation provides excellent thermal efficiency
- Broad working ambient temperature range of 5~43°C , outstanding performance
- Internal and external double door design to ensure superior insulation performance

Ergonomic Design

- Intelligent control
- The height of the temperature display screen is moderate, and the inner temperature can be checked at any time
- Safety door lock
- Low DC voltage ensures personal safety
- Plug-and-play type quick plug, positive and negative pole error-proof
- External door handle with door lock design to prevent random opening of the door to ensure vaccine safety
- Built-in handgrips on both sides of the cabinet facilitate overall movement
- The daily freezing volume of the freezer is 2.4kg, meeting the daily requirement

Solar direct drive vaccine refrigerator

Applicable for the storage of biological products and items that need to be stored under the condition of 2~8°C within pharmacies, pharmaceutical factories, epidemic prevention stations, health centers and hospitals as key examples.

HTC-40/110/112

Temperature Control

- Electronic temperature controller, digital temperature display, the display precision is 0.1°C and the control range is 2°C~8°C
- Solar power temperature display system, without the need of battery

Ergonomic Design

- Intelligent control, no adjustment required
- The height of the temperature display screen is moderate, and the inner temperature can be checked at any time
- Safety door lock
- Low DC voltage ensures personal safety
- Plug-and-play type quick plug, positive and negative pole error-proof
- External door handle with door lock design to prevent random door to ensure vaccine safety
- Built-in handgrips on both sides of the box body facilitate overall movement

Superior Performance

- World Health Organization Certified (PQS certification)
- Class A antifreeze
- Excellent hold-over times ensure the safety of vaccines
- Low temperature thermal compensation to prevent vaccine freezing
- 140mm insulation provides excellent thermal efficiency
- Wide working ambient temperature range of 5~43°C
- Internal and external double door design, better thermal insulation performance

Safety System

- Sensor error alarm, high and low temperature alarm
- Alarm mode: sound buzzer alarm and light flashing alarm
- Key components like compressors and fans are designed for purpose to ensure reliability and safety of stored items

Environmental Protection

- Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA
- The shell is coated with cold rolled steel plate, and the inner liner is made of 1.0mm alumina, which is easy to recycle
- Ultra low GWP value
- Don't use any batteries

Specifications

	Model	HTC-40	HTC-110	HTC-112
Technical Data	Cabinet Type	Chest	Chest	Chest
	Ambient Temperature (°C)	5~43	5~43	5~43
	Cooling Type	Direct cooling	Direct cooling	Direct Cooling
	Refrigerant	HC	HC	HC
	Sound Level (dB(A))	<30	<30	<30
Performance	Temperature Range (°C)	2~8	2~8	2~8
	Freezer Protection Level	A	A	A
Control	Controller	Microprocessor	Microprocessor	Microprocessor
	Display	Solar LED temperature display	Solar LED temperature display	Solar LED temperature display
Electrical Data	Power supply (V)	24	24	24
	Maximal Current (A)	5	5	5
	Energy Consumption: Stable Running (kWh/24h)	0.69	0.58	0.59
	Energy Consumption: Cool Down Test (kWh/24h)	0.71	0.62	0.62
	Holdover time at 43°C	122hrs18mins	106hrs17mins	/
	Holdover time at 32°C	162hrs36mins	152hrs28mins	/
	Autonomy Time at 43°C	117hrs18mins	96hrs24mins	92hrs46mins
	Solar Radiation Reference Period (kWh/m²/day)	3.5	3.5	3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)	22.5/0.8	59/2.08	75/2.65
	Gross Volume (L/Cu.Ft)	40/1.4	110/3.88	110/3.88
	Net/Gross Weight (approx) kg	57/82	75/105	75/105
	Net/Gross Weight (approx) lbs	125.6/180.7	165/231.5	165/231.5
	Interior Dimensions (W*D*H) mm	200*345*555	545*345*555	545*345*555
	Interior Dimensions (W*D*H) in	7.9*13.6*21.9	21.5*13.6*21.9	21.5*13.6*21.9
	Exterior Dimensions (W*D*H) mm	788*720*875	1128*720*875	1128*720*875
	Exterior Dimensions (W*D*H) in	31.0*28.3*34.4	44.4*28.3*34.4	44.4*28.3*34.4
	Packing Dimensions (W*D*H) mm	850*770*1080	1190*770*1080	1190*770*1080
	Packing Dimensions (W*D*H) in	33.4*30.3*42.5	46.9*30.3*42.5	46.9*30.3*42.5
Loading Quantities	Container Load (20'/40'/40'H)	36/78/78	26/56/56	26/56/56
Alarm	Sensor Error	Y	Y	Y
Accessories	Baskets	2	4	4
	Data Logger	Y	Y	Y
Certifications	CE	Y	Y	Y
	WHO/PQS	Y	Y	Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Refrigerator

Applicable for the storage of vaccines and reagents within clinics, health centres, hospitals, public health and research organisations in remote and sunny regions where power shortages are common.

HTC-120   HTC-240

Ergonomic Design
- Intelligent control
- High performance insulation with superior thermal efficiency
- Safety door lock
- Low DC voltage ensures personal safety

Temperature Control
- Electronic temperature controller, digital temperature display, the display precision is 0.1℃ and the control range is 2℃~8℃
- Low temperature thermal compensation to prevent vaccine freezing

Safe and Reliable
- Plug-and-play type quick plug, positive and negative pole error-proof
- Solar powered display panel shows refrigerator and freezer interior temperature without the need for a battery backup

Superior Insulation Performance
- World Health Organization Certified (PQS certification)
- Excellent autonomy time ensures the safety of vaccines
- 140mm insulation provides excellent thermal efficiency
- Broad working ambient temperature range of 5~43℃
- Door construction, seals and door handles maximizes door sealing effectiveness to reduce thermal loss

Safety System
- Sensor error alarm, high and low temperature alarm
- Alarm mode: sound buzzer alarm and light flashing alarm
- Key components like compressors and fans are designed for purpose to ensure reliability and safety of stored items

Specifications

	Model		HTC-120	HTC-240
Technical Data	Cabinet Type		Upright	Upright
	Ambient Temperature (℃)		5~43	5~43
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		No electric heating defrost	No electric heating defrost
	Refrigerant		HC	HC
	Sound Level (dB(A))		≤43	≤43
Performance	Temperature Range (℃)		2~8	2~8
	Freezer Protection Level		A	A
Control	Controller		Microprocessor	Microprocessor
	Display		Solar LED Temperature display	Solar LED Temperature display
Electrical Data	Power supply (V)		24	24
	Maximal Current (A)		5	5
	Energy Consumption: Stable Running (kWh/24h)		0.44	0.35
	Energy Consumption: Cool Down Test (kWh/24h)		0.48	0.54
	Autonomy Time at 43℃		112hrs24mins	95hrs23mins
	Autonomy Time at 32℃		183hrs20mins	151hrs10mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5	3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		100/3.5	200/7.1
	Gross Volume (L/Cu.Ft)		120/4.2	240/8.5
	Net/Gross Weight (approx)	kg	130/160	150/185
		lbs	286/352	330/407.9
	Interior Dimensions (W*D*H)	mm	530*500*530	530*500*960
		in	20.9*19.7*20.9	20.9*19.7*37.8
	Exterior Dimensions (W*D*H)	mm	865*825*1422	865*825*1815
		in	34*32*56	34*32*71
	Packing Dimensions (W*D*H)	mm	980*920*1585	980*920*1980
		in	38.6*36.2*62.4	38.6*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24	12/24/24
Alarm	Sensor Error		Y	Y
Accessories	Baskets		Y	Y
	Shelves		3	4
	Data Logger		Y	Y
Certifications	CE		Y	Y
	WHO/PQS		Y	Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Freezer

This product is desgined to freeze ice packs in remote and sunny regions where power shortages are common.

Solar Energy Display Panel
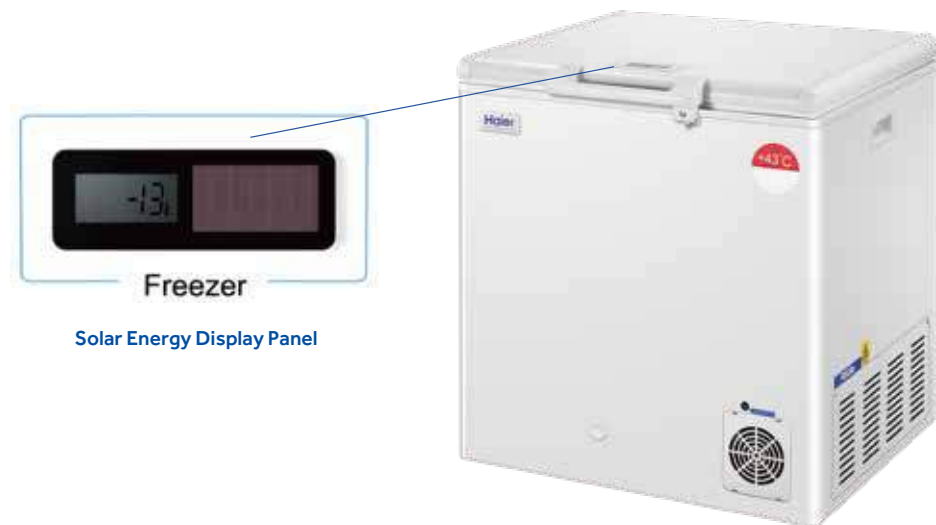
HTD-40

High Performance

- World Health Organization Certified (PQS certification)
- Equipped with ice pack pressing device, enabling the ice-pack plastered to the liner, speed up the water pack freezing
- The thickness of insulation layer is 140mm to better store the freezed ice-packs
- Broad working ambient temperature range of below 43°C, outstanding performance
- Internal and external double door design, superior insulation performance

Ergonomic Design

- Intelligent control
- The height of the temperature display screen is moderate, and the inner temperature can be checked at any time
- Safety door lock
- Low DC voltage ensures personal safety
- Plug-and-play type quick plug, positive and negative pole error-proof
- Built-in handgrips on both sides of the box body facilitate overall movement
- Compressor indicator light, indicating the system work status
  Two-chamber design: Ice pack freezer and ice pack storage chamber

Environmental Protection

- Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA
- The shell is coated with cold rolled steel plate, and the inner liner is made of 1.0mm alumina, which is easy to recycle.
- Ultra low GWP value
- Without any battery

Temperature Control

- Electronic temperature controller, digital temperature display, the display precision is 0.1°C, during the day the temperature can reach -10°C
- Solar energy temperature display system, driven by natural light

Safety System

High performance key components (compressor, fan, controller, etc.), safe and reliable

Specifications

	Model		HTD-40
Technical Data	Cabinet Type		Chest
	Ambient Temperature (°C)		≤43
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		<30
Performance	Temperature Range (°C)		<-10
	Waterpack Storage Capacity (kg)		20
	Waterpack Freezing Capacity (kg/24h)		2.4
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		5
	Energy Consumption: Stable Running (kWh/24h)		0.46
	Energy Consumption: Cool Down Test (kWh/24h)		0.50
	Autonomy Time at 43°C		5 days
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Gross Volume (L/Cu.Ft)		48/1.7
	Net/Gross Weight (approx)	kg	65/85
		lbs	143.0/187.4
	Interior Dimensions (W*D*H)	mm	Waterpack Freezer: 135*370*310 Waterpack Storage Chamber: 265*370*555
		in	Waterpack Freezer: 5.3*14.6*12.2 Waterpack Storage Chamber: 10.4*0.6*0.5
	Exterior Dimensions (W*D*H)	mm	788*720*875
		in	31.0*28.3*34.3
	Packing Dimensions (W*D*H)	mm	850*770*1080
		in	33.4*30.3*42.5
	Solar Panel (L*W*D)	mm	1335*990*40
		in	52.6*39.0*1.6
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78
Alarm	Sensor Error		Y
Accessories	Baskets		2
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Blood Refrigerator

Applicable for storing wholeblood, medicines, biological products and other laboratory products that need to be stored at 4°C.

Suitable for the storage of blood and blood articles in areas that have power shortages.

HTXC-240

Lock Catch Designed to Match Padlock

Handgrip

Display Panel

4.0℃

Refrigerator

It is equipped with 16 blood baskets, each basket can hold 12 blood bags, and a total of 192 blood bags can be stored (350ml blood bags)

Excellent autonomy time ensures the safety of blood

Solar direct drive refrigerator without battery

Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA

Electronic temperature controller, digital temperature display, the display precision is 0.1°C and the control range is 2°C~8°C

Broad working ambient temperature range of 5~43°C

Vertical structure, first-in first-out, easy operation

Automatic drainage design

Specifications

	Model		HTXC-240
Technical Data	Cabinet Type		Upright
	Ambient Temperature (°C)		≤43
	Cooling Type		Direct Cooling
	Defrost Mode		No electric heating defrost
	Refrigerant		HC
	Sound Level (dB(A))		≤43
Performance	Temperature Range (°C)		2~8
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		5
	Energy Consumption: Stable Running (kWh/24h)		0.35
	Energy Consumption: Cool Down Test (kWh/24h)		0.54
	Autonomy Time at 43°C		95hrs23mins
	Autonomy Time at 32°C		151hrs10mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Blood Storage Capacity (350ml Blood Bags)		192
	Gross Volume (L/Cu.Ft)		240/8.5
	Net/Gross Weight (approx)	kg	150/185
		lbs	330/407.9
	Interior Dimensions (W*D*H)	mm	530*500*960
		in	20.9*19.7*37.8
	Exterior Dimensions (W*D*H)	mm	890*825*1815
		in	35*32*71
	Packing Dimensions (W*D*H)	mm	985*920*1980
		in	38.8*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24
Alarm	High/Low Temperature		Y
	Sensor Error		Y
Accessories	Shelves		4
	Data Logger		Y
	Remote Temperature Monitoring Device(RTMD)		Optional
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Ice-Lined Refrigerator

The combined refrigerator with freezer is designed to store vaccines, reagents and to freeze ice packs. Suitable for vaccination stations, epidemic prevention stations, healthcare centers, pharmaceutical factories as key examples.Freezers are only designed to freeze the ice packs and not applicable for the storage of vaccines.
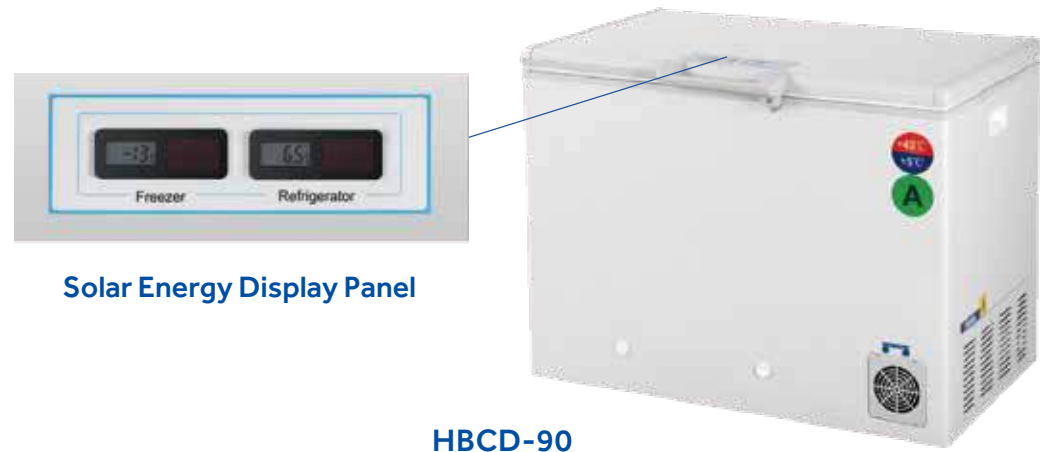
Solar Energy Display Panel

HBCD-90

Temperature Control

• Electronic temperature controller, digital temperature display, the display precision is 0.1℃ and the control range is 2-8℃

• Solar powered display panel shows interior temperature through natural light sources

Safety System

• Sensor error alarm, high/low temperature alarm

• Alarm mode: sound buzzer alarm and light flashing alarm

• Key components such as compressors and fans are designed for purpose to ensure the reliability and safety of stored items

Superior Performance

• Complies with WHO PQS specification E003/RF03.4

• Super long holdover time to ensure vaccine safety

• The daily frozen ice volume of the freezer is 4.0KG, which can meet the daily use

• Broad working ambient temperature range of 5~43℃ , outstanding performance

Ergonomic Design

• Intelligent control, no adjustment required

• The height of the temperature display screen is moderate, and the inner temperature can be checked at any time

• External door handle with door lock design to prevent random opening of the door to ensure vaccine safety

• Built-in handgrips on both sides of the cabinet facilitate overall movement

Environmental Protection

• Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA

• The shell is coated with cold rolled steel plate, and the inner liner is made of 1.0mm alumina, easy to recycle

• Ultra low GWP value

• Without any battery

Specifications

	Model		HBCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature (℃)		5-43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		＜40
Performance	Temperature Range (℃)		Freezer ≤-10 Refrigerator: 2~8
	Waterpack Storage Capacity (kg)		16
	Waterpack Freezing Capacity (kg/24h)		4
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power Supply (V/Hz)		220~240/50
	Power (W)		190
	Electrical Current (A)		1
	Power Consumption:stable running (kWh/24h)		0.9
	Power Consumption: cool down test (kWh/24h)		1
	Holdover Time at 43℃		63hrs48mins
	Holdover Time at 32℃		132hrs21mins
Construction	Vaccine Storage Capacity (L/Cu.Ft)		30/1.1
	Gross Volume (L/Cu.Ft)		Refrigerator:42/1.5 Freezer:32/1.1
	Net/Gross Weight (approx)	kg	105/135
		lbs	231/298
	Interior Dimensions (W*D*H)	mm	Refrigerator Chamber:279*273*556 Freezer Chamber:166*366*580
		in	Refrigerator Chamber:11*10.8*21.9 Freezer Chamber:6.5*14.4*22.8
	Exterior Dimensions (W*D*H)	mm	1128*717*872
		in	44.4*28.2*34.3
	Packing Dimensions (W*D*H)	mm	1190*770*1080
		in	47*30*42.5
Loading Quantities	Container Load (20'/40'/40'H)		26/56/56
Alarm	High/Low Temperature		Y
	Sensor Error		Y
Accessories	Baskets		4
	Data logger		Y
	30 Days Temperature Logger		Optional
	Automatic Voltage Stabilizer		Optional
	Remote Temperature Monitoring Device (RTMD)		Optional
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Ice-Lined Refrigerator

Suitable for pharmacies, pharmaceutical factories, epidemic prevention stations, health centers, hospitals as key examples. Used to store biological products and items that need to be stored under the condition of 2~8°C.

Solar Energy Display Panel

Refrigerator

HBC-150/260/80

Temperature Control

- Electronic temperature control, temperature digital display and the precision is 0.1°C, internal temperature range is 2°C~8°C
- Solar powered display panel shows interior temperature through natural light sources

Superior performance

- World Health Organization Certified(PQS certification)
- Broad ambient temperature range of 5°C~43°C
- Broad voltage design, stable operation within ± 20% voltage range

Safety system

- Sensor error alarm, high/low temperature alarm
- Alarm mode: sound buzzer alarm and light flashing alarm
- All independent components are securely earthed
- Key components such as compressors and fans are QC approved

Ergonomic design

- Intelligent control, no adjustment required
- High performance insulation with superior thermal efficiency
- Safety door lock

Specifications

	Model		HBC-80		HBC-150		HBC-260
Technical Data	Cabinet Type		Chest		Chest		Chest
	Ambient Temperature (°C)		5~43		5~43		5~43
	Cooling Type		Direct Cooling		Direct Cooling		Direct Cooling
	Refrigerant		HC		HC		HC
	Sound Level (dB(A))		<40		<40		<40
Performance	Temperature Range (°C)		2~8		2~8		2~8
	Freezer Protection Level		A		A		A
Control	Controller		Microprocessor		Microprocessor		Microprocessor
	Display		Solar LED Temperature Display		Solar LED Temperature Display		Solar LED Temperature Display
Electrical Data	Power Supply (V/Hz)		220~240/50	220V~240V (50/60Hz)	220~240/50	220V~240V (50/60Hz)	220~240 (50/60)
	Power (W)		110	140	120	150	165
	Electrical Current (A)		0.9	1.3	1	1.5	1.3
	Power Consumption:Stable Running (kWh/24h)		0.6	0.55	0.6	0.72	1.47
	Power Consumption:Cool Down Test (kWh/24h)		0.7	0.65	0.7	0.76	1.62
	Holdover Time at 43°C		59hrs58mins	57hrs34mins	60hrs50mins	57hrs55mins	62hrs
	Holdover Time at 32°C		98hrs26mins		96hrs23mins		117hrs24mins
Construction	Vaccine Storage Capacity (L/Cu.Ft)		61/2.2		122/4.3		211/7.5
	Gross Volume (L/Cu.Ft)		80/2.8		150/5.3		260/9.2
	Net/Gross Weight (approx)	kg	85/110		105/140		160/200
		lbs	187.6/242.7		231.7/308.9		353/441.3
	Interior Dimensions (W*D*H)	mm	500*366*560		840*366*560		1359*366*560
		in	19.7*14.4*22		33.1*14.4*22		53.5*14.4*22
	Exterior Dimensions (W*D*H)	mm	788*717*872		1128*717*872		1647*717*940
		in	31*28.2*34.3		44.4*28.2*34.3		64.8*28.2*37
	Packing Dimensions (W*D*H)	mm	850*770*1080		1190*770*1080		1720*770*1080
		in	33.5*30*42.5		47*30*42.5		67.7*30*42.5
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78		26/56/56		18/38/38
Alarms	High/Low Temperature		Y		Y		Y
	Sensor Error		Y		Y		Y
Accessories	Foot		/		/		Y
	Baskets(Standard/Max)		1/2		3/5		5/9
	Data logger		Y		Y		Y
	Automatic Voltage Stabilizer		Optional		Optional		Optional
	Remote Temperature Monitoring Device (RTMD)		Optional		Optional		Optional
Certifications	CE		Y		Y		Y
	WHO/PQS		Y		Y		Y

Product appearance and specifications are subject to change without notice

Vaccine Storage Solution

Ice-Lined Refrigerator

This product is applicable for the storage of biological products and items that need to be stored under the condition of 2~8℃. This product is used by pharmacies, pharmaceutical factories, epidemic prevention stations, health centers and hospitals as key examples.

HBC-120

HBC-240

Microprocessor Control System
- Microprocessor electronic temperature controller, LED temperature display, the temperature display precision is 0.1℃ and the control range is 2℃~8℃
- Solar powered display panel shows refrigerator and freezer interior temperature

Safe, Secure and Reliable
- Sensor error alarm, high and low temperature alarm
- Alarm mode: sound buzzer alarm and light flashing alarm
- All discrete units are properly grounded
- Key units like the compressor and the fan are safe and reliable

Superior Performance
- International Health Organization Certification (PQS certification)
- Extra-long holdover time (It can maintain the interior temperature with only 8hrs power supply per day)
- Broad working ambient range of 5~43℃
- Operates within wide voltage range, ±20% volt

Ergonomic Design
- Intelligent control
- High performance insulation layer with superior thermal insulation
- Ergonomic designed safety lock

Specifications

	Model		HBC-120	HBC-240
Technical Data	Cabinet Type		Upright	Upright
	Ambient Temperature (℃)		5～43	5～43
	Cooling Type		Direct Cooling	Direct Cooling
	Refrigerant		HC	HC
	Sound Level (dB(A))		＜40	＜40
Performance	Temperature Range (℃)		2～8	2～8
	Freezer Protection Level		A	A
Control	Controller		Microprocessor	Microprocessor
	Display		Solar LED Temperature Display	Solar LED Temperature Display
Electrical Data	Power Supply (V/Hz)		220～240/50/60	220～240/50/60
	Power (W)		145	145
	Electrical Current (A)		1	1
	Power Consumption:Stable Running (kWh/24h)		0.35	0.35
	Power Consumption:Cool Down Test (kWh/24h)		0.4	0.4
	Holdover Time at 43℃		128hrs 48mins	87hrs14mis
	Holdover Time at 32℃		185hrs	165hrs
Construction	Vaccine Storage Capacity (L/Cu.Ft)		100/3.6	200/7.2
	Gross Volume (L/Cu.Ft)		120/4.3	240/8.5
	Net/Gross Weight (approx)	kg	128/160	152/186
		lbs	281.6/352	334.4/409.2
	Interior Dimensions (W*D*H)	mm	530*500*530	530*500*960
		in	20.87*19.69*20.87	20.87*19.69*37.8
	Exterior Dimensions (W*D*H)	mm	890*829*1425	890*829*1815
		in	35.04*32.64*56.10	35.04*32.64*71.46
	Packing Dimensions (W*D*H)	mm	980*920*1585	980*920*1980
		in	38.6*36.2*62.4	38.6*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24	12/24/24
Alarms	High/Low Temperature		Y	Y
	Sensor error		Y	Y
Accessories	Foot/Caster		Y	Y
	Shelves		3	4
	Data logger		Y	Y
	Automatic Voltage Stabilizer		Optional	Optional
	Remote Temperature Monitoring Device (RTMD)		Optional	Optional
Certifications	CE		Y	Y
	WHO/PQS		Y	Y

Product appearance and specifications are subject to change without notice

Vaccine & Icepack Freezer

This product is applicable for cryogenic storage of biological reagents in hospitals, CDC, health facilities and other units in areas with insufficient or unstable power supply.

HBD-86

HBD-265

Refrigeration System
- High quality compressor
- CFC-free high-density foam insulation
- Optimized refrigeration system design

Temperature Control
- Electronic temperature controller with digital display
- Internal temperature range is -15°C to -20 °C

Ergonomic Design
- Safety lock to safeguard against unauthorized access
- Internal configuration suitable for various sizes of storage baskets
- Drainage port for ease of cabinet cleaning
- LCD temperature display

Alarms
- Power failure alarm, high temperature alarm, sensor error alarm
- Two alarm modes: sound alarm and light alarm

Specifications

	Model		HBD-86	HBD-265
Technical Data	Cabinet Type		Chest	Chest
	Ambient Temperature		<43°C	<43°C
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		/	Manual
	Refrigerant		HC	HC
	Sound Level (dB(A))		40.6	39.3
Performance	Temperature Range (°C)		-15~-25	-15~-25
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LCD
Electrical Data	Power Supply (V/Hz)		220~240(50/60)	220~240(50/60)
	Power (W)		120	210
	Electrical Current (A)		1.1	1.6
	Power Consumption: Cool Down Test (kWh/24h)		0.98	1.43
	Power Consumption: Stable Running (kWh/24h)		0.95	1.41
	Holdover Time at 43°C		More than 7hrs (up to -5°C)	11hrs25min (up to -5°C)
Construction	Gross Volume (L/Cu.Ft)		86/3	265/9.4
	Net/Gross Weight (approx)	kg	65/90	135/160
		lbs	143/198	297/352
	Interior Dimensions (W*D*H)	mm	500*366*560	1359*366*560
		in	19.7*14.4*22	53.5*14.4*22
	Exterior Dimensions (W*D*H)	mm	788*717*872	1647*717*940
		in	31*28.2*34.3	64.8*28.2*37
	Packing Dimensions (W*D*H)	mm	850*770*1080	1720*770*1080
		in	33.5*30*42.5	67.7*30*42.5
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78	18/38/38
Accessories	Foot		/	Y
	Baskets		3	9
	Automatic Voltage Stabilizer		optional	optional
Certifications	CE		Y	Y
	WHO/PQS		Y	Y

Product appearance and specifications are subject to change without notice

Walk-In Cold/Freezer Room

Haier Biomedical walk-in cold rooms are for storage of vaccines and other temperature sensitive products. The complete unit is also designed for installations in housed areas such as warehouses to meet specified temperature standards. These units have been installed in India, Guinea, Syria, Pakistan, Burundi, Zimbabwe and other regions across the world.

Specifications

Type	Freezer Room	Freezer Room	Cold Room	Cold Room	Cold Room	Cold Room	Cold Room	Combined Cold/Freezer Room	
								Cold Room	Freezer Room
Model	HRZK-40D	HRZK-20D	HRZK-10G	HRZK-15G	HRZK-20G	HRZK-30G	HRZK-40G	HRZK-40GD	
Defrost Mode	Electrical heating								
Refrigerant	CFC-Free								
Internal Temperature Range (°C)	-20	-20	2-8	2-8	2-8	2-8	2-8	2-8	-20
Evaporator Temperature (°C)	-25	-25	-7	-7	-7	-7	-7	-7	-25
Power Supply (V/Hz)	380/50	380/50	220/50	220/50	220/50	380/50	380/50	380/50	
Power (W)	5300	2630	1300	1750	1750	2520	2610	2520	2010
Refrigeranting Output (W)	4200	2060	1560	2230	2230	2950	3250	2950	1580
Capacity (m³)	40	20	10	15	20	30	40	25	15
Condensation Temperature (°C)	43								
Density (Kg/Cbm)	40±2								
K-Value (m²K)	0.22								
Insulation Thickness (mm)	100								
Certification	–	WHO/PQS							

Product appearance and specifications are subject to change without notice

Integral Cold Store Unit

• The cold room is suitable for a variety of applications; it can be used to freeze or refrigerate samples for healthcare, research, agriculture, and biotechnology purposes. In the walk-in cold room (WIC), the interior temperature can be controlled within a range of 2°C to 8°C. In the walk-in freezer (WIF), the temperature is set at -20°C.

Features of the Cold Room

• The set point of the cold room has an adjustable range of 0°C to 10°C (or -15°C to -25°C for the Freezer Room) with a resolution of 0.1°C.
• High-efficiency CFC-free polyurethane insulation foamed into place. With a density of 42kg/m³, a thickness of 100mm and an insulation K-value of 0.22 W/(m²)(K) or better.
• Internal and exterior surfaces are made up of hot-dipped galvanized steel sheet, coated in a white polyester coating. The floor is clad with non-slip material.
• Rooms are equipped with tungsten lighting.
• Rooms are equipped with shelving systems on 3 of their walls.
• Dual refrigeration system – while one system is working, the other one is reserved as a back-up.
• Forced air-cooling system
• Door equipped with a lock and heavy-duty hinges, with an internal safety release.
• CFC-free refrigerant
• Automatic defrosting
• A manual change-over switch is offered as standard, an automatic change-over switch is available as an optional extra.
• Temperature recorder and audible alarm system.

Technical Characteristics of the Refrigerating Unit

• An integrated condenser unit, called Mono block, integrating evaporator, condenser, compressor, electrical control units into one compact body, is used in cold storage rooms with temperature control of -5°C~5°C or -15°C~-20°C, in medical, clinical, agricultural and chemical industries where large scale cold storage is needed.
• Small compact structure.
• Comprises of TECUMSEH hermetic compressors, hight efficient, in-grooved copper tube and aluminium fin heat exchangers and leading brand refrigeration parts.
• The electronic control boards manage following parameters: automatic temperature setpoint and control, electric heater defrosting, protection devices for over loading, over-heating, lack of phase, high and low pressure.
• Safe, easy to use and is economical, low cost installation and operation.

Temperature Recorder

• Upper and lower limits +50°C to -30°C
• Accuracy ±1°C
• Resolution ±0.5°C
• Minimum acceptable recording period between chart changes is 7 days
• USB interface is included

Cold Room

Combined Cold Room

Applicable for storing large quantities of vaccines, reagents, medicines and other biological products. Suitable for CDCs, animal epidemic prevention and control centers, hospitals, biopharmaceutical companies, etc.
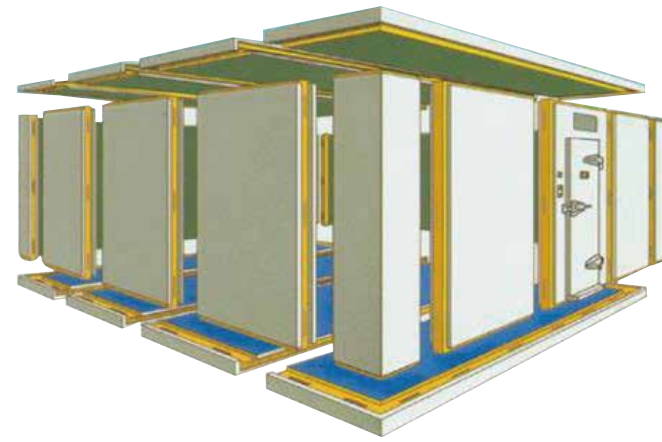
Technical Features:

• The integrated solution provider integrates cold storage, automation, informatization and environmental laboratory.

Environmental protection
• Uses R404a environmentally friendly refrigerant;
• Uses durable, environmentally-friendly polyethurane foam insulated walls to provide excellent insulation with a low ozone destruction coefficient.

Safety
• With equipment fault self-diagnosis function. With a variety of active protection and passive early warning functions, the operating status is monitored to ensure the safety of stored samples.

Modular
• The system is modular and solutions are customized according to individual requirements.

Energy saving
• The technology of liquid-subcooling and exhaust-precooling via defrosting water is adopted to save energy.

Smart
• The PLC control system can automatically control the start and stop of the refrigeration unit, the regular switching between the main and standby machines and the automatic fault switch. No manual operation is required for refrigeration and defrosting.

Side Loading Cold Room

Applied to save vaccines, reagents, medicaments, biological products, etc., Suitable for community clinics, pharmacies, etc.

Technical Features:

• All-weather: 24-hour uninterrupted monitoring of the cold storage operation status to ensure the safety of samples;

Solar Direct Driven Cold Room

• Whole process monitoring: production, transportation and storage

• Full coverage: network monitoring, real-time query, unified management

• Stable state change rate: ≤±0.3°C/10h

• Temperature uniformity: ≤±3°C

• Ultra-low noise: the noise of the outdoor unit is less than 50 decibels

• Exclusive perforated ceiling air supply design ensures rapid cooling and excellent temperature uniformity ±1°C

• Utilizes quick and effective hot fluoride defrosting method

• An electronic expansion valve accurately controls the storage temperature while ensuring the refrigeration system runs more energy efficiently

Applicable for storage of temperature-sensitive products such as large quantities of vaccines and medicines; National or regional vaccine centers, hospitals, biopharmaceutical and other industries;

Technical Features:

• Powered by solar photovoltaic power generation system, low operating cost.

• Solar direct drive refrigeration, no battery driven compressor; combined with ice lining technology, maintain the temperature in the cold room at 2-8 °C throughout the day.

• Adopting PLC intelligent control, preferentially start the compressor of higher temperature cold storage box to ensure the uniformity of the room temperature.

• Power off and maintain 2-8°C for more than 48 hours at 43°C ambient temperature; it can last longer under low ambient temperature conditions.

• Low temperature protection function module (optional), can achieve 5-43 °C wide temperature range operation.

• Optional 48V switching power supply can be connected to single-phase 110-220V AC power supply.

Solar Photovoltaic Array

Cold Room

14 pieces 35mm Thick piece group

8 pieces 40mm Thick piece group

Distribution Board

MPPT 48V30A
Charging and Discharging Controller
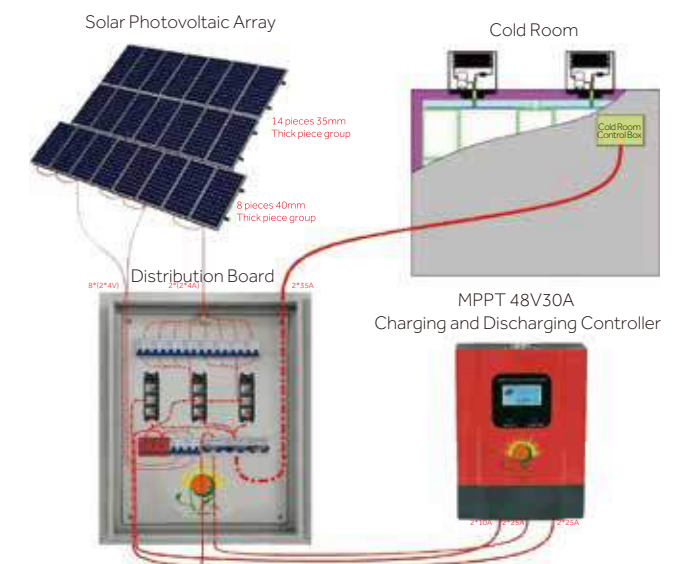
Vaccine Refrigerated Vehicle

- High chassis, excellent cross-country capacity.
- Euro-2 standard, easy and low-cost maintenance in African area with backup power.
- Complies with WHO/PQS standard requirements.
- Backup power supply.
- Heating system to use in -20℃ ambient temperature.

Vaccine Stock Monitoring Solution

Monitoring the vaccine status of all vaccination sites nationwide, providing Enterprise Resource Planning (ERP) management for decision makers with timely and accurate information of vaccine inventory and temperatures.

Function:

- Manual entry of vaccine stock.
- Data acquisition of temperature.
- Receives immunization notifications.
- Checks inventory reports.
- Check inventory trend and alarm information.
- Information data and files of vaccines.
- Checking vaccine warehousing plans.
- Submitting information for invalid vaccines.
- Checking historical temperature curve.

- 7-inch touch screen.
- Internal Internet-enabled SIM card.
- Solar power USB, EHC power supply.
- External NTC temperature sensor.

U-COOL Remote Temperature Monitoring Device

Remote Temperature Recording:

- The external temperature sensor measures the temperature, records and stores the measured temperature values automatically, and transmits them to the platform through GPRS, realizing remote platform monitoring.

Application Scenarios:

- It can be used for real-time monitoring of warehousing and distribution of food, medicine, vaccine, blood, reagents, biological products, biological sample tissue and other items. The application scenarios include refrigerated trucks, incubators, cold rooms, cold packs, refrigerated cabinets, refrigerators, freezers and so on.

Cloud Platform Website   http://ems.haierbiomedical.com

U-COOL

- Once powered on, the device immediately uploads the data automatically to the portal. Superior device, one simple activation - no technical skills needed, easy and user friendly.
- Remote portal management platform, which can track temperature, location, signal strength information and has multiple data analysis reports.
- One full charge, more than 10 days of battery life.
- The device supports sound and light alarms.
- USB data export (30 days temperature records).
- High precision, wide range of temperature measurements.
- IP65 protection, waterproof, shockproof and dustproof to fit a variety of complex environments.
- Complies with WHO Standards, WHO prequalified code: E006/060

Item	Specifications
Model	U-Cool
Temperature Sensor	NTC sensor: -40℃~+120℃ (±0.5℃ within -30℃ to +20℃, ±1℃ for other)
Environment Sensor	Temperature: -10℃~+55℃ Humidity: 0%RH~99%RH
Signal	2G/4G
Storage Capacity	260,000 sets of data
Battery	Charging voltage: 5V~12V Charging currents≤1.5A
Alarm	Audio-visual: buzzer + LED light
SIM card	Built-in SIM card
Map Location	Google map and LBS (Location Based Service)
USB	Micro USB: download data /charging
Material	Shell: PC / Shell Jacket: ABS
IP	IP65
Dimension	114.5 mm *71.5 mm *22mm

U-COOL-PRO
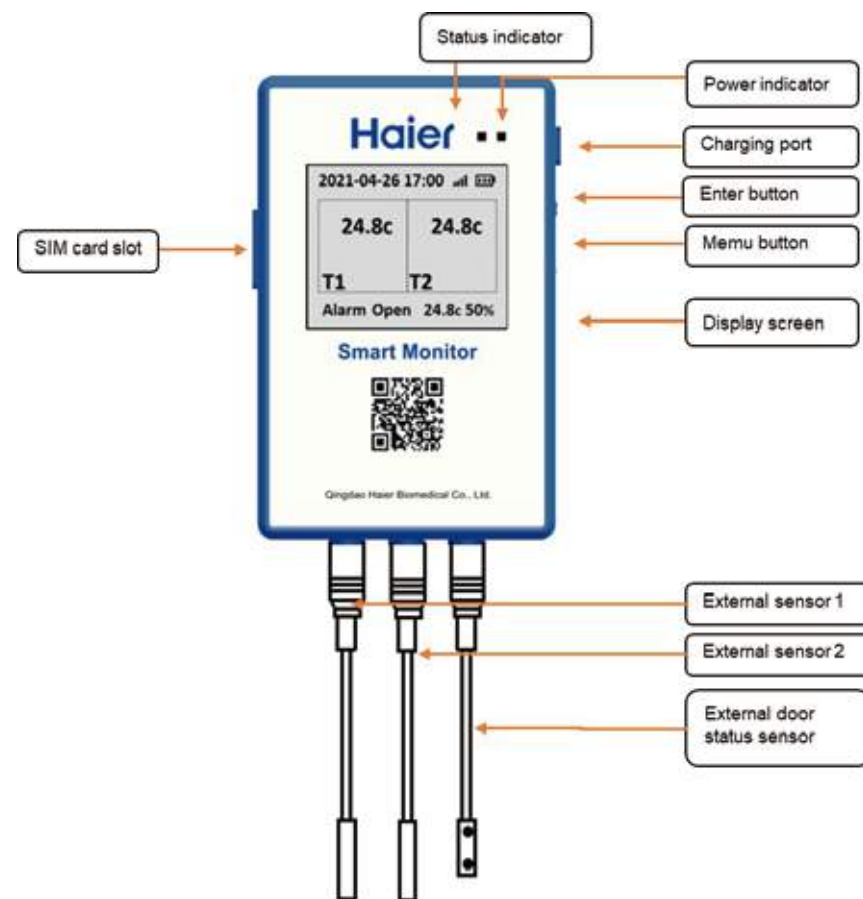
Product advantages

- The user is free to set up, and automatically uploads data to portal while power on
- The device supports sound and light alarms
- LBS base station positioning, indoor use can also be positioned
- USB data export (30 days temperature record)
- One charge, more than 10 days of battery life
- 2 pluggable temperature sensor, 1 pluggable door switch sensor
- Support 4G/3G/2G signal

Item	Specifications
Model	U-Cool-Pro
Temperature Sensor	2 Pluggable Digital temperature sensors (or PT100 optional)
	1 Ambient temperature and humidity sensor
Temperature Range	-40°C~+80°C
	PT100 sensor (optional): -200°C~+150°C
Accuracy	±0.5°C within -30°C to +20°C, ±1°C for other
Door Sensor	1 Pluggable Reed Switch sensor
Battery	Lithium battery: 4000mAh
Alarm	Audio-visual: buzzer + LED light
Map Location	Google map and LBS (Location Based Service-Mobile Base Station Positioning)
USB	Micro USB: download data /charging
Material	Shell: PC
IP	IP64
Dimension	112mm*75mm*21mm
Communication Network Mode	4G/3G/2G
Charging Voltage	5V~12V
Charging Current	≤1A
Working Current	≤2A
Storage Temperature	-40°C~+65°C
Working Temperature	-10°C~+55°C
SIM Card	Micro SIM Card
USB	Micro USB, support charging; When the device is turned off, it can be connected to the computer as a Flash drive export data in PDF/TXT format. When the device is turned on, it can be connected to the computer as a virtual serial port, which can be configured using the configuration tool.

U-Cool-LoRa

Introduction of Temperature Data Logger

Temperature Data Logger consists of sensor node device(host) with multiple sensor probes. The intelligent gateway (LoRa -- 4G) is connected to the cloud cold chain management software to achieve real-time monitoring and alarm of temperature and humidity, door open status, power on & off of refrigerators and cold room(-40~80°C)

Vaccine Safety Solutions

YB-HC600-01
Temperature Data Logger

YB-HC600-02
Door On-off Monitor

YB-HC600-03
Power Outage Monitor

YB-HZ600-01
Smart Gateway

Product advantages

Long communication distance
LoRa spread spectrum modulation is adopted for wireless communication, which works in sub-1 GHz band. With the characteristics of long communication distance, strong ability to pass through obstacles or walls, excellent anti-interference performance, no need to lay communication and power supply cables, user installation is flexible and beautiful.

Local sound and light alarm
When the acquisition temperature exceeds the set domain value, or the acquisition node is not working normally, the local sound and light alarm can be realized through the collector configuration.

Micro-USB export local data
It is equipped with standard Micro-USB interface to cooperate with PC upper computer software for local data export, firmware upgrade and system parameter configuration.

Power supply mode
The collector works with battery power, and the gateway works with the external power through adapter. When the external power supply is off, the gateway works with standby battery power supply.

Pluggable aviation plug
1) The probe is inserted into the refrigerator porthole or laid in the cold room, and the recorder host can be removed separately for operation;

2) When the probe is broken or damaged, it is convenient to replace it separately;

3) Compared to the 3.5mm audio connector, the aviation plug is more robust and offers better electromagnetic protection.

Model	YB-HC600-01	YB-HC600-02	YB-HC600-03
Product Name	Temperature Data Logger	Door On-off Monitor	Power Outage Monitor
Sensor	One line (2m) digital sensor	One line (3m)	One line (3+3m)
Measuring Function	Range: -40~80°C Precision: 0.1°C Accuracy: ±0.5°C	Door open-close monitoring	Power supply monitoring
Dimension (H*W*D mm)	125*73*23		
Battery	3.6V/5400mAh		
Communication	LoRa		
Display	LCD display, real-time display of measured data, such as electric quantity, signal strength, etc.		
Local-storage	Local storage data of 60000 sets and it supports breakpoint continued transmission		

Model	YB-HZ600-01
Product Name	Smart Gateway
Transit Network	4G
Maximum Number of Transmitters That Can Be Used	30
Dimension (W*H*D mm)	160*100*33
Battery	3.7V/10000mAh
Communication	LoRa
Local-storage	60000 sets

30-Day Electronic Temperature Logger

Haier Biomedical Vaccine Cold Chain Storage Safety Solution

•Continuous, real-time, whole-process traceable monitoring for vaccine safety storage

•WHO approved and sourced by WHO procurement.

30-Day Electronic Temperature Logger

HETL-01

WHO Certified
PQS code:E006/042
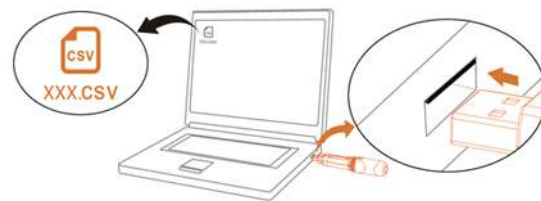
Easy to download data

Accessory: Bracket

Product Features

• Approved by WHO's PQS, PQS code:E006/042

• Designed specifically for 2~8°C vaccine storage, equipped with high/low temperature visual alarm to meet the WHO standard

• Recording capacity is over 30 days, recording interval is 6 minutes, outdated data will be overwritten by new one automatically, when the recording volume is full

• LCD screen displays temperature

• Integrated sensor device, dust and water resistant to IP65 protection standard, can be placed in Cold Box or vaccine refrigerator to monitor the temperature

• The logger can be plugged into the USB port of any PC to automatically generate a CSV file including temperature data and temperature graph which can be generated by data management software

• Built-in disposable wide temperature range lithium battery (Non-replaceable) with a minimum operating life of two years after a maximum shelf life of one year

• The bracket is included as standard

Specifications

Model	HETL-01
Temperature Range (°C)	-20~+50
Main Material	ABS (Transparent Shield: PC)
Data Interface	USB Interface
Display Medium	LCD
Resolution (°C)	0.1
Accuracy	±0.5°C for -20°C~+40°C, ±1°C for the others
Recording Volume	8192 Data Points(34 days)
Logging Interval	6 min
Power Source	Non-Replaceable Battery
Size (Length*Diameter mm)	131*24
Service Life	2~3 years

Product appearance and specifications are subject to change without notice

Laboratory Equipment

NSF Series Biological Safety Cabinet

Scope of Application

Professional air purification equipment suitable for pharmaceuticals, medical and health industries, scientific research laboratories of universities and colleges as well as other related fields.

Equipped with dual DC centrifugal fans, ensure the air flow in the safety cabinet is stable and less noisy. The wind speed is easy to adjust.

The ergonomic 10° inclination of the cabinet makes the operation more comfortable and the vision clearer.

The hot-ball anemometer monitors the wind speed in working area and exhaust area of the safety cabinet in real time and compares it with the standard wind speed. The rotate speed of the fan is adjusted through the microprocessor system to maintain the constant wind speed of the safety cabinet.

Equipped with an ultra-high efficiency filter to provide air flow with ultra-high cleanliness in the working area, reaching the US standard Fed STD 209E class 1.

It is equipped with waterproof socket timing function.

LCD screen:
Digital display of running status, abnormal operation conditions alarm, filter and UV lamp service life warning function, UV lamp timing function and interlock technology.

Plane type worktable, large basin.

HR1800-IIA2-N

Adjustable height stand (optional)

One-piece arm rest, comfortable to use and relieves fatigue.

Universal casters with built-in threaded support feet.

Product Advantages

Microprocessor Control System

- Intuitive and informative interactive digital LCD display.
- The hot-ball anemometer monitors the downflow and inflow wind speed of the safety cabinet in real time and compares it with the standard wind speed.
- The rotate speed of the fan is adjusted through the microprocessor system to maintain the constant wind speed of the safety cabinet.
- Real-time display of operational information and parameters including downflow air velocity, flow rate, temperature, humidity, positive pressure, negative pressure, fan cumulative running time and filter remaining service life.
- One button UV lamp timer function, allows users to set 0 to 24 hours of automatic on/off time.

Ultra-Low Noise, Uniform Airflow

- Dual DC fan design, combined with professional air distribution design, lower noise, with a more uniform air flow.

Ergonomic Design

Platform Arm Rest
- Platform arm rest frame, comfortable to use, relieves fatigue.

Wear-resistant and Easy to Clean
- The inner liner is manufactured with stainless steel integrated structure design, 12mm large arc transition, no dead angles to clean.
- The work surface is manufactured with high quality 304 stainless steel, without any fixed screws, preventing any accumulation pollutants.
- The cabinet is manufactured with cold rolled steel plate with corrosion resistant epoxy resin powder sprayed on the surface, which is resistant to acid and alkali corrosion.

Waterproof Socket
- Waterproof socket with timing technology allows users to program timed on/off function.

Superior Filter, Multiple Protection

- ULPA is made of moisture-proof and flame-retardant glass fiber filter paper which can intercept 99.9995% solid particles with a diameter of 0.12 μm to ensure high cleanliness of air supply flow and exhaust flow.
- Perfect air distribution design, no turbulence in the working area.
- Sound and light alarm function for abnormal parameters.

Multiple Voltage Options, Suitable for Many Countries and Regions

- Full voltage coverage (100-230V 50/60Hz), suitable for a wide range of countries and regions.

One-piece Welded Cabinet Structure, Leak Proof

- Prevention of leakage performance of dangerous factors conforms to NSF specification.

Caster and Foot
- 4 universal casters +4 feet design, easy to move and lock leveling

Biological Safety Cabinet (Touchscreen)

Main Uses

The X series of standard Class II microbiological safety cabinets are suitable for basic cell biology, microbiology, biomedicine, biosafety laboratories and other laboratories. It is the most basic protection and isolation equipment for biosafety.

ULPA filter

Dual DC centrifugal fans

10" touch screen
Abnormal operation condition alarm
Digital display of operation conditions
Filter end-of-life (EOL) reminder
UV lamp end-of-life (EOL) reminder
UV lamp appointment
UV lamp interlocking

Dual surveillance cameras (Optional)

Electrically operated glass door (Optional)

Height-adjustable underframe

Foot switch (Optional)

Intelligent IoT-based module for monitoring operation conditions with mobile app (Optional)

Cabinet body with 10° inclination

Air flow blocking

Waterproof receptacle timing

Platform-type workbench Ultra-large water collecting basin

One-piece leakage-preventing hand rest

Universal caster with built-in threaded supporting leg

HR1200-IIA2-X

Product function advantages

- The dual DC fans meet the low-noise, energy-saving and high-reliability requirements
- Utilizing intelligent constant air speed design to monitor the downward airflow and the inlet airflow in real-time. The dual air speed sensors adjust the fan speed through a microcomputer system so as to maintain constant air speed inside the cabinet
- Adopting ultralow penetration air filters (ULPA) ensuring a cleanness grade conforming to Class 1 of the American standard FED STD 209E (Class 3 of ISO14644-1) and using pressure sensors to monitor the service life of the filters in real-time to ensure superior accuracy and efficiency
- Optional - X series - electric lifting glass doors with matching foot switches
- Optional - X series - comes equipped with surveillance cameras to record the operating status of the left and right working areas respectively and independently
- Optional - Intelligent IoT module to enable the mobile App to monitor the running state of the safety cabinet and display the performance parameters such as air speed and filter life in real-time
- Adopting an intelligent interlock design to avoid the risk of misoperation; with an operational front window interlocking with the UV lamp, LED lamp and fan intelligently to ensure better security
- One-button UV lamp timer, enabling the memory setting of the user's UV lamp usage habits for convenient one-key start-up of the UV lamp timing function

Product construction advantages

- Using platform-type hand rest racks which are comfortable to use and can relieve fatigue; with leak-proof construction to prevent the splashed liquid waste from entering into the seams of the racks
- The cabinet body has a 10-degree inclination design, which is in accordance with ergonomic principles and more comfortable to operate
- The cabinet has a pull-down front window, which makes it easy to clean the upper glass after pulling down the glass front window and removing the hand rest racks
- Equipped with an integrated workbench and a stainless steel liquid collecting tank larger than the workbench so as to prevent liquid leakage
- Constructed with a universal caster design to facilitate ease of movement by users and comes with built-in threaded feet to prevent bacterial growth
- With real-time display of the filter life and the running time of the fan and the UV lamp, the system alerts the user by alarm when the service life of the filter and the UV lamp becomes less than 10%, which is convenient and safe

Biological Safety Cabinet (Touchscreen)

Specifications

Model	HR1200-IIA2-N	HR1800-IIA2-N	HR1200-IIA2-X	HR1500-IIA2-X	HR1800-IIA2-X
Working Voltage&Frequency (V/Hz)	100-230/50/60	100-230/50/60	220/50/60	220/50/60	220/50/60
Power (VA)	1300	1400	1600	1670	1850
Power of Blower (W)	DC 120, DC 112	DC 120, DC 112	DC 120 112	DC 190 112	DC 120 112
Airflow Circulation	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust
Main Filter Typical Efficiency	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um
Exhaust Filter Typical Efficiency	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um
Filter's Brand	AAF	AAF	AAF	AAF	AAF
Downflow Velocity (m/s)	0.35	0.35	0.30	0.30	0.30
Inflow Velocity (m/s)	0.53	0.53	0.45	0.45	0.45
Lighting Intensity (Lux)	1323	1292	1317	1396	1133
Net/Gross Weight (approx) kg	275/335	375/460	280/340	320/400	380/465
Net/Gross Weight (approx) lbs	617/750	827/1014	617/750	705/882	838/1025
Interior Dimensions (W*D*H) mm	1230*600*650	1830*600*650	1230*600*655	1530*600*655	1830*600*655
Interior Dimensions (W*D*H) in	48.4*23.6*25.6	72.0*23.6*25.6	48.4*23.6*25.8	60.2*23.6*25.8	72.0*23.6*25.8
Exterior Dimensions (W*D*H) mm	1340*850*2160	1940*850*2160	1336*845*2120	1636*845*2120	1936*845*2120
Exterior Dimensions (W*D*H) in	52.8*31.1*85	76.4*33.5*85	52.6*33.3*83.5	64.4*33.3*83.5	76.2*33.3*83.5
Packing Dimensions (W*D*H) mm	1400*900*1710	2000*900*1710	1400*925*1665	1700*925*1665	2000*925*1665
Packing Dimensions (W*D*H) in	55.1*35.4*67.3	78.7*35.4*67.3	55.1*36.4*65.6	66.9*36.4*65.6	78.7*36.4*65.6
Supporter	680mm(standard) 680-900mm adjustable height(optional)	680mm(standard) 680-900mm adjustable height(optional)	680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height
Container Load (20'/40'/40'H)	8/16/16	6/12/12	8/16/16	6/12/12	6/12/12
Alarm	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certification	UL,NSF	UL,NSF	CE, TÜV SÜD Mark, NMPA(CFDA)	CE, TÜV SÜD Mark, NMPA(CFDA)	CE, TÜV SÜD Mark, NMPA(CFDA)

Product appearance and specifications are subject to change without notice

Stainless Steel Arm Rest is removable, width of 60 mm

Laboratory Equipment

Biological Safety Cabinet (Standard Single HEPA)

Scope of Application

These are standard Class II microbiological safety cabinets suitable for basic cell biology, microbiology, biomedicine, biosafety laboratories and other laboratories. It is the most basic protection and isolation equipment for biosafety.

EBM DC fan,energy consumption as low as 112W, low noise to 58dB.

Dual air velocity sensors

With the third generation computer board,the program is more intelligent and the air flow self-regulation is more sensitive.

AAF filter 99.995%@0.3um

Standard water-proof socket, water valve and air valve interface.

Electrically operated sash window makes the use procedure more comfortable. (Optional)

HR1200-IIA2-S

Optional parts: adjustable stand and electric underframe fits customer's need.

Drop-down glass door is easy to clean.

Partitioned workbench is easy to sterilize and clean.

Product Advantages

• HR1200-IIA2-S is the latest biosafety cabinet developed and manufactured to European Standard EN12469.
• With improved energy efficiency the HR1200-IIA2-S is equipped with two DC fans which also lower noise output.
• A highly efficient HEPA output filter provides protection for the samples, operators and environment.
• Side glass windows allow more natural light, reducing optical stress caused by artificial lighting.
• Additional features include height adjustable stand with wheels and levelling feet, air valve and vacuum valve ports.

Features

• Certified to EN12469.
• Damp-proof, fire-proof glass fibre HEPA filter with a filtering efficiency for ≥0.3µm particulate matter is ≥99.995% provides cleaner air and safer samples.
• Dual DC fans allow for better air flow uniformity and operate with lower noise.
• LCD screen displays various parameters and clear operational conditions.
• UV lamp can be set with one single key to activate/deactivate automatically at specified sterilization intervals from 0min to 24hrs, to minimize the waiting time.
• The product features an interlocking function between the ultraviolet sterilization, fluorescent lamp, front window and fan motor meaning the UV lamp can only come on when the illuminating lamp is off. This failsafe removes the risk of incorrect operation.
• Multiple audible and visual alarms: hardware malfunction alarm, operating parameter overrun alarm, filter/UV lamp lifecycle ending alarm, etc.
• Two IP44 rated water-proof sockets with timed on/off function for improved safety and energy conservation.
• Optional electric sash window or electric underframe.

Ergonomic Design

• 10° angled front window provides a comfortable work space for operators.
• Adjustable height stand with hidden mechanism to avoid contamination.
• Universal castor for convenient moving.
• Drop-down front window design for easier cleaning of the upper edge of glass.
• Removable hand rest reduces arm fatigue and does not interfere with air inflow.
• Optional accessories include water valve (manual/ electric), air valve, VHP sterilizer and electric door function (door electric motor and foot switch).

Biological Safety Cabinet (Standard Dual HEPA)

Main Uses

Energy efficient Class II microbiological safety cabinet with two DC fans, dual exhaust HEPAs and long lasting LED lights. Suitable for microbiology, biomedicine, biosafety laboratories and other laboratories. It offers three levels of protection – operator, product and environment.

Double DC fans

AAF filter 99.995%@0.3um

Standard water-proof socket, water valve and air valve interface.

Electrically operated sash window makes the use procedure more comfortable. (Optional)

LCD screen displays real time operating parameters, filters lifecycles and other critical parameters.

Debris grid catches debris such as paper scrap to damage negative pressure zone.

HR1200-IIA2-D
Dual Exhaust HEPAs

Optional parts: adjustable stand and electric underframe fits customer's need.

Tempered glass sliding sash window is easy to clean.

Partitioned workbench is easy to sterilize and clean.

Product Advantages

The HR1200-IIA2 double exhaust filtered biological safety cabinet utilises two highly efficient HEPA exhaust filters and one ULPA downflow filter to provide three levels of protection; operator, product and environment. As there is no need for external ducting, this is a cost-effective solution.

The unit is certified to the EN 12469 standard. It uses energy efficient DC fans, as well as LED lights to ensure for optimal performance with a low noise output and reduce energy consumption. The ergonomic design ensures maximum comfort and alleviates operator fatigue.

The units utilise side air design on the upper edge and on both sides of the front window to eliminate 'blind spots'. This prevents crossflow between inside and outside air thus reducing the risk of contamination. The compartmented working surface can easily be removed for sterilization and cleaning.

Features

• E.U. EN12469 Standard Certification.
• The main filter uses a damp-proof, fire-proof glass fibre ULPA filter, the filtering efficiency for ≥0.12μm particulate matter is ≥99.9995% which provides cleaner air and safer samples.
• EC fan operates with lower noise and better uniformity air flow.
• LCD screen displays various parameters and clear operational conditions.
• Ultraviolet light can be set with one single key to automate on/off time, and sterilization time interval from 0 to 24 hours, reducing downtime.
• The product features an interlocking function between the ultraviolet sterilization, fluorescent lamp, front window and fan motor meaning the UV lamp can only come on when illuminating lamp is off. This failsafe removes the risk of incorrect operation.
• Equipped with multiple visual and sound alert functions, it is clear and easy to understand. Alarms include filter and UV end-of-life alerts, fan turned-off after door opening alert and door open alarm.
• Two IP44 rated waterproof sockets with timed on/off function to improve safety and conserve energy.

Ergonomic Design

• 10° angled front window provides a comfortable work space for operators.
• Adjustable height stands with hidden mechanism to avoid contamination.
• Universal castors with self-levelling feet for convenient moving.
• Drop-down front sash window design for easier cleaning of the upper edge of glass.
• Removable hand rest reduces arm fatigue and does not interfere with air inflow.
• Optional accessories include water valve (manual/electric), air valve and VHP sterilizer.
• Optional electric sash window or electric underframe.

Alarm Functions

• Fan turn-off alarm after door opening.
• Abnormal door height alarm.
• Door open more than limit.
• Blocked filter alarm.
• Damaged filter alert.
• Filter and UV end-of-life alert.
• Front glass blocks ultraviolet .

Biological Safety Cabinet

The Haier Biomedical Biological Safety Cabinet is designed to protect the operator, laboratory environment and samples from being exposed to the infective aerosol produced from samples with bacteria strains, diagnostic materials, and other infective substances. It provides the operator with comfortable and safer working conditions. It is widely used in medical health, disease prevention, food safety, biological pharmacy and environment monitoring.

Ultra Low Penetration Air Filter System
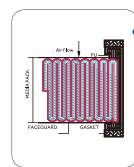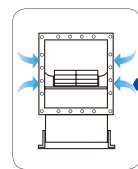
Intelligent Constant Air Velocity Patent Technology

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity to keep the air speed constant within the safety cabinet by adjustment of the fan speed via the microcomputer system.

304 Stainless Steel Operation Platform and Internal Wall

• Stainless steel work surface without screws ensures no accumulation of contaminant
• Dismountable air in-flow plate is easy to clean and disinfect
• Concaved work surface, waste liquid easily collected

Digital Microprocessor Control System

• LCD display
• Real-time display of key parameters: downflow velocity, inflow velocity, airflow volume, static pressure, negative pressure, accumulative running time of fan and UV lamp and remaining life of filter
• Sound & light alarming function
• UV sterilization reservation setting function

Safe Air Flow Distribution Design

The professional air flow distribution design, provides more uniform airflow, reducing contamination and noise to <62dB(A).

V-shaped Air Inlet Design

Swivel Castor and Self-levelling Feet

HR1200-IIA2

Features

Patent Intelligent Constant Air Velocity

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity and maintains a constant velocity by adjustment of the fan speed by microcomputer system.

Low Noise Safety Energy-saving Mode

When the human body sensor module detects under the intelligent mode that the person is outside and away from the operating area for over 15 minutes, the microcomputer program will automatically switch the safety cabinet to Low Noise Safety Energy Conservation mode, which reduces noise, conserves energy and improves the service life of the filter.

Professional Air-flow Distribution Module

Through the professional air flow distribution design, the safety cabinet provides a more uniform airflow, reducing contamination and noise to <62dB(A).

Ultra Low Penetration Air Filter System

American AAF (ULPA) filter is tested to a typical efficiency of > 99.9995% for 0.12 micron particles. ULPA filter provides vertical laminar flow to the worktable to protect samples from pollution .

Air Flow Disruption Technology

The units utilise side air design on the upper edge and on both sides of the front window to eliminate 'blind spots'. This prevents crossflow between inside and outside air, reducing contamination (Patent No. ZL200520125549.X).

Unique Tempered Glass Sliding Sash Window

The unique tempered glass sliding sash window can be removed in seconds to enable quick and efficient cleaning of upper sections, shortening downtime.

Removable Arm Rest

Removable arm rest reduces user fatigue and does not interfere with air inflow.

	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	EN 12469, Europe NMPA （CFDA） YY-0569, China	ISO 14644.1, Class 3, Worldwide US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	EN61010

Laboratory Equipment

Biological Safety Cabinet (Classic Series)

American AAF ULPA filter is tested to a typical efficiency of >99.9995% for 0.12 micron particles

Reverse centrifugal fan allows double side air inflow, decreasing noise and saving energy

Digital microprocessor control system for easy operation

Intelligent alarming system

Multiple interlocking functions, a failsafe that removes the risk of incorrect operation

Removable stainless steel work surface makes cleaning easier

Ergonomic angled design to improve comfort

Adjustable foot

HR40-IIA2

304 Stainless Steel Operation Platform and Internal Wall

• Stainless steel work surface without screws ensures no accumulation of contaminant
• Removable air in-flow plate is easy to clean and disinfect
• Internal wall is constructed of a single piece stainless steel, with 12mm arc angle corners which allows for more effective cleaning
• The volume of liquid tank is over 4L, equipped with outlet valve for convenient cleaning and maintenance
• Concaved work surface, waste liquid easily collected
• Adjustable stand (0-75mm) without exposed screw thread, reduces risk of contamination

Ultra Low Penetration Air Filtration System

• American AAF ULPA filter
• Tested to a typical efficiency of 99.9995% for 0.12 micron particles
• Provides FED STD 209E class 1 (or ISO14644.1 class 3) clean air to work surface in a stable vertical laminar flow to protect samples
• The exhaust ULPA filter traps biohazard particles acquired from the work surface before air is exhausted to the room, offering personnel and environmental protection

Air flow

PU

MEDIA PACK

FACEGUARD   GASKET
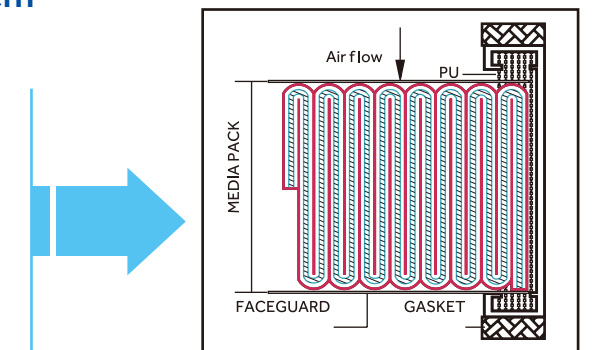
High Efficiency Blower System

• The blower system is designed for high performance operation, maximum energy efficiency and minimal maintenance
• Self cooling system reduces energy consumption while enhancing reliability

W

Overload

Pa

Minimum operating point

Overload

M³/H

Optimum
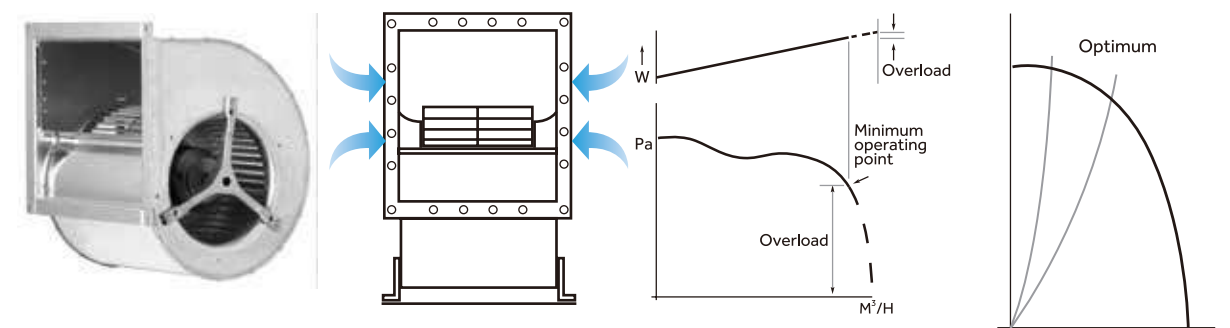
Reverse centrifugal fan	Double-side air inflow design decreases running noise	Air velocity auto-compensation function guarantees stable wind speed	Provide uniform airflow by adjusting working voltage of fan

Biological Safety Cabinet

Specifications

Model	HR700-IIA2	HR900-IIA2-D	HR900-IIA2-S	HR1200-IIA2	HR1200-IIA2-D	HR1200-IIA2-S	HR1500-IIA2
Working Voltage&Frequency (V/Hz)	220/50/60	220-240~50/60	220-240~50/60	220/50	220/50/60	220/50/60	220/50
Power (VA)	1200	1500	1500	1500	1600	1600	1900
Power of Blower (W)	210	290	290	AC L=330,M=465,H=735	DC 190, DC 170	DC 120,DC 112	AC 650
Airflow Circulation	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust
Main Filter Typical Efficiency	HEPA, H14,99.995%@0.3μm	ULPA, U15,99.9995%@0.12μm	ULPA, U15,99.9995%@0.12μm	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um	ULPA ,U15,99.9995%@0.12um
Exhaust Filter Typical Efficiency	ULPA, U15,99.9995%@0.12μm	ULPA*2, U15, 99.9995%@0.12μm	ULPA, U15, 99.9995%@0.12μm	HEPA ,H14,99.995%@0.3um	TWO HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um
Filter's Brand	AAF	AAF	AAF	AAF	AAF	AAF	AAF
Downflow Velocity (m/s)	0.30	0.30(60)	0.54(90)	0.34	0.30	0.30	0.31
Inflow Velocity (m/s)	0.53	0.55	0.55	0.55	0.45	0.45	0.55
Lighting Intensity (Lux)	≥700	≥1300	≥1300	≥900	≥1000	≥1000	≥900
Net/Gross Weight (approx) kg	100/130	290/310	290/310	320/339	320/339	320/339	350/393
Net/Gross Weight (approx) lbs	220.4/286.52	639/705	639/705	705.5/747.4	705.5/747.4	705.5/747.4	771.6/866.4
Interior Dimensions (W*D*H) mm	600*550*540	936*620*635	936*620*635	1220*620*650	1310*620*630	1310*620*630	1520*620*650
Interior Dimensions (W*D*H) in	23.62*21.65*21.26	36.9*24.4*25.0	36.9*24.4*25.0	48.0*24.4*25.6	51.6*24.4*24.8	51.6*24.4*24.8	59.9*24.4*25.6
Exterior Dimensions (W*D*H) mm	700*720*1200	1002*796 (856)*1485	1002*796 (856)*1485	1380*790*2160	1380*780*2160	1380*780*2160	1680*790*2160
Exterior Dimensions (W*D*H) in	27.5v6*30.91*50.93	39.5* 31.3 (33.7)*58.5	39.5* 31.3 (33.7)*58.5	54.3*31.1*85.0	54.3*30.7*85.0	54.3*30.7*85.0	66.1*31.1*85.0
Packing Dimensions (W*D*H) mm	765*785*1370	1070*895*1680	1070*895*1680	1470*920*1690	1470*920*1690	1470*920*1690	1755*920*1690
Packing Dimensions (W*D*H) in	30.12*30.91*53.93	42.1*35.2*66.1	42.1*35.2*66.1	57.9*36.2*66.5	57.9*36.2*66.5	57.9*36.2*66.5	69.1*36.2*66.5
Supporter	700mm(optional)	680-900mm(26.8-35.4") adjustable height	680-900mm(26.8-35.4") adjustable height	680-900mm adjustable height	680-900mm adjustable height(optional)	680-900mm adjustable height	680-900mm adjustable height
Container Load (20'/40'/40'H)	21/45/45	12/24/24	12/24/24	8/16/16	8/16/16	8/16/16	6/12/12
Alarm	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certification	CE, TÜV SÜD Mark, NMPA(CFDA)	CE, UKCA	CE, UKCA	CE, TÜV SÜD Mark, NMPA(CFDA)	CE, TÜV SÜD Mark	CE, TÜV SÜD Mark	CE, TÜV SÜD Mark, NMPA(CFDA)

Product appearance and specifications are subject to change without notice

Stainless Steel Arm Rest is removable, width of 60 mm

Laboratory Equipment

Biological Safety Cabinet

Specifications

Model		HR30-IIA2	HR40-IIA2	HR40-IIA2	HR40-IIB2
Working Voltage&Frequency (V/Hz)		220/50/60	115/60	220/50/60	220/50/60
Power (VA)		1300	1300	1300	1700
Power of Blower (W)		AC 540/625	AC 540/625	AC 540/625	AC 115
Airflow Circulation		70% Downflow, 30% Exhaust	70% Downflow, 30% Exhaust	70% Downflow,30% Exhaust	100% Exhaust
Main Filter Typical Efficiency		ULPA, U15,99.9995%@0.12um	ULPA, U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um
Exhaust Filter Typical Efficiency		HEPA ,H14,99.995%@0.3um	HEPA, H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um
Filter's Brand		AirePlus	AAF	AAF	AAF
Downflow Velocity (m/s)		0.3	0.28	0.3	0.3
Inflow Velocity (m/s)		0.53	0.55	0.53	0.53
Lighting Intensity (Lux)		≥1100	≥1200	≥1200	≥1200
Net/Gross Weight (approx)	kg	220/248	258/305	258/305	252/308
	lbs	485.0/546.7	568.8/672.4	568.8/672.4	555.6/679.0
Interior Dimensions (W*D*H)	mm	900*610*680	1167*610*680	1167*610*680	1167*610*680
	in	35.4*24.0*26.8	45.9*24.0*26.8	45.9*24.0*26.8	45.9*24.0*26.8
Exterior Dimensions (W*D*H)	mm	1100*790*2200	1360*790*2200	1360*790*2200	1360*790*2330
	in	43.3*31.1*86.6	53.5*31.1*86.6	53.5*31.1*86.6	53.5*31.1*91.7
Packing Dimensions (W*D*H)	mm	1155*905*1720	1415*905*1720	1415*905*1720	1415*905*1910
	in	45.5*35.6*67.7	55.7*35.6*67.7	55.7*35.6*67.7	55.7*35.6*75.2
Supporter（mm)		680	680	680	680
Container Load (20'/40'/40'H)		10/20/20	8/16/16	8/16/16	8/16/16
Alarm		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certification		CE, TÜV SÜD Mark, NMPA(CFDA)	/	CE, TÜV SÜD Mark, NMPA(CFDA)	CE, TÜV SÜD Mark, NMPA(CFDA)

Product appearance and specifications are subject to change without notice

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Laminar Flow Cabinet

- Featuring many technologies and authoritative testing certification for reliability
- Microcomputer intelligent control panel with durable touch buttons
- Multiple safety protection functions including UV delay start
- Interlocking function to put an end to incorrect operation
- Ergonomic design to ensure comfortable operation
- Memory function to avoid repeated start-up setting
- Integrated stand with universal casters

HCB-1300V

High-efficiency Filter HEPA

Shell: Cold rolled electrostatic painting, anti-corrosion ability

UV Lamp One-key Preset

UV germicidal delayed start to prevent from away UV damage

Pre-cleaning Function

304 Stainless steel Operation Table

UV lamps , fans, lighting linkage system to enhance user safety

Universal Caster to move more conveniently

High-Efficiency Filter HEPA

High-efficiency HEPA filter with efficiency of 99.99%@0.3μm, provides ISO14644.1 Class V standard clean air, safer and reliable clean air.

304 Stainless Work Surface

The durable and corrosion-resistant 304 stainless steel work table without fixing screws reduces the accumulation of dirt, reducing the risk of contamination.

Ergonomic Design

- Recessed internal lighting reduces eye fatigue.
- UV sterilization start-up delay technology prevents injury by UV light. After the UV lamp switch is pressed down, the audible and visual alarm will be activated to remind the operator to leave in time;
- Pre-set function: This technology includes a pre-set UV sterilization start-up delay function to provide improved working efficiency.

Interlocking Function

There is an interlocking function between illuminating lamp and UV lamp, the UV lamp only works when the illuminating lamp is off. If the UV lamp is on, it can be turned off by pressing the daylight lamp, reducing the risk of incorrect operation.

Memory Function

The UV lamp start-up delay time, sterilization duration, pre-set start time, fan position can be set and saved by user on request for the convenient and quick cabinet start-up.

One-key Operation

- After the UV lamp switch is pressed, the time function can be activated automatically. The default sterilization time is 30min, which can be adjusted by user within 0~99min on request;
- Sterilization pre-set, when pressing the UV lamp, the pre-set lamp will light to remind user that the sterilization pre-set function has been activated and that the sterilization pre-set can be conducted.

Pre-cleaning Function

The pre-cleaning function can further improve the protection of samples.

Laminar Flow Cabinet

Professional local air purification equipment,suitable for pharmacy, biomedicine and healthcare, university research and biosafety laboratories.

Positive pressure chamber design ensures air velocity uniformity and forms effective seal

Uniform air velocity design

Valve access port design, for convenient use

304 stainless steel integrated worksurface, easy to clean, corrosion-resistant

Universal caster, easy to move Foot design, stable balance

Anti-UV 6mm toughened dropdown front glass sash window

Ultra-low noise design, dual EBM fans and the positive pressure tank

The IoT module for remote real-time monitoring (optional)

Real-time display of air velocity, 0.20-0.50m/s range stepless speed control

Intelligent constant air velocity design, intelligent interlock design

The sensor monitors the air velocity of real time

UV lamp interlock UV lamp one-click timer/ delay start

HCB-1300VS

Product Features

High performance energy saving and environmental protection fan, low energy consumption, high efficiency

Real-time display filter life and fan, UV lamp running time, convenient and safe

UV lamp sterilization timer design, any time self-service UV lamp open and close

In line with YY/T 1539-2017, JG/T 292-2010, EN12469, EN1822 and other standards

Operating area cleanliness to ISO 14644-1 class 4

Intelligent interlock design, to shield the risk of mis-operation, the operating sash is manufactured with UV light, LED light, and fan

Users can adjust the air velocity in the range of 0.20~0.50m/s with the accuracy of 0.01m/s

IoT technology to achieve remote online monitoring (optional)

Intelligent constant air velocity and interlock design

Ultra-low noise design, positive pressure tank with dual EBM fans

Innovative Design

● Intelligent constant air speed design

● UV lamp sterilization reservation timer

● Air velocity sensor

● Ultra-low noise

● Ergonomic: Comfortable to operate

● Non reflective tempered UV glass

Laminar Flow Cabinet

Specifications

Model		HCB-900V	HCB-1300V	HCB-1300V	HCB-1300VS	HCB-1600H
Flow Type		Vertical	Vertical	Vertical	Vertical	Horizontal
Voltage/Frequency (V/Hz)		220/50	115/60	220/50	220V/50/60Hz	220/50/60
Power (W)		1200	1200	1200	1350	350
Vibration Amplitude (UM)		2	2	2	2	2
Exhaust Filter Typical Efficiency		H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um
Average Velocity (M/S)		0.2-0.4	0.2-0.4	0.2-0.4	0.20-0.50	0.2-0.4
Lighting Intensity (Lux)		≥300	≥300	≥300	≥600	≥1000
Sound Level (dB(A))		58	58	58	58	61
Net/Gross Weight (approx)	kg	115/145	145/171	145/171	180/232	165/214
	lbs	254/319	320/376	320/376	397/511.5	363.7/471
Internal Dimension (W*D*H)	mm	900*530*520	1300*530*520	1300*530*520	1300*510*550	1710*550*750
	in	35.4*20.9*20.5	51.2*20.9*20.5	51.2*20.9*20.5	51.2*20.1*21.7	67.3*21.7*29.6
External Dimesion (W*D*H)	mm	970*630*1730	1370*630*1730	1370*630*1730	1370*640*1820	1780*790*1960
	in	38.2*24.8*68.1	53.9*24.8*68.1	53.9*24.8*68.1	53.9*25.2*71.7	70.1*31.1*77.2
Packing Dimensions (W*D*H)	mm	1105*745*1280	1505*745*1280	1505*745*1280	1470*810*1290	1865*940*1370
	in	43.5*29.3*50.4	59.3*29.3*50.4	59.3*29.3*50.4	57.9*31.9*50.8	73.4*37.0*53.9
Supporter		755mm high chassis	755mm high chassis	755mm high chassis	750mm high chassis	765mm high chassis
Cleanliness Classification		ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5
Container Load (20'40'40'H)		15/33/33	10/25/25	10/25/25	11/22/22	6/12/12
Certification		CE, NMPA(CFDA)	/	CE, NMPA(CFDA)	NMPA(CFDA)	CE, NMPA(CFDA)

Product appearance and specifications are subject to change without notice

CO₂
Incubator

Haier Biomedical
Intelligent Protection of Life Science

CO₂ Incubator

CO₂ Incubator

Haier Biomedical IoT enabled CO₂ incubator with 180°C dry heat sterilisation provides a safe and secure reproducible growth environment for cell cultures.

IR Sensitive Control of CO₂ Concentration

The new IR sensor with high temperature resistance of 190°C is based on the NDIR measurement principle and uses a silicon MEMS transmitter to replace the traditional light source. It can withstand more than 300 dry heat sterilization cycles with a service life of up to 15 years and control accuracy of ±0.1%. German IR infrared sensing technology, zero drift, without need for calibration, drift less than 0.3% within 2 years.

7-inch Touchscreen

Displays CO₂ concentration and temperature data in real time. 15 years of data can be exported via USB.

Inner Door

The door ensures the inside of the cabinet is sealed.

Outer Door

The heated outer door prevents the condensation of the inner door.

6-sided heating sketch

Internal Partition

Safety anti-slip design of pull out shelves.
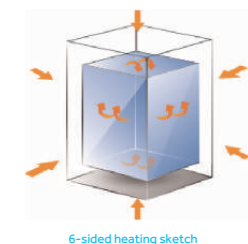
304 Stainless Interior

HCP-80/168/258

Adjustable Feet

It can be double stacked.

180°C Dry-heat Sterilization

All internal components do not need to be disassembled and do not need separate autoclave sterilization to prevent secondary pollution. Cleaning consumables are not needed, one-button sterilization. German INFRARED CO₂ sensor, NDIR light source technology drift < 0.3% within two years. The unit can withstand sterilization at 180°C with no disassembly and no manual calibration.

Precise and Accurate Temperature Control

Controls the temperature precisely, within ±0.1°C, with six-sided heating based on the fuzzy PID control principle, to provide a stable temperature to ensure the normal growth of cells throughout their life cycle.
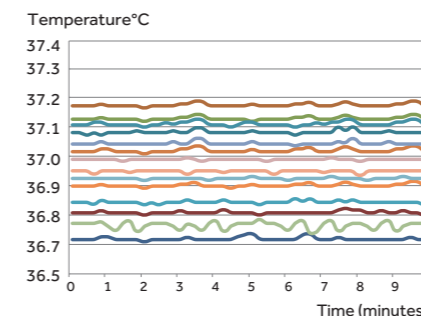
Uniformity of 27 measuring points <±0.3°C
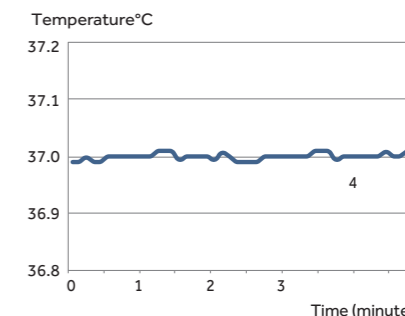
Central consistency point <±0.1°C

Precise CO₂ Concentration Using New IR Sensor Control Technology

Haier Biomedical's new IR Sensor technology uses NDIR measurement principles and withstands high temperatures of 190°C. The silicon MEMS transmitter can carry out more than 300 dry heat sterilization cycles to extend the service life to 15 years. Built-in temperature and humidity compensation technology reduces the impact of changes of humidity and temperature without the need for calibration after the high temperature sterilization. Five point calibration yields a higher measuring accuracy, sensitivity with less drift.
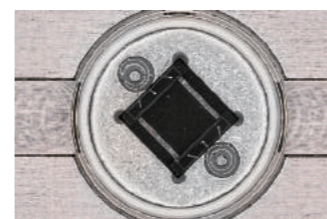
Silicon-based mems transmitter
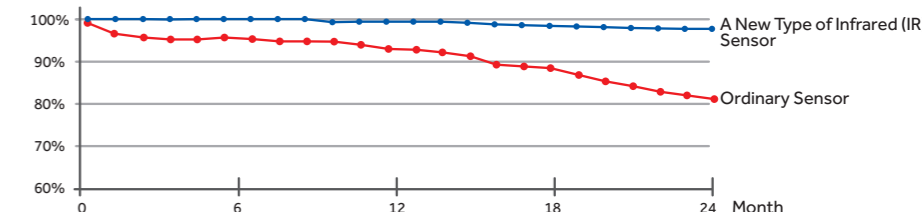
Sketch of drift less than 0.3%

A New Type of Infrared (IR) Sensor

Ordinary Sensor

Fast Environment Recovery for Optimal Cell Growth

Adopting active air flow control technology, and based on the fuzzy PID control principle, the parameters can be restored without overshoot. After opening the door for 30 seconds, the temperature and CO₂ concentration can be quickly restored within 4 minutes. Even if multiple users share a CO₂ incubator and frequently open and close the door, the stability and uniformity of the incubator can be ensured.

Illustration of purified airflow

Temperature recovery curve (door open for 30s)

CO₂ concentration recovery curve (door open for 30s)

CO₂ Incubator
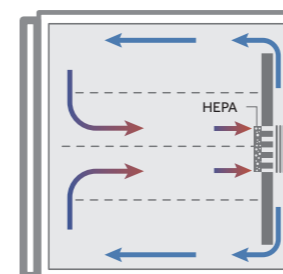
180°C Dry-Heat Sterilization Technology Minimises Contamination

Easy and effective sterilization of microorganisms including bacteria, fungi and microplasma with strong resistance, at 180°C high temperatures without the need for consumables. Simply press the "sterilization key" to activate and complete the sterilization process automatically in just 12 hours.
Delivers sterility level within the chamber of all surfaces to meet WS/T367-2012 standards.
All components are sterilized during the process, there is no need to dissemble internal components (including CO₂ sensors) and decontaminate separately, thus avoiding secondary pollution.

Temperature°C

Time (hours)
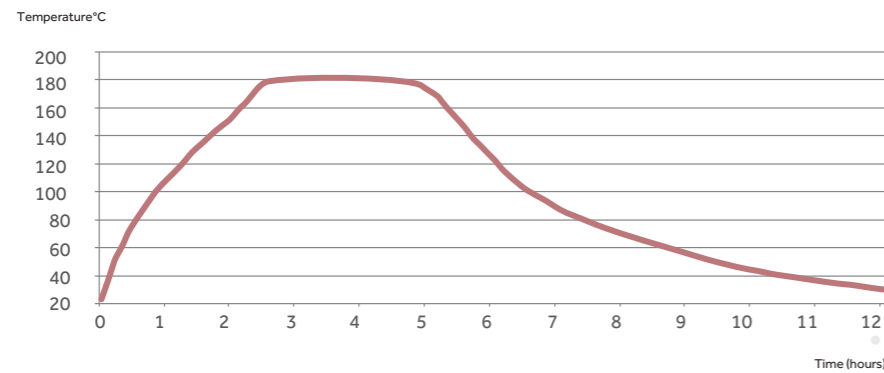
Sterilization Temperature Profile

Thirty-four points were tested in the working chamber, including glass inner doors and partitions.
All regions reached 180°C and maintained for 2 hours.

Ultraviolet disinfection	90°C hygrothermal disinfection	180°C dry-heat sterilization of haier CO₂ incubator
Cells exposed to bacterial environment	Cells exposed to bacterial environment	Pollution-free cell growth environment

High Efficiency Microbial Filter

The CO₂ inlet is equipped with a high-efficiency microbial filter, with 99.99% filtration efficiency for particles larger than or equal to 0.2μm in diameter. It can effectively filter bacteria and dust particles in the CO₂ gas line to ensure the safety of experimental results.

Easy to Clean Interior

The working chamber is plasma electro polished, stamped stainless steel with wide-arc, laser welded corners. Bracketless shelving design ensures that it is quick and easy to clean.

Interactive Intelligent Display with Easy Touch Operation

Touch-sensitive screen with rapid sensing even in rubber gloves. Green indicates normal operational parameters, while a red warning display indicates abnormal, making it easy to view data at a glance. A red warning display and audible buzzer will alarm when water level is low.

Home screen red warning

Real-time display of operation data & real-time display of temperature, for CO₂ concentration and O₂ concentration, and the data during the culture cycle can be viewed at any time.
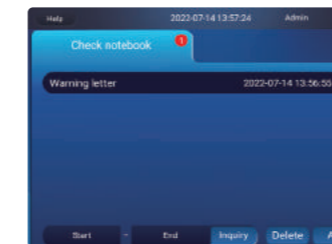
Announcement function designed for multiple persons to use the same incubator making it clear to all users on important matters.

Operation mode clear management authority: three-levels of authority to ensure the security of data.

Realtime Monitoring via Optional IoT Module

The IoT module is optional. The information of the setting parameters, operation parameters, operation curves, alarm records and event records is uploaded in real time through IoT cloud platform to ensure real time monitoring of the operation status of the incubator by APP or PC.

Anti-Condensation Heating System to Reduce Pollution Risk

The door on the CO₂ incubator radiates heat to the inner glass door, effectively preventing the glass door from forming condensation. The possibility of microbial contamination caused by the condensate water is eliminated.

Intelligent Control of Circulating Air Maintains Uniformity

Automatically adjusts the circulation of the air flow, optimising the air flow to avoid air volatilization of samples and ensuring proper uniformity throughout the chamber.

Comprehensive Safety Alarm System

The system ensures the safety of experiments and processes by utilizing an independent temperature alarm system, including a sound light and remote reminder. Other alarms include CO₂ concentration, door ajar and water shortage.

CO₂ Incubator

CO₂ Incubator

Innovative and User-friendly Design with Attention to Detail
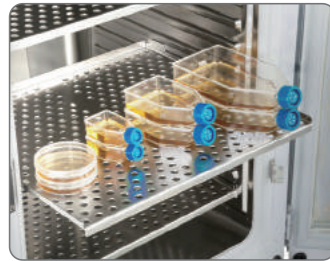
Safe anti-slip design with pull out shelves.

Convenient drainage design

Cabinet Internal
Heat Volume
Liner
Cold Spot
Condensate Water
Reservoir
Active Cooling
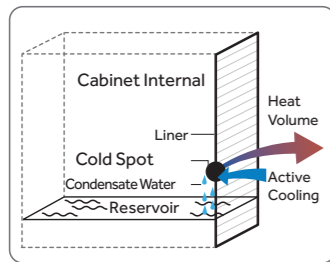
Active heat pipe condensation technology with any condensation directly returning to the reservoir.

环境温度 26.0℃

Data traceable for 15 years with large storage capacity and data exportable through USB.

O₂ Control (Optional) for HCP-168 Only

The nitrogen intake is controlled by the oxygen concentration detected by the oxygen sensor. By filling nitrogen, the oxygen concentration can be controlled in the range of 1-21% and the control accuracy is 0.1%, which can simulate the hypoxic conditions for the research of primary cell, stem cells and embryos.
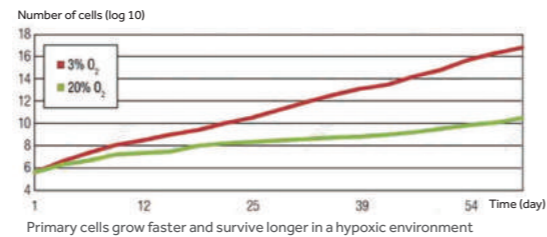
*To order the HCP-168 incubator complete with O₂ control module use product code O₂-HCP-168.

Number of cells (log 10)

■ 3% O₂
■ 20% O₂

Time (day)

Primary cells grow faster and survive longer in a hypoxic environment

Optional Accessories

Name	Picture
Relief Valve	
HEPA Filter	
HEPA Filter Cover	
Stacking Frame	
Internal partition	
Roller base	

Name	Picture
Water Tray	
Oxygen Sensor (only for HCP-168)	
Solenoid Valve (only for HCP-168)	
6 Inner Door (only for HCP-168)	
3 Inner Door (only for HCP-168)	

Specifications

	Model		HCP-80	HCP-80B	HCP-168	HCP-168B	HCP-258	HCP-258B
Type			Air Jacket		Air Jacket		Air Jacket	
Construction	Chamber Volume (L)		80		170		258	
	Interior Chamber		304 Stainless Steel					
	Exterior Chamber		Cold-rolled steel powder coated					
	Access Port		/		35mm Diameter		35mm Diameter	
	Data Outputs		Remote Alarm Contacts, USB, and Optional 4-20mA					
Dimensions	Net/Gross Weight (approx)	kg	75/100		95/130		110/160	
		lbs	165/220		242.5/308.6		297/374	
	Interior Dimensions (W*D*H)	mm	400*420*490		490*560*650		570*610*745	
		in	15.7*16.5*19.3		19.3*22*25.6		22.4*24.0*29.3	
	Exterior Dimensions (W*D*H)	mm	625*684*735		714*812*887		794*867*985	
		in	24.6*26.9*28.5		28.1*32*34.9		31.3*34.1*38.8	
	Packing Dimensions (W*D*H)	mm	765*710*930		890*800*1085		950*880*1145	
		in	30*28*36.6		35*31.5*43		337.4*35*45	
Shelves	Dimensions (W*D)	mm	380*300		473*434		550*484	
	Number Standard/Maximum		3/8		3/11		3/13	
	Max.load Per Shelf/Total Load	kg	15/45		15/45		15/45	
	Construction		Perforated, Adjustable					
Electrical	Rated Voltage Power Supply (V/Hz)		220-240-50/60	115/60	220-240-50/60	115/60	220-240-50/60	115/60
	Nominal Consumption (kw) (Steri-run)		0.07 (0.9)		0.095 (1.4)		0.12 (1.6)	
Control	Controller		Microprocessor		Microprocessor		Microprocessor	
	Display		7 "LCD Screen		7 " LCD Screen		7 "LCD Screen	
CO₂	Control Accuracy		0.1%		0.1%		0.1%	
	Range		0-20%		0-20%		0-20%	
	Alarm Range		±0.5%		±0.5%		±0.5%	
	Inlet Pressure		12-17Psi (0.8-1.2 Bar)					
	Gas Purity		≥99.5%					
	Sensor		IR		IR		IR	
	Recovery Time at 5vol.-%/CO₂ for a 30 Second Door Opening*(min)		4		4		4	
	CO₂ Inlet Filter (μm)		<0.2		<0.2		<0.2	
Alarms	High/Low Temperature		Y		Y		Y	
	Remote Alarm		Y		Y		Y	
	Excessive CO₂ Concentration		Y		Y		Y	
	Water Shortage		Y		Y		Y	
	Sensor Error		Y		Y		Y	
	Door Ajar		Y		Y		Y	
Temperature Parameter	Control Accuracy (°C)		0.1		0.1		0.1	
	Range		Ambient temperature+3-55°C					
	Uniformity (°C)		±0.3		±0.3		±0.3	
	Ambient Range (°C)		18-32		18-32		18-32	
	Sensor		2PT1000		2PT1000		2PT1000	
	Recovery Time at 37°C for a 30 Second Door Opening* (min)		4		4		4	
Sterilization Cycle	Cycle Temperature		180°C on internal Surfaces and Shelves					
	Cycle Duration		Under 12 Hours		Under 12 Hours		Under 12 Hours	
Humidity	RH (Relative Humidity)		Setting 37°C ≥90%		Setting 37°C ≥90%		Setting 37°C ≥90%	
	Humidity Reservoir		Max.1.3L/Min 0.5L		Max.3L/Min 0.5L		Max.3.6L/Min 0.5L	
Optional	Hepa Filter		Y		Y		Y	
	Pressure Reducing Valve		Y		Y		Y	
	RS485		Y		Y		Y	
	4-20mA		Y		Y		Y	
	The Cylinder Switch		Y		Y		Y	
Certification			CE	UL	CE	UL	CE	UL

Product appearance and specifications are subject to change without notice

CO₂ Incubator

Air Jacketed With Six-sides Heating Design

- Fast temperature recovery and superior temperature uniformity
- High temperature sterilization can ensure that the temperature of each surface can reach 90℃

Door Switch

When the door opens, heating, air intake and fan automatically stop to minimize the risk of cross contamination

Inner Door

- Tempered glass provides easy observation of sample growth
- Three/six inner doors optional
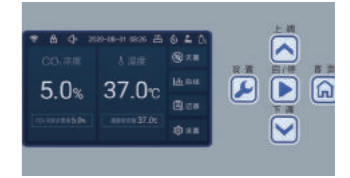
Operation Panel

- 4-inch LCD screen, vivid display and easy operation
- Abnormal operation sound and light alarm to ensure sample safety
- Running data can be traced, large capacity storage, data can be exported through USB

Co₂ Sensor

- The new IR sensor with high temperature resistance of 100°C, can withstand more than 300 high heat sterilization cycles
- Based on the NDIR measurement principle and uses a silicon MEMS transmitter to replace the traditional light source
- Zero drift and without need for calibration

Test Hole

Providing access for convenient measurement of internal statistics

Partition

- Anti-slip design
- High levelness ensures uniform growth of adherent cells
- Mirror stainless steel to ensure high surface cleanliness, easy to clean

Outer Door

- Prevents the condensation of the inner door
- Left/right hand door optional

Air Flow System

The air flow circulation ensures proper uniformity throughout the chamber

Inner and Outer Door Seal

- Silicone material, prevent aging after heating
- Close the inner cavity to ensure the cleanliness and uniformity of the inner chamber

HCP-168E

Integrated Liner

Integral design, large arc design, easy to clean

Bottom Reservoir Humidification

- Reservoir humidification method, no water tray, easy to clean, avoid breeding bacteria
- Large evaporation area and fast humidity recovery

CO₂ Incubator

Precise and Accurate Temperature Control

Controls the temperature precisely, within ±0.05°C, with six-sided heating based on the fuzzy PID control principle, to provide a stable temperature to ensure the normal growth of cells throughout their life cycle.

Six-sided heating **Uniformity of 27measuring points<±0.25°C** **Central consistency point<±0.05°C**
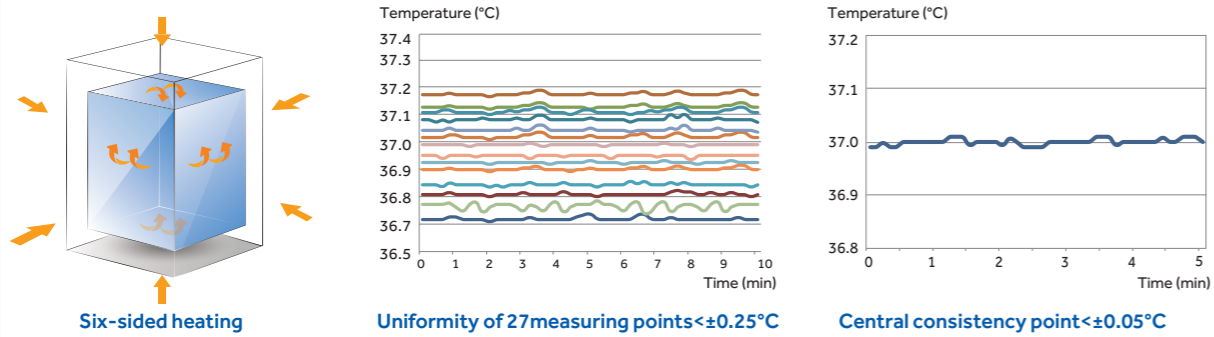
Precise CO₂ Concentration Using New IR Sensor Control Technology

Haier Biomedical's new IR Sensor technology uses NDIR measurement principles and withstands high tempera- ture of 100°C. The silicon MEMS transmitter can carry out more than 300 dry heat sterilization cycles to extend the service life to 15 years. Built-in temperature and humidity compensation technology reduces the impact of changes of humidity and temperature without the need for calibration after the high temperature sterilization. Five points calibration yields a higher measuring accuracy, sensitivity with less drift (less than 3% within 2 years).
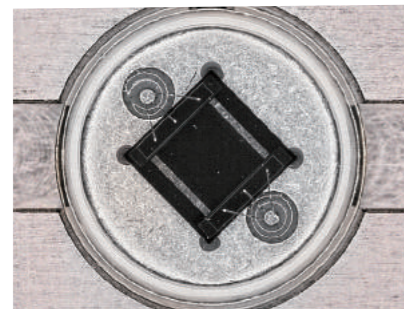
Silicon-based mems transmitter Infrared (IR) sensor

A New Type of Infrared (IR) Sensor
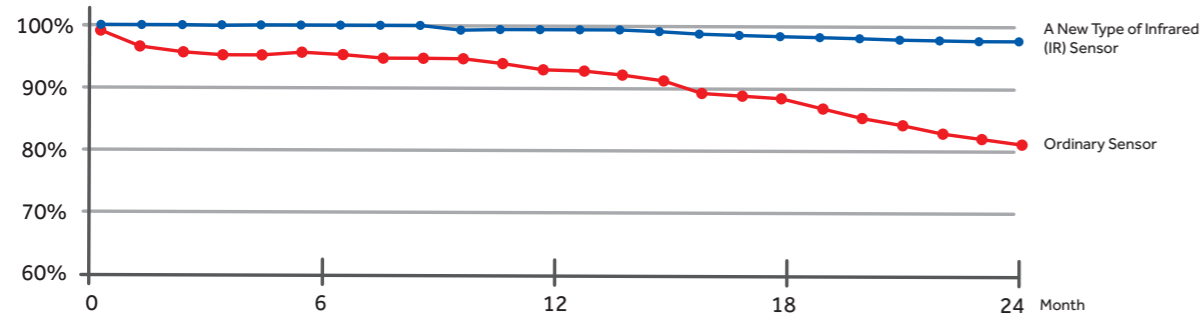
Ordinary Sensor

Drift comparison between infrared sensor and ordinary sensor

*The equipment is tested by Haier in a controlled environment. Haier does not guarantee that the results of field tests under different conditions will be consistent. The test model is HCP-168E

Fast Environment Recovery for Optimal Cell Growth

Adopting active air flow control technology, based on the fuzzy PID control principle, the parameters can be restored without overshoot. After opening the door for 30 seconds, the temperature and CO₂ concentration can be quickly restored within 4 minutes. Even if multiple users share a CO₂ incubator and frequently open and close the door, the stability and uniformity of the incubator can be ensured.

Illustration of purified airflow **Temperature recovery curve (door open for 30s)** **CO₂ concentration recovery curve (door open for 30s)**
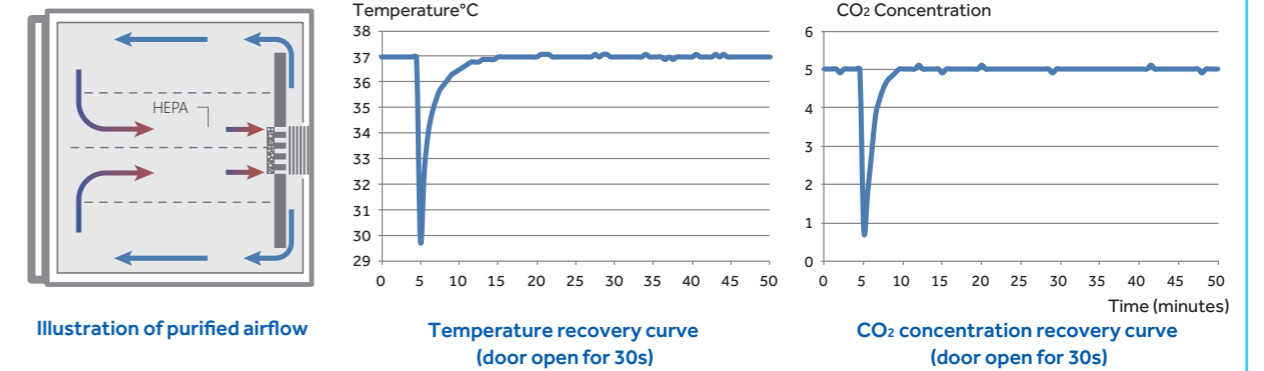
90°C Moist Heat Sterilization Technology

Effective sterilization of microorganisms including bacillus and spores with strong resistance, at 90°C under moist heat, without the need for consumables. Simply press the "sterilization button", to activate and complete the sterilization process automatically in 14 hours.
Delivers sterility level within the chamber of all surfaces to meet WS/T367-2012 standards.
All components are sterilized during the process, there is no need to dissemble internal components (including CO₂ sensors) and decontaminate separately, thus avoiding secondary pollution.
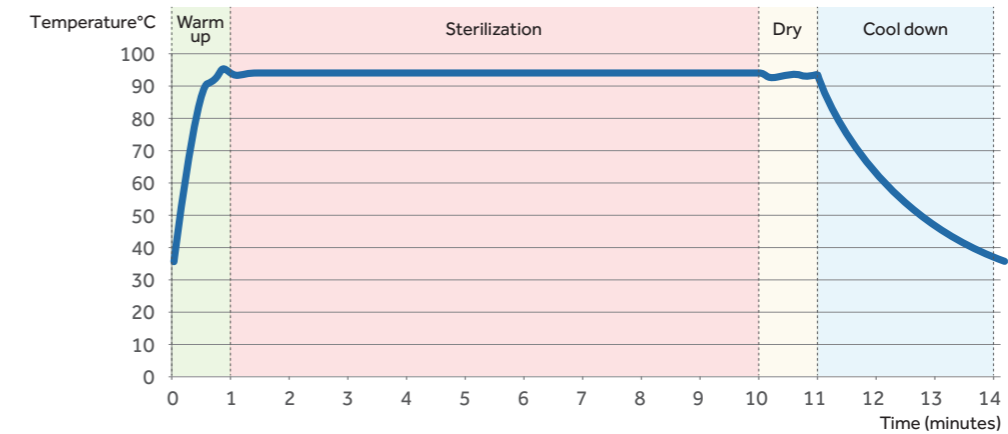
Sterilization Temperature Profile

Forty-seven points were tested in the working chamber, including glass inner doors and partitions.
All regions reached 90°C and maintained for 9 hours.

*The equipment is tested by Haier in a controlled environment. Haier does not guarantee that the results of field tests under different conditions will be consistent. The test model is HCP-168E

CO₂ Incubator

Easy to Clean Lnterior

The working chamber is plasma electro polished, stamped stainless steel with wide-arc, laser welded corners. Bracketless shelving design ensures that it is quick and easy to clean.
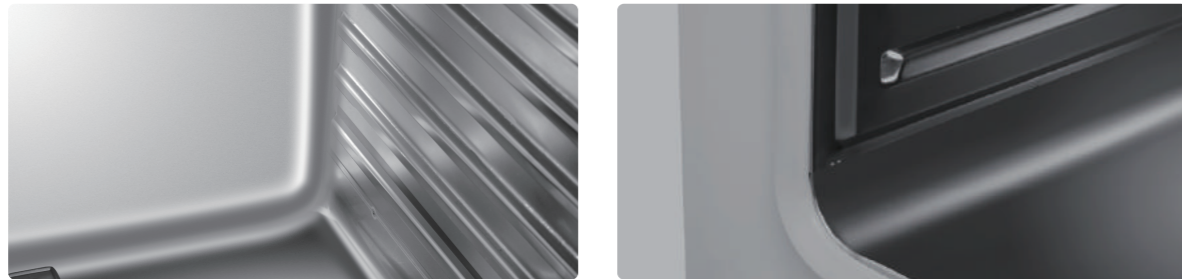
Innovative Design with Attention to Detail

5.0% 37.0℃

CO₂ setting 5.0%   Temperature setting 37.0℃

Curve   Record   Set

Safe anti-slip design of pull-out shelves.
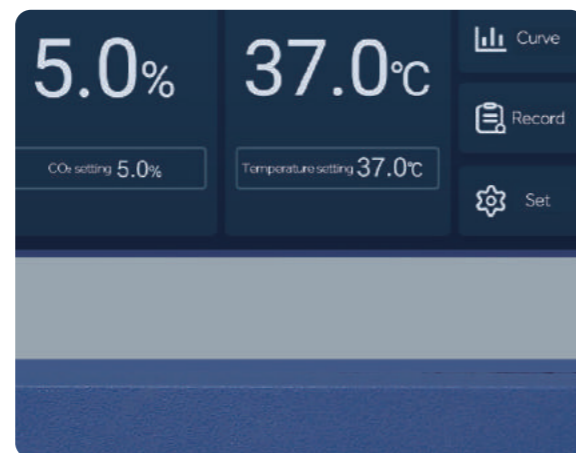
Data traceable for 15 years with large storage capacity and data exportable through USB.

Reservoir Humidification Without Condensation

Active heat pipe condensation technology with condensate water directly return to the reservoir, to ensure no condensation.

Cabinet Internal — Liner — Cold spot — Condensate water — Reservoir — Heating Volume — Active Cooling
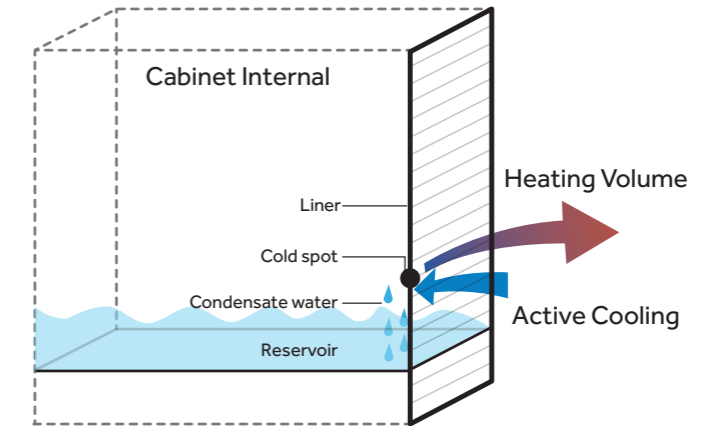
Optional Accessories

Name	Material Description
Oxygen module	Zirconia O₂ sensor, control accuracy: 0.1%; control range: 1-21%
3 Inner door	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
6 Inner door	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
Water Tray	Provides different bottom humidification methods
Roller base	Easy to move, prevent the ground bacteria contamination
Stacking frame	Stacking the two incubators makes the fixation firmer
HEPA filter	Ensure the cleanliness of the box, suitable for users who open and close the door frequently
Pressure reducing valve	Suitable for users with cylinder gas supply
Partition	Increase the number of samples cultured

Specifications

Model	Volume (L)	Exterior Dimensions (W*D*H)(mm)	Interior Dimensions (W*D*H)(mm)	Shelf Dimensions (W*D*H)(mm)	Standard Configuration of Shelves No./Maximum
HCP-168E	170	714*812*887	490*560*650	473/434	3/11

Temperature Control Mode	Humidity Control Range at 37℃	Temperature Sensor	Temperature Control Range	Temperature Fluctuation	Temperature Uniformity	CO₂ Sensor	CO₂ Control Range	CO₂ Control Accuracy
Air jacket	High humidity≥90% Low humidity≥80%	PT1000	Ambient temperature +3℃~55℃	±0.1℃	±0.3℃	Infrared (IR) sensor	0-20%	0.1%

Standard Incubator

Scope of Application

The solution is widely used in bacteria, fungi and other microorganisms culture; as well as enzyme digestion reaction, ligation reaction, embedded incubation and other related constant temperature experiments.

Embedded incubation   Bacteria   Fungus

HZP-168   HFP-80

Ergonomic Design

Personalized interface, easy to link
Equipped with USB and RS485 interfaces to meet the different needs of users to transfer data.

Multiple protection benefits for increased security
Overheat protection (OPT), over current protection (FU), sensor error detection, independent temperature limit, compliance with DIN 12880 requirements and EU 3.1 safety level. Sound, light and remote alarms (optional) which guarantee experiment safety. Multiple alarms, such as over temperature alarm, high and low temperature alarm, door ajar, and sensor error alarm.

Scalable bulk data storage
The touchscreen's memory can be increased to 64GB to store up to 15 years' data which can be exported via USB

High thermal insulation performance, energy saving and environmental protection
The unit is manufactured with aluminum foil insulation cotton, which improves the overall insulation performance and reduces energy consumption, lowering costs while also being environmentally friendly.
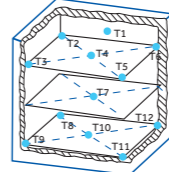
Fuzzy PID Control Technology

HZP-168
Natural Convection

HFP-80
Forced Convection

ASTM standard,
12 points testing

Fuzzy PID control technology and high performance four-sided heating mechanisms are used to achieve precise temperature control with superior uniformity.

Rapid Recovery After Door Open

Rapid warming: the temperature inside the unit quickly recovers after opening the door to reduce the influence of temperature fluctuation on the sample.
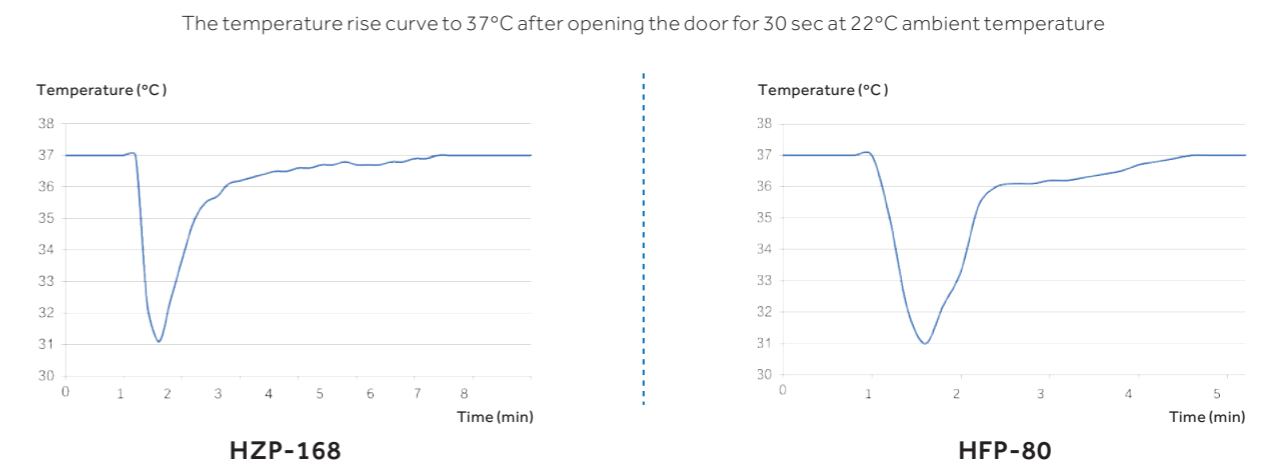
The temperature rise curve to 37°C after opening the door for 30 sec at 22°C ambient temperature

Temperature (°C)

HZP-168

Temperature (°C)

HFP-80

Convenient and Intelligent Management at a Glance

7-inch touchscreen, easy to operate and sensitive, it can respond quickly even when wearing rubber gloves.
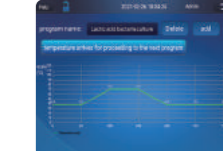
Real-time display of temperature data, one-touch to review previous data.

Records abnormal information in real time, eliminating any hidden abnormalities which ensures the culturing is more secure.

Multiple operating modes.

The program can be edited and set at any number of segments to meet the needs of various detection tests.

CO₂ Incubator

Standard Incubator

Precise Temperature Control, Energy-efficient and Environment-friendly

An energy-efficient model with superior control and heating mechanisms, high-quality insulation material and cabinet structure to ensure heating requirements are met while keeping power consumption to a minimum.

Temperature fluctuation ±0.1°C（37°C）

Temperature uniformity ±0.5°C（37°C）

HZP-168

Temperature fluctuation ±0.1°C (37°C)

Temperature uniformity ±0.3°C（37°C）
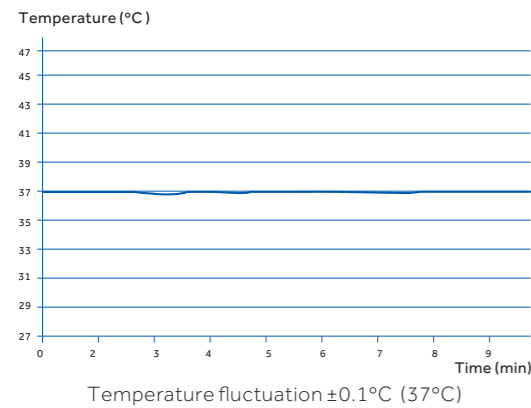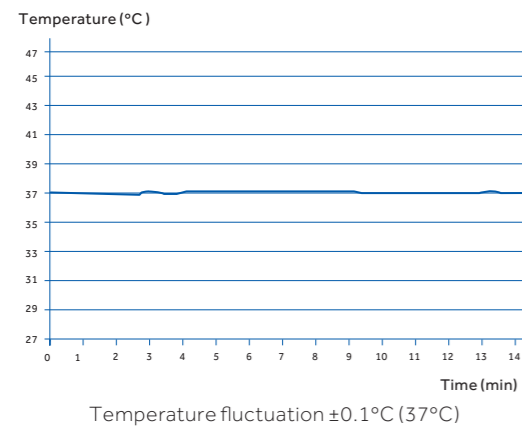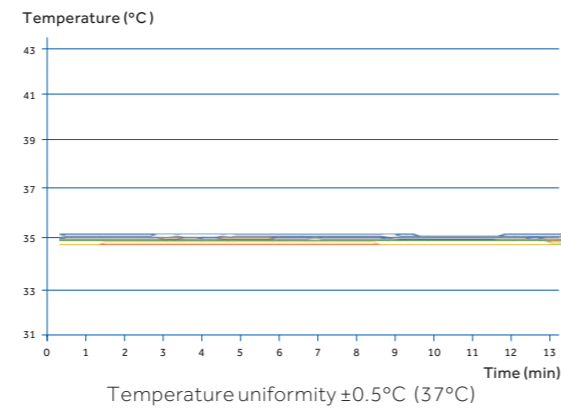
HFP-80

Optional IoT Technology for Real-time Remote Monitoring

Through the mobile app, the status of the incubator can be checked in real time, and information such as temperature alarm, sensor error alarm and door ajar can be controlled with one button, which provides more security for the experiment process.

Pictures in Details

Seamless, curved internal chamber for easy cleaning and decontamination.

Standard independent intelligent temperature safety controller to ensure experimental safety; RS485 achieves seamless IoT data connection.

Product Parameters

Model	Product Series	Capacity (L)	Power (W)	Exterior Dimensions (W*D*H)(mm)	Interior Dimensions (W*D*H)(mm)	Packing Dimensions (W*D*H)(mm)
HZP-168	Natural convection	168	640	650*782*1028	490*550*626	795*835*1220
HFP-80	Forced convection	80	510	560*662*870	400*400*480	710*760*1070

Shelves (Standard)	Temperature Control Range	Temperature Uniformity	Temperature Fluctuation (°C)	Temperature Control Precision (°C)	Recovery Time after 30 sec Door Opening (min)
2/17	RT+5~105°C	±0.5°C at 37°C	±0.1	±0.1	5
2/12	RT+5~105°C	±0.3°C at 37°C	±0.1	±0.1	2.5

Product appearance and specifications are subject to change without notice

CO₂ Incubator

Vertical Autoclave

Vertical Autoclave
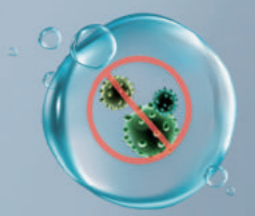
Scope of Application

This upright automatic rapid sterilization unit uses high temperature saturated steam as the sterilization medium. Applicable to testing laboratories, laboratories, operating rooms, supply rooms, higher education, animal husbandry, disease control centers and other medical and biomedical research units, achieves rapid sterilization of instruments, dressings, rubber, liquids, glassware, bacteria and cell culture medium, wastes, etc.

Product Fearures

Automatic Program Control
Water injection, heating, exhaust, sterilization, pressure relief, drainage, drying, automatic control of the whole process, no manual operation, one-click completion.

Automatic Drying Function (Auxiliary Drying)
The drying time can be set after the sterilization is completed.

Multiple Exhaust Methods
A variety of exhaust methods such as regular temperature setting exhaust, dynamic exhaust and full-process air escape, completely eliminates the cold air in the sterilizer and improves steam saturation, ensuring effective sterilization.

One-click Start of Stored Procedures
Equipped with quick programs for instruments, dressings, rubber and liquids, one-button start for easy operation.

Two Pressure Relief Methods
Two pressure relief methods are available: fast pressure relief and slow pressure relief. The slow pressure relief method for liquid sterilization can prevent liquid overflow caused by rapid buildup of pressure.

Warm-up Control and Timing Start
The preheating control function supports the sterilizer heating process, which shortens the heating time of the sterilizer and improves the efficiency of the process; equipped with timing start function and can start the sterilization program according to the predetermined time and arrange the process time accordingly.

HRLM-80

Safety Mechanisms

Automatic overpressure pressure relief:
When the set pressure is exceeded, the safety valve opens automatically to release the pressure.

Automatic over-temperature protection:
When the set temperature is exceeded, the system cuts off the power supply and alarms automatically generated.

Anti-drying protection:
When the water level is too low, the power will automatically cut off, the operation is stopped, and an alarm is automatically generated.

Door safety protection:
Real-time detection of door status, sterilization procedures cannot be started if the door is not tightly closed and there is a reminder to open the door; the sterilization can only start when the door is normally closed. However, when there is pressure in the sterilizer, the sealing door cannot be opened to prevent damage caused by steam leakage.

Sensor disconnection detection:
Monitors the status of the sensor in real time to ensure that the sensor is working properly to prevent excessive temperature caused by abnormal sensors.

Full protection thermal insulated door cover:
The door cover is made of high-performance thermal insulation material which completely covers the metal door, which prevents the operator from being burned.

Standard over-current, over-voltage protection and leakage protection.

Specifications

Model	Volume (L)	Net Weight (Kg)	Power Supply (V/Hz)	Power (W)	Exterior Dimension (W*D*H mm)	Interior Dimension (mm)	Maximum Pressure (Mpa)	Maximum Temperature (°C)	Rated Working Pressure (Mpa)	Pressure Display Range (Mpa)
HRLM-80	80	105	220-240 50/60	4200	546*750*1085	φ386*695	0.28	150	0.22	-0.1-0.3

Sterilization Temperature Range	Temperature Control Precision(°C)	Dynamic Pulse Exhaust Times	Dynamic Pulse Exhaust Temperature	Solution Temperature (°C)	Holding Temperature (°C)	Sterilization Time Range	Cabinet and Door Material	Accessories	
105-136°C	±0.1	0-99 (Settable)	110-136°C	40-100 (Settable)	40-100 (Settable)	0-999 mins	SUS304 Stainless Steel	2 Stainless Steel Sterilized Baskets	Optional Printer

Drying Oven

Scope of Application

Typically used for drying and sterilization of laboratory consumables, instruments and samples; as well as heating and curing, drying and dehydration, heat removal, moisture content determination of materials and samples in the fields of medicine, chemical industry, agricultural products as key examples. Other uses include, high temperature heat resistance tests and thermal aging tests of rubber, plastic products and electrical insulation materials. The solution is widely used in medical, enterprise, universities, scientific research institutions, environmental monitoring centers, pharmaceutical, food and drug quality monitoring centers and other related industries.

Laboratory consumables   Instruments   Thermal aging test

HFS-160   **HZS-60**

Ergonomic Design

High thermal insulation performance, energy saving and environmental protection

The unit is manufactured with aluminum foil insulation cotton, which improves the overall insulation performance and reduces energy consumption, lowering costs while also being environmentally-friendly.

Personalized interface, easy to transfer data

Equipped with USB and RS485 interfaces to better meet the different needs of users for transfer data

Precise high temperature control

Superior preheating technology with an innovative air duct structure.

Safe and stable

Multiple safety protection features.

Multiple safety protections

Overheat protection (OPT), over current protection (FU), sensor error detection, independent temperature limit, compliance with DIN 12880 requirements and EU 3.1 safety level. Sound,light and remote alarms guarantee experiment safety.

Scalable bulk data storage

The touch-screen can be increased to 64GB with capacity to store 15 years' data. The data can be exported using a USB flash drive.

Smart interface

7-inch intelligent touchscreen with optional IoT technology for real-time remote monitoring via an app.

Operation mode

Four operation modes for multiple temperature requirements.
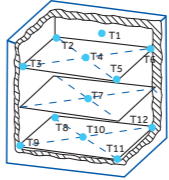
PID Control Technology

HFS-160
Forced convection

HZS-60
Natural convection

ASTM standard,
12 points testing

Based on PID control principle, manufactured with U-shaped 3-sided heating to achieve superior temperature control and uniformity control.

Precise Temperature Control, Energy-efficient and Quiet

High performance 3-sided heating and professional air duct design, high-quality fan components and insulation materials ensures precise temperature control while keeping power consumption to minimum.

Temperature fluctuation ±0.3°C (100°C)

Temperature uniformity ±2°C (100°C)

HFS-160

Temperature fluctuation ±0.2°C (100°C)

Temperature uniformity ±1.5°C (100°C)

HZS-60

Drying Oven
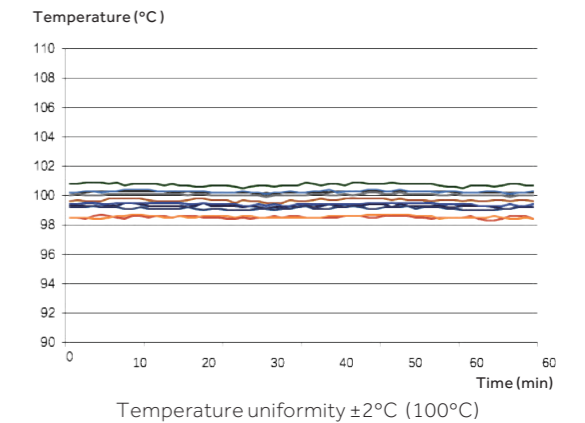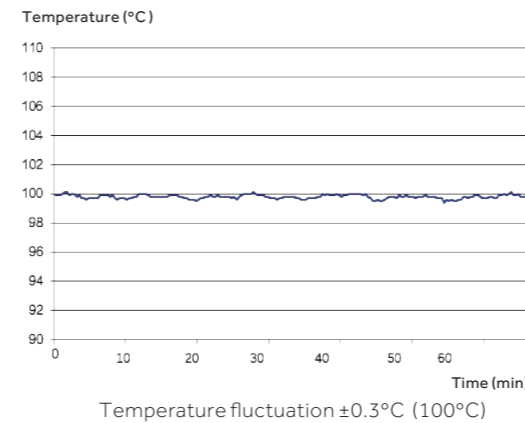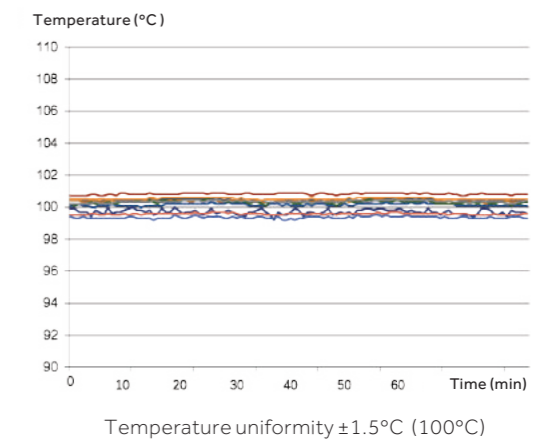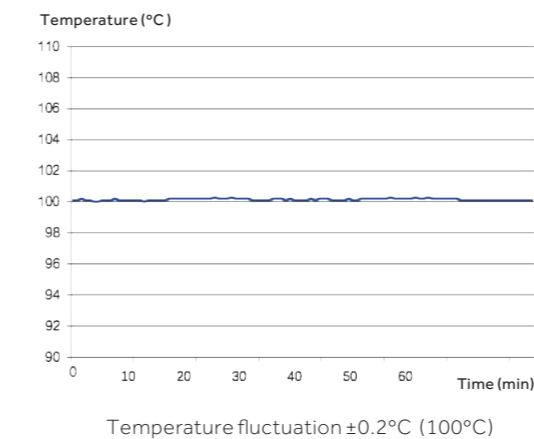
Rapid Recovery After Door Open

The temperature inside the unit quickly recovers after opening the door without overshoot.

Temperature (°C)

Temperature recovery curve to 100°C after opening the door for 30s

HFS-160

Temperature (°C)

Temperature recovery curve to 100°C after opening the door for 30s

HZS-60

Heater

Preheating zone

Optional IoT Technology for Real-time Remote Monitoring

Through the mobile app, the status of the dry chamber can be checked in real time, and information such as temperature abnormal alarm, sensor error alarm and door ajar can be controlled with one button, which provides more security for the experiment process.

Pictures in Details

Ergonomic self-locking handle, firm and durable, easy to use.

Large arc angle 304 mirror stainless steel inner liner, easy to clean.

Standard independent intelligent temperature safety controller to ensure experimental safety; RS485 achieves seamless IoT data connection.
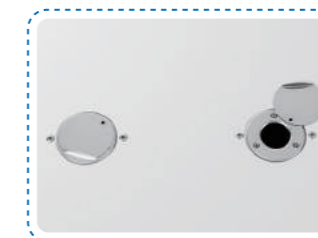
It is equipped with portholes to facilitate external equipment monitoring to record the experimental process.

Convenient and Intelligent Management at a Glance

7-inch touchscreen, easy to operate and sensitive, it can respond quickly even when wearing rubber gloves.

Real-time display of temperature data, one-touch to review previous data.

Records abnormal information in real time, to eliminate hidden errors.

Multiple operating modes.

The program can be edited and set at any number of segments to meet the needs of various detection tests.

Product Parameters

| Model	Product Series	Capacity (L)	Power (W)	Exterior Dimensions (W*D*H)(mm)	Interior Dimensions (W*D*H)(mm)	Packing Dimensions (W*D*H)(mm)	Shelf Dimensions (mm)	Shelves (standard/maximum)	Shelves Spacing (mm)
HZS-60	Natural convection	60	900	572*719*792	370*385*420	710*810*945	340*345	2/9	30
HFS-160	Forced convection	160	2500	752*809*973	550*492*600	895*900*1025	520*445	2/15	30

Temperature Setting Range (°C)	Temperature Uniformity	Temperature Fluctuation	Temperature Control Precision (°C)	Heating Rate (ambient temperature 22°C)	Recovery Time after Opening the Door for 30s
RT+10-200	±1.5°C at 100°C ±2.5°C at 150°C	±0.2°C at 100°C ±0.3°C at 150°C	±0.1	40min to 100°C 50min to 150°C	9min to 100°C 20min to 150°C
RT+10-200	±2°C at 100°C ±3°C at 150°C	±0.3°C at 100°C ±0.4°C at 150°C	±0.1	20min to 100°C 30min to 150°C	4min to 100°C 5min to 150°C

Product appearance and specifications are subject to change without notice

Constant Climate Dry Chamber

Climate
Chamber

Climate Chamber

Animal and plant tissue culture, drug stability tests, cosmetic stability tests, food shelf life tests, electronic components aging tests, packaging material stability tests.

HHS-256/756/506

Product Advantages

Silent
Semiconductor technology ensures low vibration and noise output with no pollution into the environment

Water-saving
Intelligent control of PTC humidification, daily water consumption of 120-320ml, no need to recycle waste water, saving space

Precise control
Accurate temperature and humidity control, long-term stability, 40 °C temperature uniformity ±0.5°C and central temperature fluctuation ±0.2°C, 75% humidity fluctuation ±1%

Power saving
Semiconductor technology means the daily power consumption is as low as 5kWh; 90% more energy efficient than compressor technologies

Product Features

Multiple protection protocols - equipped with delay start, high/low temperature and light intensity protection in line with DIN12880 requirement for over/under temperature protection

High precision temperature sensor, dual PT1000 sensors for more accurate temperature control

Optional electromagnetic lock, suitable for multiple users with independent management for safety

Expandable large capacity data storage, the touchscreen memory can be expanded to 64GB, storing up to 15 years data which can be exported via a USB

An access port with a diameter of 35mm on the left side of the cabinet to facilitate independent testing of temperature and humidity

High insulating performance polyethurane foam provides excellent insulation and stable cabinet temperatures reducing energy consumption

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Polyurethane foam insulation provides excellent thermal insulation, reducing energy consumption

High precision capacitive humidity sensor

Microprocessor control system
- PID control principle, 10-inch touch screen, temperature control precision 0.1°C, humidity control precision 0.1%, temperature range 5-70°C, humidity range 10%-90%
- USB, RS485 and 4-20mA LAN interface as standard

- Temperature alarm, humidity alarm, door alarm, sensor alarm and water shortage warning
- Display temperature, humidity and ambient temperature; users can query the historical curve

Product Parts

10" LCD screen	Door lock module
Foam insulated outer door	Top control module
Porthole	Semiconductor cooling duct
Toughened glass interior door	Top control module
High precision humidity sensor	The adjustable stainless steel load-bearing shelf
All internal stainless steel	Cabinet PU foam insulation layer
Universal lock casters	

HHS-756

International Quality Assurance

◉ Accurate Temperature Control
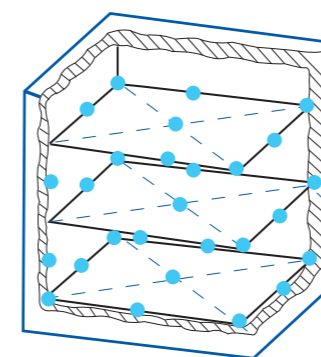
DIN12880 standard 27 test points

Temperature/°C
45 43 41 39 37 35
0.0 0.3 0.7 1.0 1.3 1.7 2.0 2.3 2.7 3.0 3.3 3.7 4.0 4.3 4.7 5.0 5.3 5.7 6.0 6.3 6.7 7.0 7.3 7.7 8.0
Time/h

Central point temperature fluctuation within ±0.2°C (ambient temperature: 22°C, setting temperature: 40°C)

Temperature/°C
45 40 35 30
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.0 2.3 2.6 3.2 3.5 3.8 4.1 4.4 4.7 5.0 5.3 5.5 5.8 6.1 6.4 6.7 7.0 7.3 7.6 7.9
Time/h

27 test points temperature uniformity is ±0.5°C(ambient temperature: 22°C, setting temperature: 40°C)

Constant Climate Chamber

Climate Chamber

◉ Accurate Humidity Control

Humidity/%

Temperature/°C
ICH standard test points

Humidity/%

Time/h
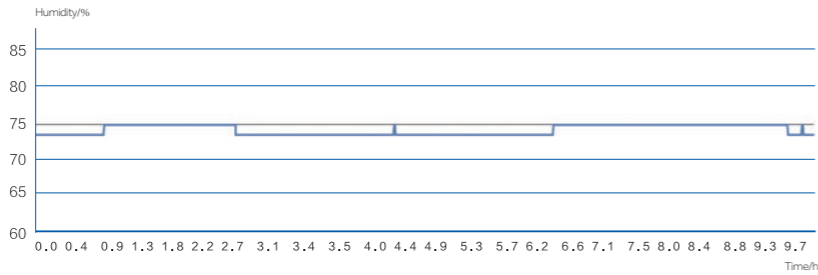
Humidity fluctuation ±1%: Accurate temperature control (ambient temperature: 22°C, ambient humidity: 22.3%, setting temperature: 40°C, setting humidity: 75%)

◉ Internal Cabinet Environment Quick Recovery System
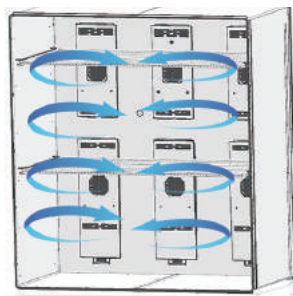
Professional air duct design, ensuring temperature and humidity uniformity

Temperature/°C

Time/min
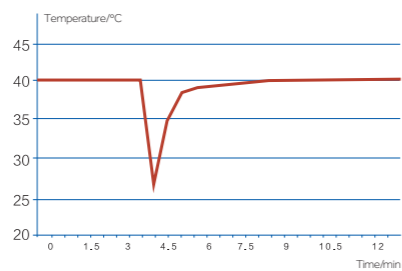
The time required for temperature to return to to 40°C after 30s door opening is <4 minutes

Humidity/%

Time/min
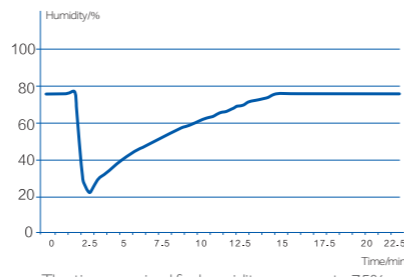
The time required for humidity recovery to 75% after opening door for 30s is <14 minutes

Intelligent Management

◉ Convenient and intelligent management to improve working efficiency

•The intelligent 10-inch touchscreen controller is easy to operate and sensitive to touch, even in rubber gloves. The PID control algorithm ensures the accuracy of temperature control

•Data and multi-user authority management and permissions conforms to FDA 21 CFR Part 11
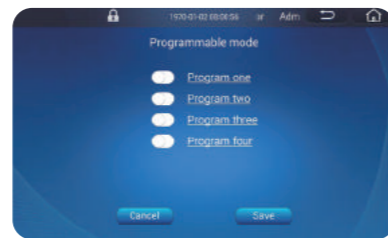
•Unlimited programs with infinite humidity and temperature settings to allow users to customise to their needs

◉ High quality manufacture and reliable operation
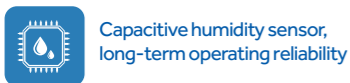
Capacitive humidity sensor, long-term operating reliability

• Interference-free humidity data collection.
• Long-term reliability without the need for calibration.
• High precision ±0.1%.
• Anti-condensation design for more accurate humidity monitoring

High precision temperature sensor, accurate and reliable

• Adopts PT100 temperature sensors for accurate, stable and repeatable measurement without deviation.
• Dual sensors further improve accuracy.

Semi-conductor cooling, superior energy-saving and mute effect

• Semiconductor thermocouple consists of N-shape semiconductor and P-shape semiconductor.

◉ Intelligent control, ensures temperature and humidity accuracy

Intelligent control PTC humidification, energy-saving and water-saving
The temperature and purity of vapour is accurately controlled by the intelligent water supply system and ceramic high-temperature heating apparatus.

Intelligent dehumidification, accurate humidity control
Semi-conductor intelligent dehumidification system accurately controls heating and cooling, matching with humidity control.

Specifications

	Model		HHS-256	HHS-506	HHS-756
Construction	Chamber Volume (L)		256L	506L	756L
	Interior Chamber		stainless steel	stainless steel	stainless steel
	Exterior Chamber		Galvanized Sheet Powder Coating	Galvanized sheet powder coating	Galvanized sheet powder coating
	Access Port		35mm Diameter	35mm Diameter	35mm Diameter
Dimensions	Net/Gross Weight	kg	175/188	225/260	280/328
	Interior Dimensions (W*D*H)	mm	650*570*700	740*570*1200	1100*570*1200
	Exterior Dimensions (W*D*H)	mm	835*905*1190	930*905*1690	1290*905*1690
	Packing Dimensions (W*D*H)	mm	1030*955*1280	1110*955*1780	1380*955*1780
Shelves	Dimension / mm (W*D)		597*531	687*531	1048*531
	Standard Qty / Max Qty		2/16	2/31	2/31
	Max Weight Per Shelf	kg	20	20	20
	Structure		Slide rail, adjustable	Slide rail, adjustable	Slide rail, adjustable
Electrical	Voltage / Frequency (V/Hz)		220-240~50/6	220-240~50/6	220-240~50/6
	Power (W)		750	1100	1760
	Day Consumption at 25°C & 40% RH (kw·h)		4.6	5.4	5.6
Control	Controller		The microprocessor	The microprocessor	The microprocessor
	Display		10 "smart LCD screen	10 "smart LCD screen	10 "smart LCD screen
The Temperature Parameter	The Set Range (°C)		5~70	5~70	5~70
	Control Precision (°C)		±0.1	±0.1	±0.1
	Temperature Uniformity at 25°C		±0.2	±0.2	±0.2
	Temperature Fluctuation at 25°C		±0.1	±0.1	±0.1
	The Sensor		PT1000	PT1000	PT1000
	Rate of Temperature Rise (°C / min)		1	0.8	0.6
	30 Seconds Recovery Time After Door Opening at 40°C (min)		3	3.8	5
Humidity Parameter	Humidity Setting Range (% RH)		10~90	10~90	10~90
	Humidity Setting Accuracy (% RH)		0.1	0.1	0.1
	Humidity Fluctuation at 25°C & 40% RH (% RH)		±0.5	±0.5	±0.5
	Daily Water Consumption (ml)		120	240	320
Optional	Electromagnetic lock (password)		Y	Y	Y
	Printer		Y	Y	Y
Standard	Remote Alarm Interface		Y	Y	Y
	RS485		Y	Y	Y
	Water Level Alarm		Y	Y	Y

Product appearance and specifications are subject to change without notice

Constant Climate Chamber
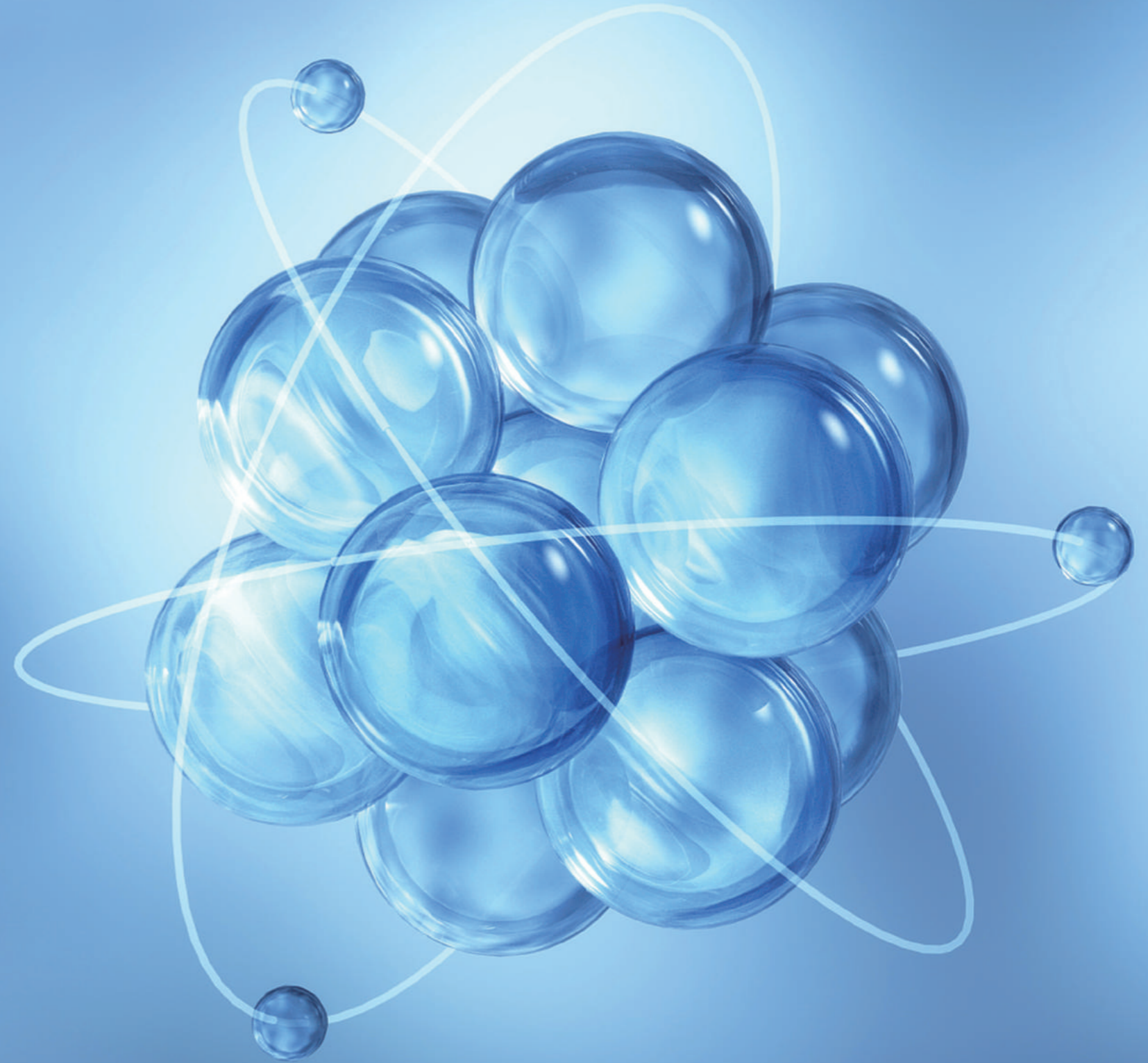
Centrifuge

Benchtop High-Speed Refrigerated Centrifuge

Scope and Application of the Product

For the separation and purification of samples of cells, macromolecular proteins, blood, body fluids, DNA/RNA, plasmids, bacteria and viruses.

LX-155T500R

Product Advantages

Real-time Monitoring and Alarms

The sensor automatically monitors vibration in real time, and will stop and alarm when excess vibration is detected

Rotor Balance Detection

Dynamic monitoring of the centrifugal process means that the centrifuge will automatically stop in the event of a balance error

The Fuzzy PID Control with Seamless Evaporator

To achieve precise temperature control and high-efficiency heat transfer

Long Service Life of Motor

Dynamic sealing technology that effectively prolong the service life of motor

Ergonomic Angled Touch Screen

The 7-inch touchscreen is angled at 45° for to be comfortable and practical for users of all heights

RFID Rotor Recognition

The Auto-ID rotor is instantly identified by the centrifuge upon installation; this ensures the rotor operates within safe limits

Smart and Intelligent Control

Large smart screen controller provides an interactive interface which is easy to operate even in gloves

Precise Speed Control

High-precision speed control technology ensures process integrity

Alarm History   Help   Time/date

Acceleration/deceleration setting

RCF/RPM setting

Pre-cool

Quick access to stored programs

Unlimited program storage library

Quick spin   Start/stop   Lid open

Product Parts

Intelligent lid locking monitoring and automatic self-locking to ensure safe operation

Easy to clean, corrosion-resistant 316 stainless steel chamber

Motorized gas springs with safety protection

The 7-inch touchscreen is angled at 45° for to be comfortable and practical for users of all heights

Triple-layer construction to ensure safe use

Drainage tray to prevent internal water accumulation and improve corrosion resistance

Specifications

Model	Max Speed (r/min)	Max RCF (xg)	Max Capacity (ml)	Sound Level (dB(A))	Temperature Setting Range (°C)	Temperature Accuracy (°C)	Speed Accuracy (rpm)
LX-155T500R	15500	26322	4*500	≤55	-20~40	±2	±10

Timer	Power (W)	Power Supply (V/Hz)	External Dimensions (W*D*H)(mm)	Net Weight (kg)	Height of Lid Open (mm)	Packing Dimension (W*D*H)(mm)	Gross Weight (kg)
1s-99h 59min59s	1200	AC220, 50/60	658*673*358	112	860	740*795*565	133

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Benchtop High-Speed Refrigerated Centrifuge

Rotor Configuration List

No.	Rotor Description	Max Capacity (ml)	Max RCF (xg)	Max Speed (rpm)	Singe Tube Capacity (ml)	Maximum Tube Dimensions (Ø*L)(mm)	Tube Type	Picture
1	Fixed-Angle Rotor	24*1.5	23100	15500	1.5/2	11*38	Round bottom/Conical bottom	
2	Fixed-Angle Rotor	30*1.5	26322	15500	1.5/2	11*38	Round bottom/Conical bottom	
3	Fixed-Angle Rotor	48*1.5	22132	14000	1.5/2	11*38	Round bottom/Conical bottom	
4	Fixed-Angle Rotor	12*10	16071	12500	10	16*86	Round bottom	
5	Fixed-Angle Rotor	12*15	21912	14000	15	17*121	Conical bottom	
6	Fixed-Angle Rotor	6*50	17065	12000	50	29*115	Round bottom	
7	Fixed-Angle Rotor	6*50	16421	12000	50	30*115	Conical bottom	
Optional	Adapter	15-50	6 pcs/set		15	17*121	Conical bottom	
8	Fixed-Angle Rotor	12*8*0.2	14892	12000	0.2	6*18	PCR	
9	Fixed-Angle Rotor (Steel sleeves)	42*15	4472	5000	15	17*120	Round bottom/Conical bottom	
10	Fixed-Angle Rotor (Steel sleeves)	12*50/15	4640	5000	50/15	30*104	Round bottom/Conical bottom	
11	Fixed-Angle Rotor (Steel sleeves)	10*100	3350	4500	100	38*106	Round bottom	
12	Swing-out	4*500	3184	4000	500	Rotor block	Four position	
Optional	Round Bucket	500	3184	4000	500	81*106	Flat bottom	
	Adapter	4*250	4 pcs/set		250	62*123	Flat bottom	
	Adapter	4*225	4 pcs/set		225	60*136	Conical bottom	
	Adapter	4*100	4 pcs/set		100	38*106	Round bottom	
	Adapter	4*4*50	4 pcs/set		50	30*115	Conical bottom	
	Adapter	4*10*15	4 pcs/set		15	17*121	Conical bottom	
	Adapter	4*14*10	4 pcs/set		10	15*105	Large blood collection tube	
	Adapter	4*19*7/5	4 pcs/set		2-5	12*80/105	Small/Large blood collection tube	
	Adapter	4*30*1.5	4 pcs/set		1.5	11*38	Round bottom/Conical bottom	
	ELISA Plate Bucket	4*96 well plate	2612	4000	0.2	86*128	ELISA plate	

Scope and Application of the Product

For the separation and purification of samples of cells, macromolecular proteins, blood, body fluids, DNA/RNA, plasmids, bacteria and viruses.

LX-185T100R

Product Advantages

Multi-level User Management
Effectively protects personal data. centrifugal programs and operation parameters can be stored separately to avoid data disorder

Precise Temperature Control and Ultra-fast Refrigeration
The fuzzy PID control with seamless evaporator to achieve precise temperature control and high-efficiency heat transfer

Real-time Monitoring and Alarms
The sensor automatically monitors vibration in real time, and will stop and alarm when excess vibration is detected

Ergonomic Angled Touch Screen
The 7-inch touchscreen is angled at 45° for to be comfortable and practical for users of all heights

Smart and Intelligent Control
Large smart screen controller provides an interactive interface which is easy to operate even in gloves

Precise Speed Control
High-precision speed control technology to ensure the accuracy of experimental data

Smart Anti Vibration Lock
Automatic smart lock safeguards users

Menu Driven Program
Intelligent storage of centrifugal programs, quick access to programs

Benchtop High-Speed Refrigerated Centrifuge

Alarm History
Help
Time/date

Acceleration/ deceleration setting

RCF/RPM setting

Pre-cool

3:46PM 13 Dec 2022   Visitor   Login

9   9

0 RPM   00:00:00   23℃
18500 RPM / RCF   √ 00:20:00   4℃

1
2
3
4
5

+   More

Quick access to stored programs

Unlimited program storage library

Quick Spin
Start/ stop
Lid open

Product Parts

Triple-layer construction to ensure safe use

Motorized gas springs with safety protection

Drainage tray to prevent internal water accumulation and improve corrosion resistance

Intelligent lid locking monitoring and automatic self-locking to ensure safe operation

Easy to clean, corrosion-resistant 316 stainless steel chamber

The 7-inch touchscreen is angled at 45° for to be comfortable and practical for users of all heights

Specifications

Model	Max Speed (r/min)	Max RCF (xg)	Max Capacity (ml)	Sound Level (dB(A))	Temperature Setting Range (°C)	Temperature Accuracy (°C)	Speed Accuracy (rpm)
LX-185T100R	18500	30130	4*100	≤52	-20-40	±2	±10

Timer	Power (W)	Power Supply (V/Hz)	External Dimensions (W*D*H)(mm)	Net Weight (kg)	Height of Lid Open (mm)	Packing Dimension (W*D*H)(mm)	Gross Weight (kg)
1s~99h 59min59s	1200	AC220, 50/60	420*680*330	57	860	800*505*535	73

*Haier Biomedical reserves the right to change products and specifications without prior notice.

Rotor Configuration List

No.	Rotor Description	Max Capacity (ml)	Max RCF (xg)	Max Speed (rpm)	Singe Tube Capacity (ml)	Maximum Tube Dimensions (Ø*L)(mm)	Tube Type	Picture
1	Fixed-Angle Rotor	12*1.5	26019	18500	1.5/2	11*38	Round bottom/Conical bottom	
2	Fixed-Angle Rotor	24*1.5	30130	17500	1.5/2	11*38	Round bottom/Conical bottom	
3	Fixed-Angle Rotor	48*1.5	19083	13000	1.5/2	11*38	Round bottom/Conical bottom	
4	Fixed-Angle Rotor	12*5	18090	16000	5	14*55	Round bottom	
5	Fixed-Angle Rotor	12*10	16071	12500	10	16*86	Round bottom	
6	Fixed-Angle Rotor	8*15	13200	12000	15	17*121	Conical bottom	
7	Fixed-Angle Rotor	6*50	15294	12000	50	29*115	Round bottom	
8	Fixed-Angle Rotor	6*50	16421	12000	50	30*115	Conical bottom	
Optional	Adapter	15-50	6 pcs/set		15	17*121	Conical bottom	
9	Fixed-Angle Rotor	4*100	13257	11000	100	38*106	Round bottom	
10	Fixed-Angle Rotor	12*8*0.2	18516	12000	0.2	6*18	PCR	
11	Fixed-Angle Rotor (Steel sleeves)	18*15	4749	5000	15	17*120	Round bottom/Conical bottom	
12	Fixed-Angle Rotor (Steel sleeves)	6*50/15	3577	5000	50/15	30*104	Round bottom/Conical bottom	
13	Fixed-Angle Rotor (Steel sleeves)	6*100	3348	4800	100	38*106	Round bottom	
14	Swing-out Rotor	ELISA Plate	2287	4500	0.2	Rotor block	Two position	
	ELISA Plate Bucket	2*96 well plate	2287	4500	0.2	86*128	ELISA Plate	
15	Swing-out Rotor	4*50	2770	4200	/	Rotor block	Four position	
Optional	Bucket	4*5*10/7	2770	4200	10	15*105	Large blood collection tube	
Optional	Adapter	5	50 pcs/set	50 pcs/set	5	12*80	Small blood collection tube	
Optional	Bucket	4*2*15	2770	4200	15	17*120	Round bottom/Conical bottom	
Optional	Bucket	4*1*50	2770	4200	50	30*104	Round bottom/Conical bottom	

Benchtop High-Speed Refrigerated Centrifuge

Scope of Application

Mainly used for nucleic acid extraction, DNA/RNA separation, purification, virus separation and protein precipitation in the laboratory. Widely used in universities, third party testing organizations, disease prevention, medical and health, biological pharmaceutical and other related fields.
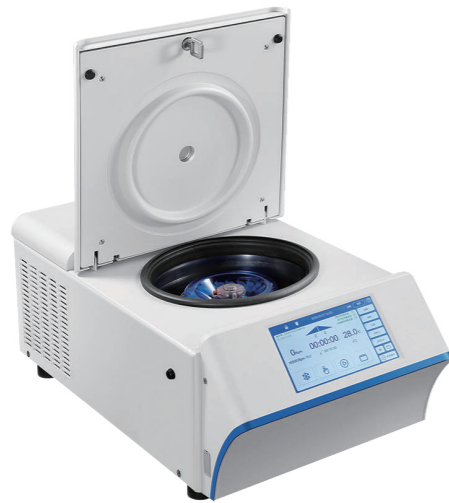
LX-165T2R

Product Advantages

Smart and Intelligent Control

Large smart screen controller provides an interactive interface which is easy to operate even in gloves.

Set Timer

Temperature set-point and real-time temperature display.

Target speed/centrifugal force and real-time speed display.

Quick access to stored programs. Unlimited program storage, supports customised programs for safety.

Clear one-touch buttons for fast refrigeration, fast centrifugation, intelligent start-stop and lid-closing status.

Intelligent Centrifugal Management System
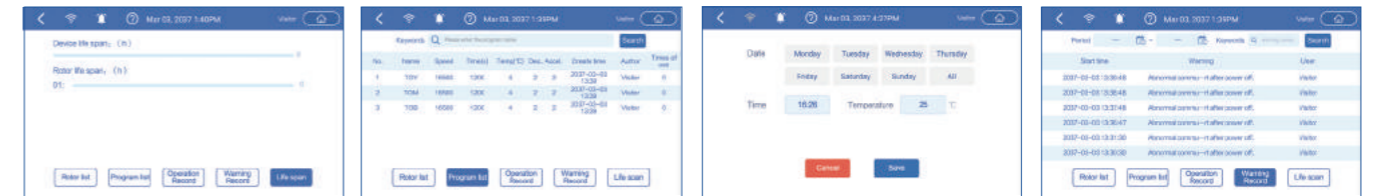
Operation failure detection, rotor and machine service life monitoring.

Intelligent storage of centrifugal programs, quick access to programs.

Fast refrigeration preset, saves time.

View abnormal alarms
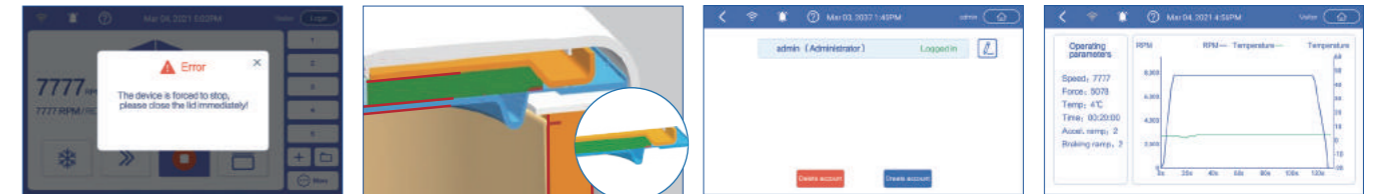
Intelligent lid locking monitoring and automatic self-locking to ensure safe operation.

Safer by design, triple-layer construction to ensure safe use.

Multi-level user management, effectively protects personal data.

Intelligent monitoring of temperature, speed, vibration and rotor to ensure reliable operation.

Auto-ID Instant Rotor Recognition and Rotor Service Life Statistics

- Auto-ID instant rotor upon installing the rotor, the centrifuge will automatically identify the rotor model to ensure safe operation within rotor limits.
- Rotor ID: Each rotor is equipped with a unique ID which enables traceability of rotor information.
- Rotor service life statistics: The rotor service time is recorded on the terminal and the centrifuge will alert users as the rotor reaches the end of its service life.
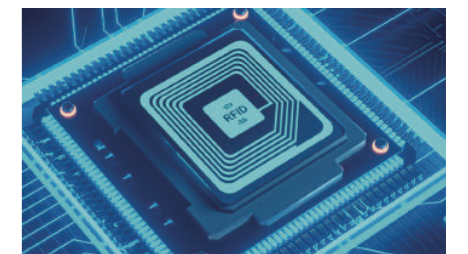
Balance Detection

- Vibration monitoring for safe operation: The unit is designed with six-axis gyroscope technology, and if the vibration exceeds safe limits, the centrifuge will stop automatically.
- Rotor balancing detection: Dynamic monitoring of the centrifugal process means that the centrifuge will automatically shut down control in the event of a balance error.
- Centrifuge balancing detection: The built-in electronic gradienter automatically monitors the unit balancing status.

Benchtop High-Speed Refrigerated Centrifuge

Precise Temperature Control and Ultra-fast Refrigeration

- Dual frequency conversion refrigeration technology ensures rapid refrigeration to reduce waiting time.

- High precision throttling technology proactive adjusts to provide precise temperature control.

- Seamless copper tube wrapping technology to achieve high efficiency heat transfer.

Specifications

Model	Max Speed (r/min)	Speed Accuracy (rpm)	Max RCF (xg)	Sound level (dB(A))
LX-165T2R	16,500	±10	25,872	≤ 52

Temperature Setting Range(°C)	Timer	External Dimensions (W*D*H)(mm)	Power Supply (V/Hz)	Certification
-20~40	1s~99 hours 59 mins 59s	340*625*248	220/50/60	CE

*Haier Biomedical reserves the right to change products and specifications without prior notice.
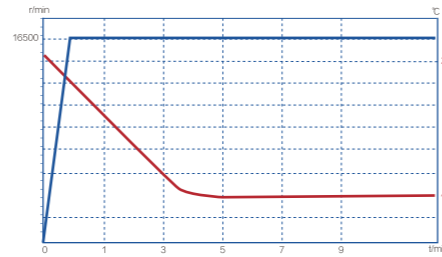
Leading Global Manufacturer. Quality and Safety Guaranteed

- Extensive quality assurance and testing processes to ensure long-term reliability.

- High-precision speed control technology to ensure the accuracy of experimental data.

- Advanced dynamic balance monitoring technology to ensure the safe operation of the rotor.

Rotor Configuration List

No.	Rotor Description	Max Capacity (ml)	Max RCF (xg)	Max Speed (rpm)	Maximum Tube Dimensions (Ø*L)(mm)	Tube Type	Picture
1	Fixed Angle Rotor (Plastic Cover)	24*1.5/2	25872	16500	11*38	Round bottom/Conical bottom	
2	Fixed Angle Rotor (Sealed)	24*1.5/2	21382	15000	11*38	Round bottom/Conical bottom	
3	Fixed Angle Rotor (Sealed)	12*5	21407	15000	12*75	Round bottom	
4	PCR Fixed Angle Rotor	4*8*0.2	18891	15000	6*18	PCR	

Ergonomic Design

Ergonomic Design

Designed with multiple user applications, the touchscreen is angled to provide a clear view and is comfortable and practical for users of all heights.

Smart Lid Lock

The automatic lid lock monitors the lid closing status, as the door is closed, it will tighten automatically indicating when the unit is safe to use.

USB Interface

Data, such as operation records and error records, can be exported using a USB.

Benchtop High-Speed Centrifuge

Scope of Application

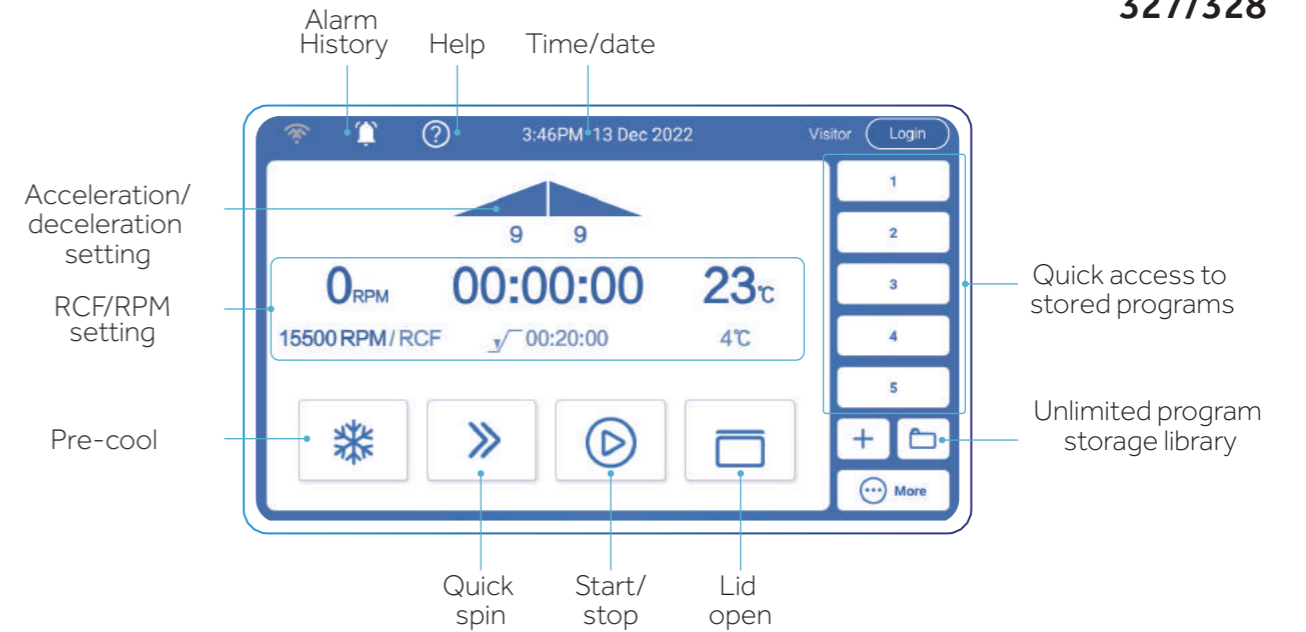For the separation and purification of samples of cells, macromolecular proteins, blood, body fluids, DNA/RNA, plasmids, bacteria and viruses.

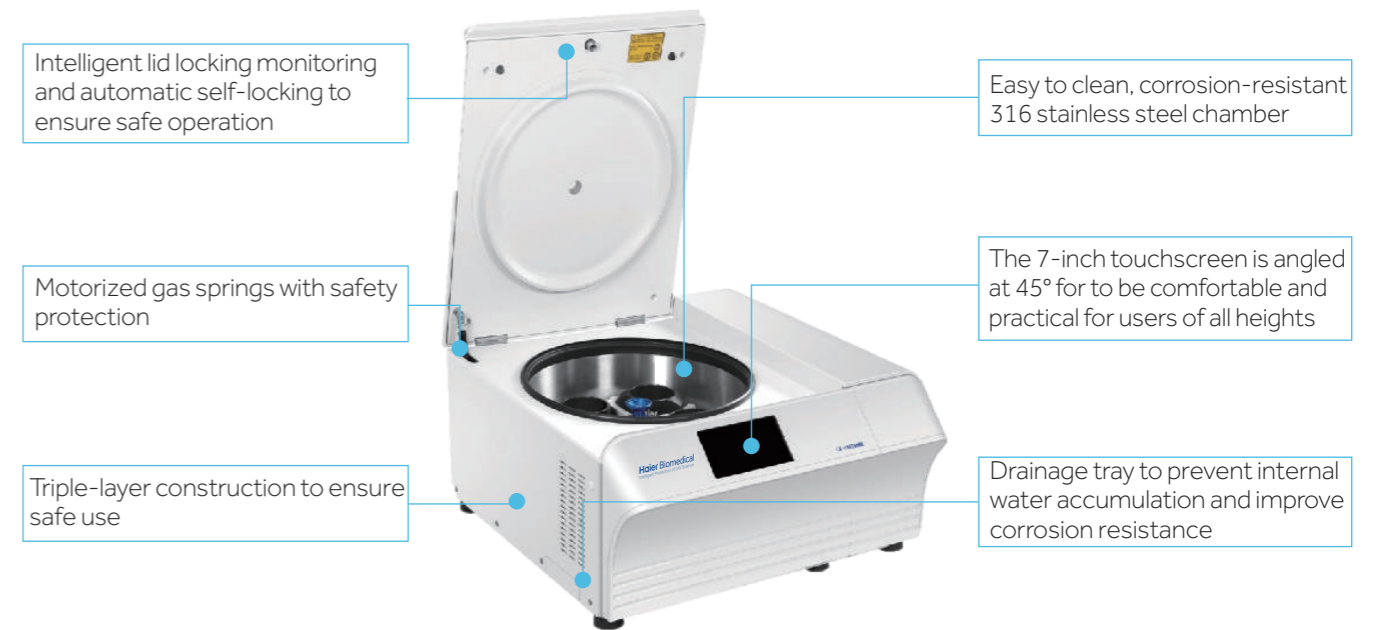Triple-layer

Anti vibration lid lock

LX-165T2-J

Product Introduction

High efficiency air cooling technology

Active balance detection

Automatic rotor identification

Triple-layer protection to ensure safety

Large screen LCD display

One-click program selection

Multiple anti-vibration technologies allow for low noise and smooth operation even at maximum speed
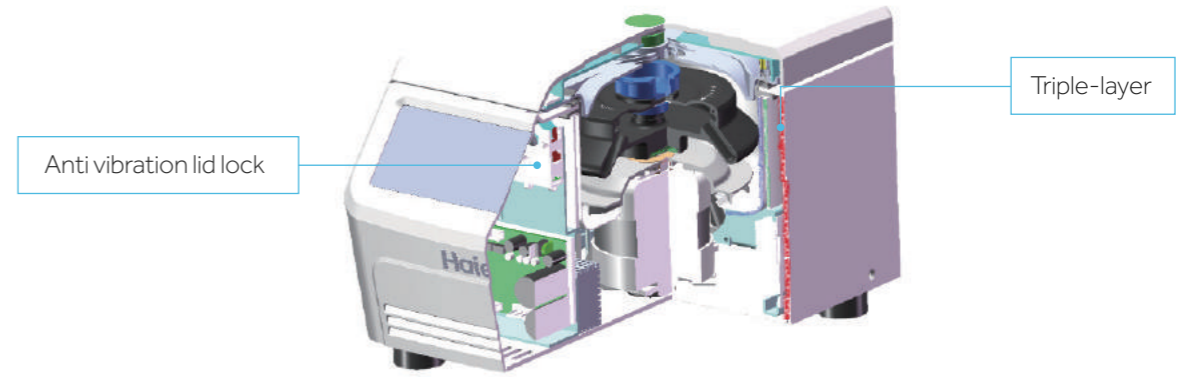
Product Advantages

Active Balance Detection
The machine with a high-sensitivity, six axis vibration. In case of abnormal vibration or rotor imbalance caused by non balancing, asymmetry, tube breakage and or rotor damage, an alarm will sound and the machine will stop immediately

High Efficiency Air Cooling Technology
Proprietary air duct structure design allows for quick dissipation of heat inside the centrifugal chamber

Anti Vibration Lid Lock
Anti-vibration lid lock ensures lid remains locked during excess vibration for user safety

Multiple Damping and Noise Reduction Technology
Multiple anti-vibration technologies allow for low noise and smooth operation even at maximum speed (16,500rpm 58dB)

Triple-layer Protection
Cabinet construction includes metal liner, fully covered steel plate protective sleeve and 3mm steel shell

Automatic Rotor Identification
Automatic rotor identification limits maximum speed for safety

Benchtop High-Speed Centrifuge

Benchtop Low-speed Centrifuge

Scope of Application

Low speed, non-refrigerated centrifuge suitable for the routine separation of particles and ideal for the analysis of blood and other biological samples. For low-medium throughput applications, for use with 15ml, 50ml and 100ml round and conical centrifuges tubes.

Specifications

Max Speed (rpm)	Max RCF (xg)	Max Capacity (ml)	Speed Accuracy (rpm)	Time Set Range	Noise (dB)
16500	25872	12*5.0	±10	1s-99h59min59s	≤58

Power Supply (V/Hz)	Power (W)	Exterior Dimensions (W*D*H)(mm)	Net Weight (Kg)	Packing Dimensions (mm)	Gross Weight (Kg)
220/50/60	230	375*270*252	18	565*375*380	20

*Haier Biomedical reserves the right to change products and specifications without prior notice.

LX-60T100-J

Rotor Configuration List

No.	Rotor Description	Max Capacity (ml)	Max RCF (xg)	Max Speed (rpm)	Maximum Tube Dimensions (Ø*L)(mm)	Tube Type	Picture
1	Fixed Angle Rotor (Plastic Cover)	24*1.5/2	25872	16500	11*38	Round bottom/Conical bottom	
2	Fixed Angle Rotor (Sealed)	24*1.5/2	21382	15000	11*38	Round bottom/Conical bottom	
3	Fixed Angle Rotor (Sealed)	12*5	21407	15000	12*75	Round bottom	
4	PCR Fixed Angle Rotor	4*8*0.2	18891	15000	6*18	PCR	

Product Advantages

Quality and Safety

- Imbalance detection for maximum safety
- Stainless steel rotor chamber is corrosion- resistant and easy to clean
- Triple-layer protection to ensure safety
- Patented anti-vibration safety lid lock
- Aerosol-tight caps for safe centrifugation of hazardous samples optionally available

Intelligent Design

- High efficiency air cooling technology minimises warming to protect samples
- Multiple vibration and noise reduction technologies ensure quiet and stable operation
- A choice of rotors including large capacity rotor and a dual capacity rotor (15ml/50ml)

Convenient Operation

- One-click program selection for improved work efficiency
- Automatic rotor identification
- Simultaneous display of both set and actual speed and time, which can be adjusted as required. Users can set operation and switch between relative centrifugal force (rcf) and speed (rpm) as needed.

Benchtop Low-speed Centrifuge

Product Introduction

High efficiency air cooling technology

Anti-vibration lock

Automatic balance detection

Triple-layer protection

Large LCD display

Automatic rotor identification

Large capacity rotor and multi-use rotor 15/50ml

One-click program selection

Multiple vibration and noise reduction technologies
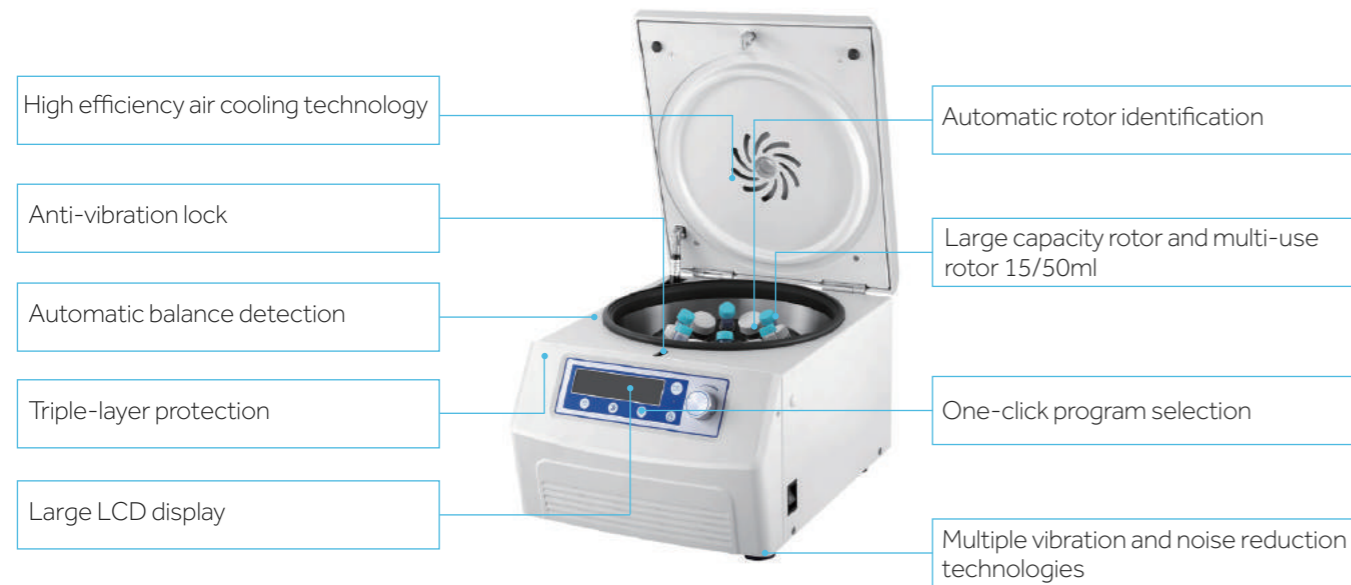
Specifications

Max Speed (rpm)	RCF (xg)	Max Capacity (ml)	Speed Accuracy (rpm)	Time Set Range	Noise (dB)
6000	4749	6*100	±10	1s ~ 99h59min59s	≤56

Power Supply (V/Hz)	Power (W)	Exterior Dimensions (W*D*H)(mm)	Net Weight (Kg)	Packing Dimensions (mm)	Gross Weight (Kg)
220/50/60	150	447*281*340	25	545*400*410	28

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Rotor Configuration List

No.	Rotor Description	Max Capacity (ml)	Max RCF (xg)	Max Speed (rpm)	Maximum Tube Dimensions (Ø*L)(mm)	Tube Type	Picture
1	Fixed-Angle Rotor (Steel sleeves)	12*15	4749	6000	17*120	Round bottom/Conical bottom	
2	Fixed-Angle Rotor (Steel sleeves)	6*50/15	3577	5000	30*104	Round bottom/Conical bottom	
	Fixed-Angle Rotor (Steel sleeves)	18*15	3577	5000	17*120	Round bottom/Conical bottom	
3	Fixed-Angle Rotor (Steel sleeves)	6*100	3348	4800	38*106	Round bottom	
4	Fixed-Angle Rotor (Steel sleeves)	12*10	2753	5000	15*105	Large blood collection tube	
5	Fixed-Angle Rotor (Steel sleeves)	36*10	2465	4200	15*105	Large blood collection tube	
Optional	Adapter	50 pcs/set	/	/	12*80	Small blood collection tube	/
6	Swing-out Rotor Block	4*50	2770	4200	Rotor block	Four position	
	Bucket	4*1*15 4*2*10 4*2*5	2770	4200	17*121 17*96 12*79	Applicable to reproductive sciences	
	Bucket	4*5*10/7	2770	4200	15*105	Large blood collection tube	
Optional	Adapter	50 pcs/set			12*80	Small blood collection tube	/
	Bucket	4*2*15	2770	4200	17*120	Round bottom/Conical bottom	
	Bucket	4*1*50	2770	4200	30*104	Round bottom/Conical bottom	
7	Swing-out Rotor	2*96 well plate	1932	4000	86*128	ELISA Plate	

Haier Biomedical
Intelligent Protection of Life Science

Liquid Nitrogen Storage Solutions

Haier YDD-850-465

Haier YDS-175-216-F

YDS-35-125-F

25°C

- 190°C

- 196°C

Liquid Nitrogen Storage Solutions

Biobank Series for Large Scale Storage

Biobank series for large scale storage is designed to ensure the maximum storage capacity with the minimum consumption of liquid nitrogen to lower the overall cost of operation.

- LN_2 Splashproof
- Data Logging
- Hot Gas Bypass
- 5 Year Vacuum Warranty
- From 13,000 to 94,875 Cryovials

- Self-diagnostics
- Vapour Phase Storage
- Lockable Lid
- Liquid Phase Storage
- One-touch Defogging

Key Features

- Massive capacity between 13,000 to 94,875×2ml Vials
- Vapour phase storage is the only guaranteed method to prevent cross-contamination
- Vapour phase storage at -190°C
- 5-Year vacuum warranty

- One-touch defogging for easier access
- LN_2 splash proof ensures a safer operation
- Can be used to store all kinds of biological sample

Product Advantages

Optimal Use of Storage Space

Racks are stored on the rotating tray with an appropriate distance from the wall of the chamber. Liquid nitrogen or supercooled nitrogen vapour is filled in the space between the tray and the wall to maintain temperature uniformity. Storage space is equally divided into four or six fan-shaped storage areas which are clearly labelled. Each storage room is easily rotated to the opening of the tank for convenient sample access.

Designed for Both Liquid and Vapor Phase Storages

Each model from the Biobank series for large scale storage is designed for both liquid and vapor phase storage. For the vapor phase storage operation process, samples are located away from the liquid nitrogen at a uniform temperature close to that of liquid nitrogen.

Advanced Vacuum Technology and Superinsulation Technology

Haier Biomedical's Liquid Nitrogen Storage System Biobank series for large scale storage applies advanced vacuum technology and superinsulation technology to ensure storage safety and temperature uniformity while reducing the consumption of liquid nitrogen. The temperature difference of the entire storage area does not exceed 10°C, even during the vapor phase storage process, the temperature near the top of the shelf is as low as -190°C.

Cryosmart Level Monitoring System ZJY-800N

Haier Biomedical's Liquid Nitrogen Storage System Biobank series for large scale storage feature the Cryosmart system for complete monitoring and control. High-precision temperature and liquid level sensors are used to ensure accuracy. All data and samples are protected by a secure access control system.

Biobank Series for Large Scale Storage

- Cryosmart level monitoring system to ensure samples safety
- Cork
- Advanced vacuum system and superinsulation
- Strong stainless steel outer shell
- Storage rack
- Rotating tray design for easy retrieval and insertion of storage racks
- Caster for easy moving

Liquid and Gas Phase

Liquid Phase
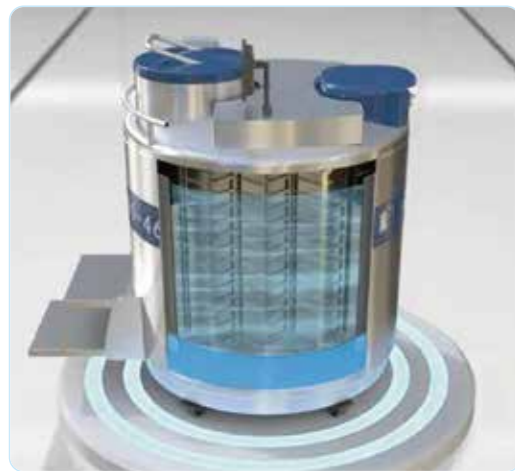
Gas Phase
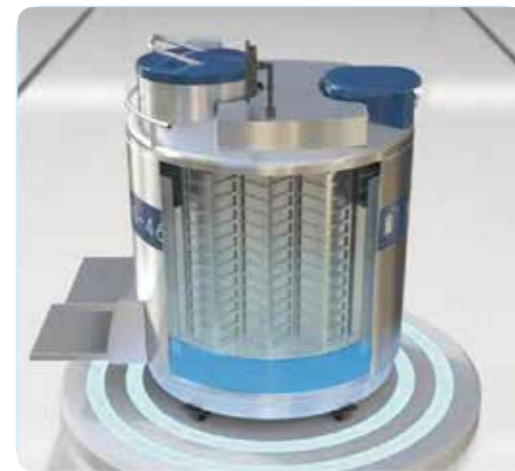
Top of the Container

Liquid Feed System

The unique design can reduce the amount of water vapor solidification on the outer surface of the neck, the container is reinforced at liquid nitrogen temperature to extend the physical service life of the container.

The large-caliber stainless steel liquid nitrogen biological container is matched with a self-pressurizing replenishment tank, which is suitable for scientific research institutions with a small sample storage capacity.

Temperature Test Graph

YDD-1800-635

① Precooling stage when freezer filled to high level
② Lid open test, -179.2°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 22 days

YDD-550-445
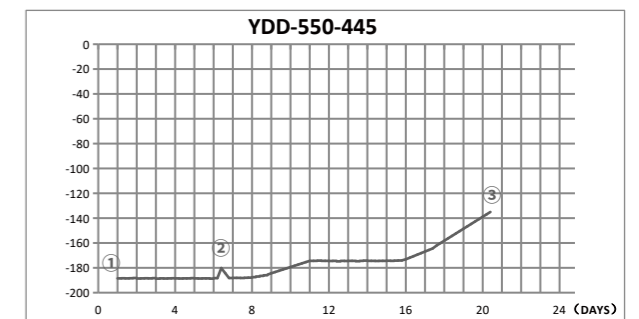
① Precooling stage when freezer filled to high level
② Lid open test, -180.2°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 20 days

YDD-850-465
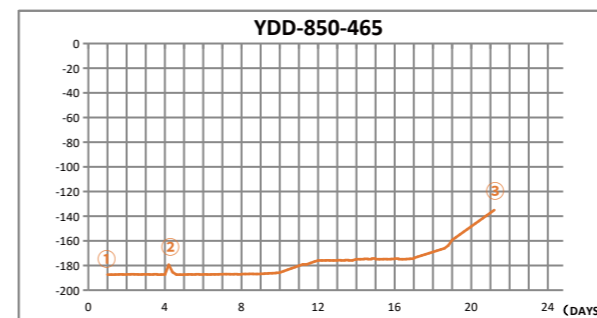
① Precooling stage when freezer filled to high level
② Lid open test, -179.4°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 21 days

YDD-350-326
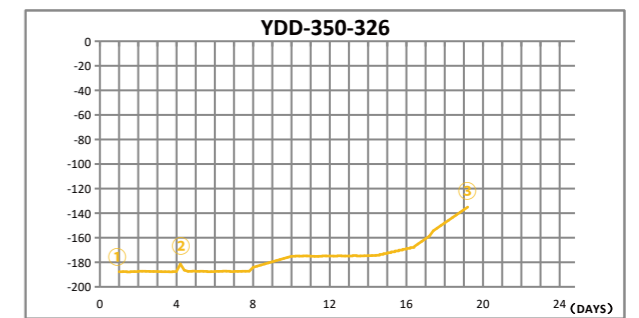
① Precooling stage when freezer filled to high level
② Lid open test, -181.4°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 19 days

Temp Test indicates typical performance of Haier Biobank freezer with factory recommended level settings. Actual performance may vary with atmospheric conditions and usage.

Biobank Series for Large Scale Storage

Technical Parameters

Model	YDD-350-326/PM	YDD-370-326/PM	YDD-450-326/PT	YDD-550-445	YDD-750-445	YDD-850-465
2ml Volume	13K	16K	21K	27K	38K	43K
Maximum Storage Capacity						
2 ml Vials (Internal Thread)	13000	15600	21000	27000	37800	42900
Freeze Rack (100 wells)	12	12	12	24	24	32
Freeze Rack (25 wells)	4	4	8	12	12	4
Layers of each Rack	10	12	15	10	14	13
5 ml Vials (Internal Thread)	5360	6432	10548	11220	17952	18844
Freeze Rack (81 wells)	12	12	12	24	24	32
Freeze Rack (25 wells)	4	4	8	12	12	4
Layers of each Rack	5	6	9	5	8	7
Performance						
Volume of LN$_2$ (L)	350	370	460	587	783	890
Volume of LN$_2$ under the Tray (L)	55	55	55	80	80	135
Dimensions						
Inside Neck Diameter (mm)	326	326	326	445	445	465
Effective Internal Height (mm)	600	704	828	600	828	773
Height (mm)	1263	1370	1495	1266	1486	1499
Operating Height (mm)	1263	1096	1212	970	995	980
Outside Diameter (mm)	875	875	875	1104	1104	1190
Door Width Requirement (mm)	895	895	895	1124	1124	1210
Empty Weight (kg)	219	230	277	328	372	441
Full Weight (kg)	502	529	649	802	1005	1160
Shipping Weight (kg)	358	438	470	520	616	702

Technical Parameters

Model	YDD-1000-465	YDD-1300-635	YDD-1600-635	YDD-1800-635
2ml Volume	51K	59K	76K	95K
Maximum Storage Capacity				
2 ml Vials (Internal Thread)	51000	58500	76050	94875
Freeze Rack (100 wells)	30	54	54	60
Freeze Rack (25 wells)	16	18	18	13
Layers of each Rack	15	10	13	15
5 ml Vials (Internal Thread)	22640	28944	33768	46665
Freeze Rack (81 wells)	30	54	54	60
Freeze Rack (25 wells)	16	18	18	13
Layers of each Rack	8	6	7	9
Performance				
Volume of LN$_2$ (L)	1014	1340	1660	1880
Volume of LN$_2$ under the Tray (L)	135	265	300	320
Dimensions				
Inside Neck Diameter (mm)	465	635	635	635
Effective Internal Height (mm)	900	620	791	900
Height (mm)	1619	1342	1534	1662
Operating Height (mm)	1090	997	967	1097
Outside Diameter (mm)	1190	1565	1565	1565
Door Width Requirement (mm)	1210	1585	1585	1585
Empty Weight (kg)	495	851	914	985
Full Weight (kg)	1314	1934	2255	2504
Shipping Weight (kg)	926	1168	1426	1520

Blood bag capacity

Model	YDD-350-326			YDD-370-326			YDD-450-326			YDD-550-445			YDD-750-445			YDD-850-465		
Bag Specifications	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks
25 ml (791 OS/U)	1176	6	196	1372	7	196	1608	8	201	2208	6	368	2944	8	368	2996	7	428
50 ml (4R9951)	720	6	120	840	7	120	1024	8	128	1392	6	232	1856	8	232	1904	7	272
250 ml (DF - 200)	264	3	88	352	4	88	475	5	95	516	3	172	860	5	172	832	4	208
500ml (4R9953)	168	3	56	168	3	56	305	5	61	336	3	112	560	5	112	544	4	136
500 ml (4R9955)	144	3	48	192	4	48	280	5	56	288	3	96	480	5	96	464	4	116
700 ml (DF - 700)	96	3	32	96	3	32	152	4	38	204	3	68	272	4	68	320	4	80

Blood bag capacity

Model	YDD-1000-465			YDD-1300-635			YDD-1600-635			YDD-1800-635		
Bag Specifications	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks
25 ml (791 OS/U)	3852	9	428	4536	6	956	5292	7	756	7218	9	802
50 ml (4R9951)	2394	9	266	2808	6	468	3276	7	468	4446	9	494
250 ml (DF - 200)	1020	5	204	1062	3	354	1770	5	354	1940	5	388
500 ml (4R9953)	670	5	134	666	3	222	888	4	222	1290	5	258
500 ml (4R9955)	520	5	104	654	3	218	792	4	198	1090	5	218
700 ml (DF - 700)	400	5	80	396	3	132	528	4	132	775	5	155

Biobank Series for Large Scale Storage

Racks (vertical type) and Blood bag racks

	Racks (vertical type)	25 ml Blood bag racks	50 ml Blood bag racks
YDD-350-326 YDD-370-326			
YDD-450-326			
YDD-550-445 YDD-750-445			
YDD-850-465			
YDD-1000-465			
YDD-1300-635 YDD-1600-635			
YDD-1800-635			

Biological Sample Bank-YDD Series

Storage Example of 2ml Internally Threaded Vial

Vial (1.2/2ml) → Plastic Cryobox (25, 81, 100) → Rack (vertical type) | Vial (1.2/2ml) → Vial Cane (3, 6) → Canister

Storage Example of Tall 5ml Cryovials

Vial (5ml) → Cryobox (25, 81) → Rack (vertical type) (5ml) | Vial (5ml) → Vial Cane (6) → Canister

Blood Bag Storage Example

Blood Bag (25/50/250ml) → Blood Bag Cryo Box → Blood Bag Rack

Straw Storage Example

Straw (0.25/0.5ml) → Plastic Protective Sleeve → Canister

Biobank Series for Large Scale Storage

Product List

Model	Product	Model	Description and Accessories
YDD-350-326	Biobank Freezer (Smart type)	YDD-350-326	Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 10-tier rack (5*5), 12 pcs of 10-tier rack (9*9), 40pcs of cryo boxes for 2ml vial (5*5), 120pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-350-326	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used to store 2ml cryoboxes (5*5), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used to store 2ml cryoboxes (9*9), Ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-6	Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350\550\1300
	Blood bag Rack	DCJ-50-6	Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350\550\1300
	Blood bag Rack	DCJ-250-3	Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml via l(81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-370-326	Biobank Freezer (Smart type)	YDD-370-326	Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 12-tier rack (5*5), 12 pcs of 12-tier rack (9*9), 48pcs of cryo boxes for 2ml vial (5*5), 144pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-370-326	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-12	Used to store 2ml cryoboxes (5*5), Twelve layers in total, suitable for YDD-370 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-12	Used to store 2ml cryoboxes (9*9), Twelve layers in total, suitable for YDD-370 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-7	Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-50-7	Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-250-4	Rack used to store 250ml blood bag, 4 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-450-326	Biobank Freezer (Smart type)	YDD-450-326	Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 14-tier rack (5*5), 14 pcs of 14-tier rack (9*9), 56pcs of cryo boxes for 2ml vial (5*5), 196pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-450-326	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-14	Used to store 2ml cryoboxes (5*5), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-14	Used to store 2ml cryoboxes (9*9), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-8	Rack used to store 25ml blood bag, 8 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750
	Blood bag Rack	DCJ-50-8	Rack used to store 50ml blood bag, 8 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750
	Blood bag Rack	DCJ-250-5	Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Product List

Model	Product	Model	Description and Accessories
YDD-550-445	Biobank Freezer (Smart type)	YDD-550-445	Includes vacuum isolated hose (GRG-DN10/2.0), 12pcs of 10-tier rack (5*5), 24 pcs of 10-tier rack (9*9), 120pcs of cryo boxes for 2ml vial (5*5), 240pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-550-445	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used to store 2ml cryoboxes (5*5), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used to store 2ml cryoboxes (9*9), Ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-6	Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350\550/1300
	Blood bag Rack	DCJ-50-6	Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Blood bag Rack	DCJ-250-3	Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-750-445	Biobank Freezer (Smart type)	YDD-750-445	Includes vacuum isolated hose (GRG-DN10/2.0), 12pcs of 14-tier rack (5*5), 24 pcs of 14-tier rack (9*9), 168pcs of cryo boxes for 2ml vial (5*5), 336pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-750-445	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-14	Used to store 2ml cryoboxes (5*5), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-14	Used to store 2ml cryoboxes (9*9), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-8	Rack used to store 25ml blood bag, 8 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750
	Blood bag Rack	DCJ-50-8	Rack used to store 50ml blood bag, 8 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750
	Blood bag Rack	DCJ-250-5	Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-850-465	Biobank Freezer (Smart type)	YDD-850-465	Includes vacuum isolated hose (GRG-DN10/2.0), 4 pcs of 13-tier rack (5*5), 32 pcs of 13-tier rack (9*9), 52pcs of cryo boxes (5*5) for 2ml vial, 416pcs of cryo boxes (9*9) for 2ml vial, 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-850-465	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-13	Used to store 2ml cryoboxes (5*5), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-13	Used to store 2ml cryoboxes (9*9), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-7	Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-50-7	Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-250-4	Rack used to store 250ml blood bag, 4 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Biobank Series for Large Scale Storage

Product List

Model	Product	Model	Description and Accessories
YDD-1000-465	Biobank Freezer (Smart type)	YDD-1000-465	Includes vacuum isolated hose (GRG-DN10/2.0), 16 pcs of 15-tier rack (5*5), 30 pcs of 15-tier rack (9*9), 240pcs of cryo boxes (5*5) for 2ml vial, 450pcs of cryo boxes(9*9) for 2ml vial, 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-1000-465	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used to store 2ml cryoboxes (5*5), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used to store 2ml cryoboxes (9*9), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-9	Rack used to store 25ml blood bag, 9 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-1000/1800
	Blood bag Rack	DCJ-50-9	Rack used to store 50ml blood bag, 9 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-1000/1800
	Blood bag Rack	DCJ-250-5	Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-1300-635	Biobank Freezer (Smart type)	YDD-1300-635	Includes vacuum isolated hose (GRG-DN10/2.0), 120 pcs of round rack, 240 pcs of φ 97mm canister (2 goblets included for each), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-1300-635	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used to store 2ml cryoboxes (5*5), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used to store 2ml cryoboxes (9*9), Ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-6	Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Blood bag Rack	DCJ-50-6	Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Blood bag Rack	DCJ-250-3	Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-1600-635	Biobank Freezer (Smart type)	YDD-1600-635	Includes vacuum isolated hose (GRG-DN10/2.0), 468pcs of 7-tier blood bag rack for 50ml, 3276 pcs of 50ml blood bag cryo box (4R9951), 1 set of cryosmart (level monitoring system)
	Biobank Freezer	YDD-1600-635	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-13	Used to store 2ml cryoboxes (5*5), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-13	Used to store 2ml cryoboxes (9*9), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-7	Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-50-7	Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-250-5	Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial(25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Product List

Model	Product	Model	Description and Accessories
YDD-1800-635	Biobank Freezer (Smart type)	YDD-1800-635	Includes vacuum isolated hose （GRG-DN10/2.0), 13 pcs of 15-tier rack(5*5), 60 pcs of 15-tier rack(9*9), 195pcs of cryo boxes(5*5) for 2ml vial, 900pcs of cryo boxes(9*9) for 2ml vial, 1 set of cryosmart(level monitoring system)
	Biobank Freezer	YDD-1800-635	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used to store 2ml cryoboxes (5*5), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used to store 2ml cryoboxes (9*9), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Blood bag Rack	DCJ-25-9	Rack used to store 25ml blood bag, 9 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-1000/1800
	Blood bag Rack	DCJ-50-9	Rack used to store 50ml blood bag, 9 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-1000/1800
	Blood bag Rack	DCJ-250-5	Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800
	Plastic cryo box	5×5 (2.0)	Used to store 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9×9 (2.0)	Used to store 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart Level Monitoring System	Cryosmart Level Monitoring System ZJY-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
Other Racks	Blood bag Rack	DCJ-250-3	Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Blood bag Rack	DCJ-250-4	Rack used to store 250ml blood bag, 4 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850
	Blood bag Rack	DCJ-250-5	Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800
	Blood bag Rack	DCJ-25-6	Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Blood bag Rack	DCJ-25-7	Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-25-8	Rack used to store 25ml blood bag, 8 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750
	Blood bag Rack	DCJ-25-9	Rack used to store 25ml blood bag, 9 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-1000/1800
	Blood bag Rack	DCJ-50-6	Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-350/550/1300
	Blood bag Rack	DCJ-50-7	Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-370/850/1600
	Blood bag Rack	DCJ-50-8	Rack used to store 50ml blood bag, 8 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-450/750
	Blood bag Rack	DCJ-50-9	Rack used to store 50ml blood bag, 9 layers in total with each layer storing one blood bag: including blood bag cryogenic boxes, suitable for YDD-1000/1800
	Rack (vertical type)	FDCJ-25-5(5.0)	Used to store 5ml cryoboxes (5*5), five layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-25-7(5.0)	Used to store 5ml cryoboxes (5*5), seven layers in total, suitable for YDD-450/750/850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-25-8(5.0)	Used to store 5ml cryoboxes (5*5), Eight layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-5(5.0)	Used to store 5ml cryoboxes (9*9), Five layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-7(5.0)	Used to store 5ml cryoboxes (9*9), Seven layers in total, suitable for YDD-450/750/850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-8(5.0)	Used to store 5ml cryoboxes (9*9), Eight layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	XDCJ-8-12	Used to store 2ml Aluminium cryoboxes (8 holes), Twelve layers in total, suitable for YDD-450/750/850/1600 (including aluminium cryboxes)
	Rack (vertical type)	XDCJ-8-9	Used to store 2ml Aluminium cryoboxes (8 holes), Nine layers in total, suitable for YDD-350/550/1300 (including aluminium cryboxes)
	Round Rack	YDCJ-97-2	Includes 2 canisters (TT97-2C), 4 plastic goblets and 1 pick up hook for goblets in total, the storage capacity for 0.5ml straw is 3016, suitable for YDD-1300

Low Temperature Transport Trolley YDC-3000H

Mobile Cryogenic Transfer Operation Platform

The unit can be used to preserve plasma and biomaterials during transportation. It is suitable for deep hypothermia operation and transportation of samples in hospitals, various biobanks and laboratories. High quality stainless steel in combination with the thermal insulation layer ensures the effectiveness and durability of the low temperature transport trolley.

- Temperature and Liquid Level Monitor
- Operating Bracket
- Cryopreservation Box
- The Insulation Cover can be Magnet Absorbed
- Inlet System

Product Advantages

Touch Screen
LCD touch operation

USB Data Export
It has its own USB interface and supports USB data export.

Real Time Monitoring
The instrument monitors the temperature and liquid level in real time and displays the expected remaining service time. Continuous working hours up to 24 hours.

2020-02-15 15:26
-160°C
📏 100 mm
🕐 480 min
⚙ Set

User Friendly Design

Appearance Spray
The appearance of spray, not easily affected by stains.

Caster Design
Integrated design, universal caster at the bottom, easy to move.

Polymer Materials
The new type of environmentally-friendly polymer material is used inside the cover plate, which is more appealing, more environment-friendly and more advanced than the commonly used pearl foam and polyurethane materials.

The Insulation Cover can be Magnet Absorbed
The insulation cover can be magnet absorbed to the side of vehicle, which is convenient to extract, and the space reserved at the bottom can be used to store other tools.

Technical Parameters

Product Model	Dimensions (L × W × H mm)	Frozen Storage Space (L × W × H mm)	Liquid Nitrogen Under Tray (L)	Maximum Storage				
				5×5 Freezing Boxes (ea)	10×10 Freezing Boxes (ea)	50ml Blood Bag Boxes (ea)	200ml Blood Bag Boxes (ea)	2ml Cryopreservation Tube (ea)
YDC-3000H	1295×523×1095	900×335×163	33	65	30	105	50	3000

Smart Series (Square Racks)

The smart, IoT and cloud management system monitors temperature and liquid levels simultaneously to provide accurate and real-time information on the critical parameters to ensure ultimate sample safety.

- IoT and Cloud Management
- Multiple Level of Protections
- Low Energy Consumption
- Temperature and Level Display
- Updated Design
- High Performance Stability
- New Lock Design

Key Features

- 5 models from 2,400 to 6,000 cryovial capacity
- 5 years vacuum warranty
- Durable aluminium construction
- Real time monitor of temperature and level
- Cloud data storage for traceability
- Low consumption rate and high performance stability
- New lock design

Product Advantages

Colour identification for Rack handles

Rack handles are colour-coded for ease of separating storage zones and managing samples.

Double lock and double control design

The new double lock and double control design requires two people to open at the same time to ensure sample safety.
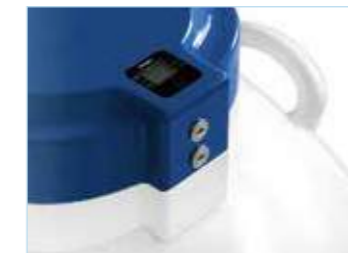
Dual monitoring respectively for temperature and liquid level

Storage temperature and liquid level are automatically monitored by a high precision controller. Accurate and real-time information ensures samples safety.

Multilayer protection for ultimate safety

Temperature and level are monitored in real time to safeguard the storage environment. Alarms can be transmitted through email, IM and wechat.

Cloud data storage for traceability

Temperature and level data can be transmitted to Haier's IoT platform for storage. All data is traceable and stored permanently.

Low consumption rate and high performance stability

Automated manufacture ensures build quality and reliable vacuum which delivers stable and uniform temperature performance as well as low LN2 consumption rates.

Accessories

Rack	Smart Box (SW-300)	Roller Base
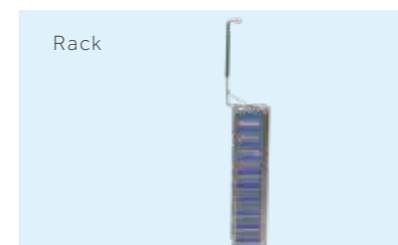
Smart Series (Square Racks)

Technical Parameters

Model	YDS-65-216-FZ	YDS-95-216-FZ	YDS-115-216-FZ	YDS-145-216-FZ	YDS-175-216-FZ
Maximum Storage Volume					
No. of Rack	6	6	6	6	6
2ml Storage Vials (100/box)	2400	3000	3600	4800	6000
Layers in Rack	4	5	6	8	10
5ml Storage Vials (81/box)	—	972	1458	1944	2430
Layers in Rack	—	2	3	4	5
Function					
Liquid Nitrogen Volume (L)	65	95	115	145	175
Static Evapouration Rate* (%/d)	0.78	0.90	0.90	0.94	0.94
Static Holding Time** (Day)	83	105	127	154	186
Dimensions					
Neck Opening (mm)	216	216	216	216	216
Overall Height (mm)	712	774	846	946	1060
Overall Diameter (mm)	681	681	681	681	681
Empty Weight (kg)	39.3	42.5	43.7	49.9	54.8
Full Weight (kg)	81.5	112.3	133.5	158.9	199.5
Shipping Weight (kg)	63.8	67.9	71.2	82.1	91.3

* Static evapouration and static holding time are theoretical values. Actual evapouration and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evapourate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

Product List

Model	Product	Model	Description and Accessories
YDS-65-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-65-216-FZ	Includes 6 racks (4-tier), cryoboxes (9*9), lockable cap, roller base is optional
YDS-95-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-95-216-FZ	Includes 6 racks (5-tier), cryoboxes (9*9), lockable cap, roller base is optional
YDS-115-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-115-216-FZ	Includes 6 racks (6-tier), cryoboxes (9*9), lockable cap, roller base is optional
YDS-145-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-145-216-FZ	Includes 6 racks (8-tier), cryoboxes (9*9), lockable cap, roller base is optional
YDS-175-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-175-216-FZ	Includes 6 racks (10-tier), cryoboxes (9*9), lockable cap, roller base is optional
	Roller Base	YSC-M	Suitable for all 65L~175L aluminium tank, equipped with 5 universal wheels

Medium Sized Storage Series (Square Racks)

Medium Sized Storage Series (Square Racks) features low LN$_2$ consumption and relatively small footprint for medium capacity sample storage.

- 5 Year Vacuum Warranty
- Cryobox Storage
- High Thermal Efficiency
- Durable
- Secure
- Liquid and Vapour Storage

Medium Sized Storage Series (Square Racks)

Key Features

- Heavy duty lockable enclosure offers excellent security
- Compatible with all major cryobox brands
- Durable aluminium construction
- Temperature monitoring available
- Liquid or vapour phase option available
- High thermal efficiency
- 5 year vacuum warranty
- Ultra-low evapouration loss

Product Advantages

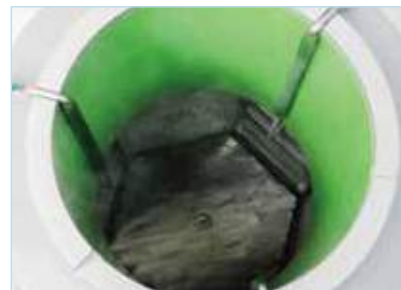**ULT Storage with Extremely Low LN$_2$ Evapouration Loss**

Freezer racks are in the ultra-low temperature environment with extremely low LN$_2$ evapouration. Even stored in vapour phase, the temperature will be below -190°C for a long time.

Advanced Vacuum Technology and Superinsulation Technology

Advanced vacuum and insulation technologies ensure cryopreservation for up to four months.

Compatible for Blood Bag Storage

Suitable for blood bag applications, the racks can be adapted to provide temporary blood bag storage before transferring bags to larger LN2 storage tanks.

Technical Parameters

Model	YDS-65-216-F	YDS-95-216-F	YDS-115-216-F	YDS-140-216-F	YDS-175-216-F
Maximum Storage Capacity					
No. of Rack	6	6	6	6	6
No. 2.0 ml Cryovials (100 / Box)	2400	3000	3600	4800	6000
No. of Boxes in (2ml each Rack)	4	5	6	8	10
No. 5.0 ml Cryovials (81 / Box)	-	972	1458	1944	2430
No. of Boxes in (5ml each Rack)	-	2	3	4	5
Performance					
Volume of LN$_2$ (L)	65	95	115	145	175
Static Evapouration Rate* (L/Day)	0.78	0.90	0.90	0.94	0.94
Static Holding Time** (Day)	83	105	127	154	186
Dimensions					
Neck Opening Diameter (mm)	216	216	216	216	216
Height (mm)	712	774	846	946	1060
Outer Diameter (mm)	681	681	681	681	681
Empty Weight (kg)	38.3	41.3	42.3	48.9	53.8
Full Weight (kg)	80.8	112.4	132.8	157.3	198.5
Shipping Weight (kg)	61.8	65.9	72.9	80.1	89.2

* Static evapouration and static holding time are theoretical values. Actual evapouration and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evapourate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

Liquid Nitrogen Temperature Detector

The temperature monitor provides continuous and reliable monitoring of the temperature in the container. It is the ideal choice for long-term monitoring of sample storage temperature and reminding users to add liquid nitrogen.

The temperature monitor ZTC-100A has real-time temperature display function, and can also provide the following alarms:
* Over temperature alarm
* Sensor error acousto-optic alarm

ZTC-100A

Accessories

Roller Base	Plastic Cryo Box	Lockable Cap (SG-216)	Rack (5ml)

5 ml Customized Cryogenic Box	SmartCap	Rack	Smart Box (SW-300)

Medium Sized Storage Series (Square Racks)

Product List

Model	Product	Model	Description and Accessories
YDC-3000H	Cryogenic transfer vehicle	YDC-3000H	Include level and temperature monitoring controller, with rechargeable battery and storage drawers
BioT Air	cryovial transfer flask	BioT Air	It can store 55pcs of 2ml cryovial
YDS-65-216	Liquid Nitrogen Container	YDS-65-216-F	Includes 6 racks (4 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-65-216	Includes lockable cap, no rack, no Protective jacket
	Rack	FTT-81-4	Used to store 2ml cryo boxes (9*9), 4 layers in total, 9*9 cryo boxes included, suitable for YDS-65-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-340	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-65-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
YDS-95-216	Liquid Nitrogen Container	YDS-95-216-F (5.0)	Includes 6 racks for 5ml, 2 layers in total, 12pcs of 5ml 9*9 cryo boxes and lockable cap included, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-95-216-F	Includes 6 racks (5 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-95-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-5	Used to store 2ml cryo boxes (9*9), 5 layers in total, 9*9 cryo boxes included, suitable for YDS-95-216 (plastic cryo boxes included)
	Rack	FTT-81-2 (5.0)	Used to store 5ml cryo boxes (9*9), 2 layers in total, 9*9 cryo boxes included, suitable for YDS-65-216\95-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-370	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-95-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
YDS-115-216	Liquid Nitrogen Container	YDS-115-216-F (5.0)	Includes 6 racks for 5ml, 3 layers in total, 18pcs of 5ml 9*9 cryo boxes and lockable cap included, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-115-216-F	Includes 6 racks (6 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-115-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-6	Used to store 2ml cryo boxes (9*9), 6 layers in total, 9*9 cryo boxes included, suitable for YDS-115-216 (plastic cryo boxes included)
	Rack	FTT-81-3 (5.0)	Used to store 5ml cryo boxes (9*9), 3 layers in total, 9*9 cryo boxes included, suitable for YDS-115-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-450	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-115-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
YDS-140-216	Liquid Nitrogen Container	YDS-140-216-F (5.0)	Includes 6 racks for 5ml, 4 layers in total, 24pcs of 5ml 9*9 cryo boxes and lockable cap included, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-140-216-F	Includes 6 racks (8 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-140-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-8	Used to store 2ml cryo boxes (9*9), 8 layers in total, 9*9 cryo boxes included, suitable for YDS-145-216 (plastic cryo boxes included)
	Rack	FTT-81-4 (5.0)	Used to store 5ml cryo boxes (9*9), 4 layers in total, 9*9 cryo boxes included, suitable for YDS-145-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-570	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-145-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening

Product List

Model	Product	Model	Description and Accessories
YDS-175-216	Liquid Nitrogen Container	YDS-175-216-F (5.0)	Includes 6 racks for 5ml, 5 layers in total, 30pcs of 5ml 9*9 cryo boxes and lockable cap included, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-175-216-F	Includes 6 racks (10 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-175-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-10	Used to store 2ml cryo boxes (9*9), 10 layers in total, 9*9 cryo boxes included, suitable for YDS-175-216 (plastic cryo boxes included)
	Rack	FTT-81-5 (5.0)	Used to store 5ml cryo boxes (9*9), 5 layers in total, 9*9 cryo boxes included, suitable for YDS-175-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-670	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-175-216 / competitors' products
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
Other Racks	Blood Bag Rack	DCJ-250-1FT6	Used to store 250ml blood bag, 7 bags per layer, 1 layer in total, blood bag cryo boxes included, suitable for YDS-95-216 (6 racks)
	Blood Bag Rack	DCJ-250-1T30	Used to store 250ml blood bag, 1 bag per layer, 1 layer in total, blood bag cryo boxes included, suitable for YDS-95-216 (30 racks)
	Blood Bag Rack	DCJ-250-2FT6	Used to store 250ml blood bag, 7 bags per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (6 racks)
	Blood Bag Rack	DCJ-250-2T30	Used to store 250ml blood bag, 7 bags per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (6 racks)
	Blood Bag Rack	DCJ-50-1FT6	Used to store 50ml blood bag, 14 bags per layer, 1 layer in total, blood bag cryo boxes included, suitable for YDS-95-216 (6 racks)
	Blood Bag Rack	DCJ-50-2T30	Used to store 50ml blood bag, 1 bag per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-95-216 (30 racks)
	Blood Bag Rack	DCJ-50-3T30	Used to store 50ml blood bag, 1 bag per layer, 3 layers in total, blood bag cryo boxes included, suitable for YDS-115-216 (30 racks)
	Blood Bag Rack	DCJ-50-2FT6	Used to store 50ml blood bag, 14 bags per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-115-216 (6 racks)
	Blood Bag Rack	DCJ-50-4T30	Used to store 50ml blood bag, 1 bag per layer, 4 layers in total, blood bag cryo boxes included, suitable for YDS-145-216 (30 racks)
	Blood Bag Rack	DCJ-50-3FT6	Used to store 50ml blood bag, 14 bags per layer, 3 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (6 racks)
	Blood Bag Rack	DCJ-50-5T30	Used to store 50ml blood bag, one bag per layer, 5 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (30 racks)
	Rack (vertical type)	FDCJ-81-6(115)	Used to store 2ml cryo boxes (9*9), 6 layers in total, suitable for YDS-115-216 (plastic cryoboxes included)
	Rack (vertical type)	FDCJ-81-8(145)	Used to store 2ml cryo boxes (9*9), 8 layers in total, suitable for YDS-145-216 (plastic cryoboxes included)
	Rack (vertical type)	FDCJ-81-10(175)	Used to store 2ml cryo boxes (9*9), 10 layers in total, suitable for YDS-175-216 (plastic cryoboxes included)

Medium Sized Storage Series (Square Racks)

Biological Sample Library-YDS Series

Storage Example of 2ml Internally Threaded Vial

Vial
(1.2/2ml)

Plastic Cryobox
(25, 81, 100)

Rack

Vial
(1.2/2ml)

Vial Cane
(3, 6)

Canister

Storage Example of Tall 5ml Cryovials

Vial
(5ml)

Cryobox
(25, 81)

Rack (5ml)

Vial
(5ml)

Vial Cane
(6)

Canister

Blood Bag Storage Example

Blood Bag
(25/50/250ml)

Blood Bag Cryo Box
(25/50/250ml)

Customized
Blood Bag Rack

Straw Storage Example

Straw
(0.25/0.5ml)

Plastic Protective Sleeve

Canister
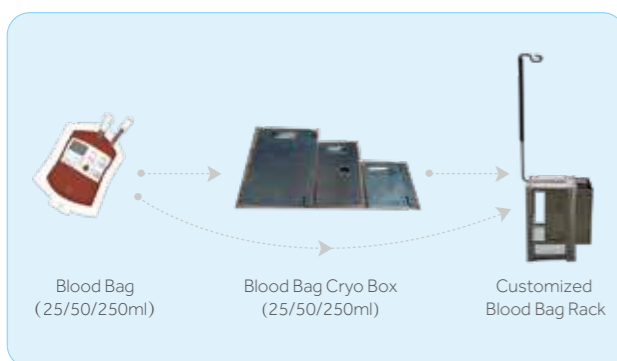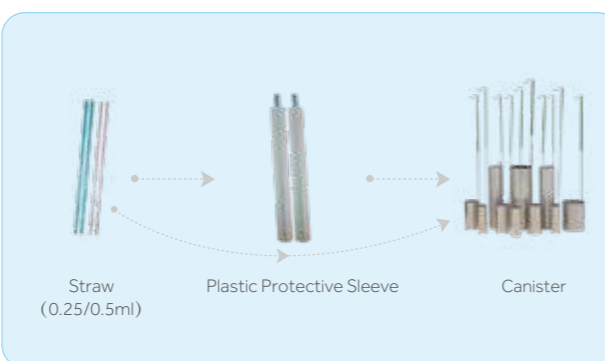
Small Sized Storage Series (Square Racks)

Widely used within many laboratories, this small-sized storage series features low LN₂ consumption and dual handle design. Stores between 600 and 1100 vials in square racks and cryo boxes.

- 5 Year Vacuum Warranty
- High Thermal Efficiency
- Lightweight
- 30 Litre to 50 Litre Capacity
- Durable
- Secure
- Super-Insulation
- Ideal for Lab Applications

YDS-50B-125-F
YDS-47-127-6YS
YDS-35-125-F
YDS-30-125-F
YDS-10-125-F

Small Sized Storage Series (Square Racks)

Key Features

- Heavy duty lockable enclosure offers excellent security
- Strong, lightweight aluminium construction
- Dual handles
- Temperature monitoring available
- Roller bases available
- High thermal efficiency
- 5 year vacuum warranty
- Ultra-low LN$_2$ evapouration loss

Product Advantages

Low LN$_2$ Consumption and Maximum Storage Efficiency

Haier Biomedical's Small Sized Storage Series (Square Racks) Liquid Nitrogen Storage System features low LN$_2$ consumption and small storage capacity for laboratory applications. The lightweight containers have a smaller footprint whilst providing maximum efficiency of cryogenic storage capacity.

Advanced Vacuum Technology and Super-insulation Technology

Advanced vacuum and insulation technologies provide ultra-low liquid nitrogen evapouration loss and ensure up to three months cryogenic storage.

Five Models Available

Small Sized Storage Series (Square Racks) offers Five models with different capacity from 100, 600, 750, 900 to 1100 standard 2 ml cryovials. All models are supplied with stainless steel racks and cryogenic boxes.

Accessories

| Roller Base | Rack | Liquid Nitrogen Temperature Detector | Lockable Cap (SG-125) | Smart Cap | Smart Box (SW-300) |

Technical Parameters

Model	YDS-10-125	YDS-30-125	YDS-35-125	YDS-47-127	YDS-50B-125
Maximum Storage Capacity					
No. of Rack	1	6	6	6	6
1.2&2 ml Cryovials (25 per box)	100	600	750	1110	900
No. of Boxes in (Rack)	4	4	5	5	6
Performance					
Volume of LN$_2$ (L)	10	31.5	35.5	47	50
Static Evapouration* (L/Day)	0.42	0.35	0.36	0.36	0.45
Static Holding Time** (Day)	24	90	97	130	110
Dimensions					
Opening Diameter (mm)	125	125	125	127	125
Height (mm)	625	704	748	718	818
Outside Diameter (mm)	300	462	462	508	462
Empty Weight (kg)	6.3	13	14.5	18.2	17.3
Full Weight (kg)	15.1	38.9	43.2	60.9	62.4
Shipping Weight (kg)	9.6	19.3	21.9	30.7	30.3

* Static evapouration and static holding time are theoretical values. Actual evapouration and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evaporate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibri um and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

Product List

* All models with F-suffix are supplied with stainless steel racks and cryo boxes.

Model	Product	Model	Description and Accessories
YDS-10-125	Liquid Nitrogen Container	YDS-10-125	No canister; no protective jacket; no lockable cap; equipped with braces for carrying
	Liquid Nitrogen Container	YDS-10-125-F	Include 1 square rack with 4 layers and 5*5 cryobox; lockable cap; no protective jacket
	Rack	FTT-25-4	Used to store 2ml cryo boxes (5*5), 4 layers in total, 5*5 cryo boxes included, suitable for YDS-30-125 / YDS-10-125 (plastic cryo boxes included)
	Canister (TT97)	TT10H-125	Φ97 single tier canister, no goblet, suitable for YDS-10-125, YDH-10-125
	Cork (125)	GS10-125	Suitable for YDS-10-125, YDH-10-125, YDS-50B-125
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening
YDS-30-125	Liquid Nitrogen Container	YDS-30-125-F	Includes 6 racks with 4 layers, 5*5 cryoboxes, lockable cap and protective jacket, roller base is optional.
	Liquid Nitrogen Container	YDS-30-125	Includes protective jacket only, roller base is optional
	Rack	FTT-25-4	Used to store 2ml cryo boxes (5*5), 4 layers in total, 5*5 cryo boxes included, suitable for YDS-30-125 / YDS-10-125 (plastic cryo boxes included)
	Canister (TT97)	TT30-125	Φ97 single tier canister, no goblet, suitable for YDS-30-125
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-125-370	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-20-125 / YDS-30-125
	Cork (125)	GS20-125	Suitable for YDS-30-125, YDS-35-125, YDS-47-127, YDS-35B-125
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening

Small Sized Storage Series (Square Racks)

Product List

Model	Product	Model	Description and Accessories
YDS-35-125	Liquid Nitrogen Container	YDS-35-125-6YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-35-125-F	Includes 6 racks with 5 layers, 5*5 cryoboxes, lockable cap and protective jacket, roller base is optional.
	Liquid Nitrogen Container	YDS-35-125	Includes protective jacket only, roller base is optional
	Rack	FTT-25-5	Used to store 2ml cryo boxes (5*5), 5 layers in total, 5*5 cryo boxes included, suitable for YDS-35-125, YDS-47-127 (plastic cryo boxes included)
	Canister (TT97)	TT35-125	Φ97 single tier canister, no goblet, suitable for YDS-35-125
	Canister (TTS97)	TTS35-125	Φ97 double-tier canister, 2 goblets included, suitable for YDS-35-125
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-125-400	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-25-125 / YDS-35-125 / competitors' products
	Cork (125)	GS20-125	Suitable for YDS-30-125, YDS-35-125, YDS-47-127, YDS-35B-125
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening
YDS-47-127	Liquid Nitrogen Container	YDS-47-127-6YS	Includes 6 round rack with 5 layers (37 holes) and lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-47-127	Includes 10 canisters (Φ72 / 276mm) and lockable cap, no protective jacket, roller base is optional
	Round Rack (Y98-37)	TT47-127-5	Φ98 round rack used to store 37 vials (2ml), 5 tiers in total, suitable for YDS-47-127-6YS
	Canister (TTS72)	TTS47-127-10T	Φ72, height 276mm double-tier canister, 2 goblets included, suitable for YDS-47-127
	Roller Base	YSC-47L	Suitable for all 47L Alunimium tank, equipped with 5 universal wheels
	SmartCap	LT-127-370-10	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-47-127 / competitors' products
	SmartCap	LT-127-400	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-47-127-6YS / YDS-47-127 / competitors' products
	Cork (125)	GS20-125	Suitable for YDS-30-125, YDS-35-125, YDS-47-127, YDS-35B-125
	Cork (125)	GS47-127-10T	Suitable for YDS-47-127
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening
YDS-50B-125	Liquid Nitrogen Container	YDS-50B-125-F	Includes 6 racks with 6 layers, 5*5 cryoboxes, lockable cap and protective jacket, roller base is optional.
	Liquid Nitrogen Container	YDS-50B-125-S	Includes 6 canisters (Φ97 / 276mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-50B-125	Includes protective jacket only, roller base is optional
	Rack	FTT-25-6	Used to store 2ml cryo boxes (5*5), 6 layers in total, 5*5 cryo boxes included, suitable for YDS-50B-125 (plastic cryo boxes included)
	Canister (TT97)	TT50-125	Φ97 single tier canister, no goblet, suitable for YDS-50B-125
	Canister (TTS97)	TTS50-125	Φ97 double-tier canister, 2 goblets included, suitable for YDS-50B-125
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-125-500	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-50-125
	Cork (125)	GS10-125	Suitable for YDS-10-125, YDH-10-125, YDS-50B-125
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening

Product Description

SmartCap is a low energy consumption IoT-based module that can monitor liquid nitrogen level and temperature in a liquid nitrogen tank. It is suitable for aluminium alloy liquid nitrogen tanks with opening port size of 50 mm, 80 mm, 125 mm, 216 mm. The built-in high efficiency lithium battery can operate the device for more than two years.

SmartCap

Product Characteristics

Independent, high accuracy measuring system for liquid level and temperature

Real time display of level and temperature, alarm setting via phone message, email, and wechat

Wireless transmission of level and temperature data to a data interrupter

Fluid level and temperature data uploaded remotely to cloud terminals for recording, printing, and storage

Built-in high efficiency lithium battery for longevity

SmartCap

Smart Box (SW-300)

Mobile APP - Biolink

E-mail

Biolink
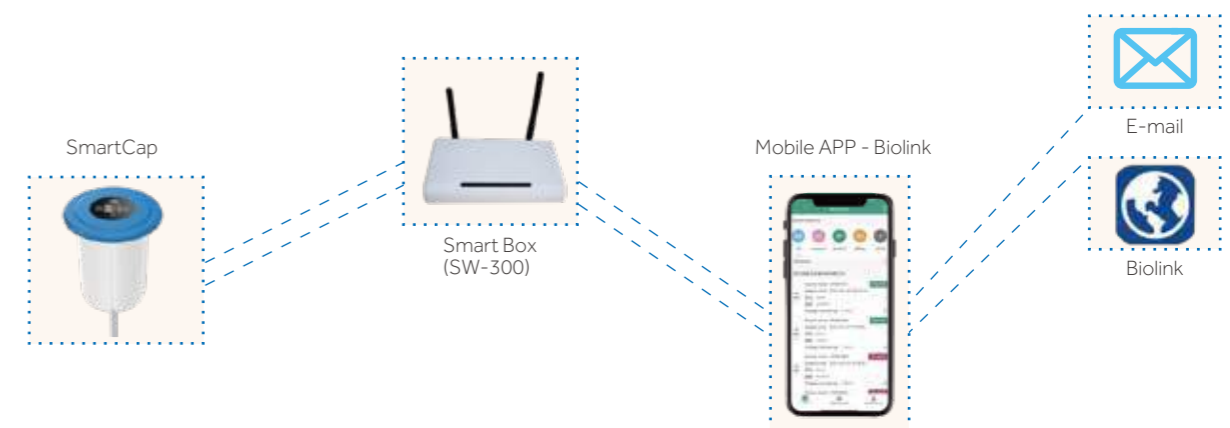
The SmartCap collects liquid level data and temperature data and transmits the information to cloud data store wirelessly, via 2.4G at a fixed interval every 10 minutes. Users can check real-time data and system alarm situation at any time through the Haier mobile APP-Biolink.

Small Sized Storage Series (Square Racks)

Product List

Model	Product	Model	Description and Accessories
Smart Cap	SmartCap	LT-50-220	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-3 / YDS-6
	SmartCap	LT-50-280	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-10 / YDS-15
	SmartCap	LT-50-370	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-13 / YDS-20 / YDS-30
	SmartCap	LT-50-400	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-35
	SmartCap	LT-50-450	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-25 any make of tank with 50mm opening.
	SmartCap	LT-50-500	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-50
	SmartCap	LT-80-220	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-6-80
	SmartCap	LT-80-280	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-10-80/YDS-15-80
	SmartCap	LT-80-370	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-20-80/YDS-30-80
	SmartCap	LT-80-400	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-35-80
	SmartCap	LT-80-450	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-25-80
	SmartCap	LT-80-500	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-50-80
	SmartCap	LT-125-280	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-10-125/YDS-15-125
	SmartCap	LT-125-340	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for any make of tank with 125mm opening.
	SmartCap	LT-125-370	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-20-125/YDS-30-125
	SmartCap	LT-125-400	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-25-125/YDS-35-125/competitors' products
	SmartCap	LT-125-500	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-50-125
	SmartCap	LT-127-370-10	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-47-127-10/any make of tank with 125mm opening.
	SmartCap	LT-127-400	Used to monitor level and temperature for containers with 125mm neck opening, data can be transmitted to cloud platform, suitable for YDS-47-127-6Y/YDS-47-127/any make of tank with 125mm opening.
	SmartCap	LT-200-340	Used to monitor level and temperature for containers with 200mm neck opening, data can be transmitted to cloud platform, suitable for any make of tank with 200mm opening
	SmartCap	LT-200-370	Used to monitor level and temperature for containers with 200mm neck opening, data can be transmitted to cloud platform, suitable for any make of tank with 200mm opening
	SmartCap	LT-200-450	Used to monitor level and temperature for containers with 200mm neck opening, data can be transmitted to cloud platform, suitable for any make of tank with 200mm opening
	SmartCap	LT-216-340	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-65-216
	SmartCap	LT-216-340-4	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for any make of tank with 200mm opening
	SmartCap	LT-216-370	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-95-216
	SmartCap	LT-216-450	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-115-216
	SmartCap	LT-216-570	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-145-216
	SmartCap	LT-216-670	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-175-216/any make of tank with 216mm opening.
Accessories	Smart Box	SW-300	Date transferred with WIFI network connected, required for International users (outside China)

High Capacity Series for Storage or Transport (Round Canisters)

High Capacity Series for Storage or Transport (Round Canisters) provides two cryopreservation solutions for long-term static storage and transportation of biological samples.

- Numbered Index Canister Locations
- High Capacity
- High Thermal Efficiency
- 5 Year Vacuum Warranty
- Extended Hold Time
- LN2 Dispenser
- Round Canisters for Straw Storage
- Lockable
- Roller Bases Available

# High Capacity Series for Storage or Transport (Round Canisters)

Key Features

• Strong and lightweight aluminium construction
• Heavy duty lockable enclosure offers excellent security
• Numbered index location points for canisters
• Straw storage
• LN₂ dispense pump available

• Roller bases available
• High thermal efficiency
• 5 year vacuum warranty
• Ultra-low evapouration loss

Product Advantages

Narrow neck design and excellent thermal conductivity reduces evapouration loss of liquid nitrogen to extend storage times.

Large-capacity models have wider necks for easy access to biological samples.
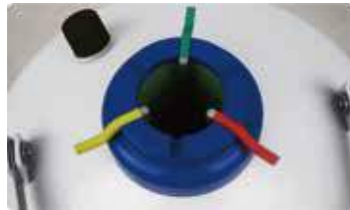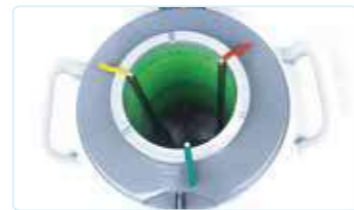
Long-term cryopreservation models have narrower necks with less heat intrusion.

Technical Parameters

	Model	YDS-2-30	YDS-2-35	YDS-3	YDS-6	YDS-10	YDS-10-80
Maximum Capacity	No. of Canister	3 (0)	3 (3)	6 (0)	6 (0)	6 (0)	6 (0)
	No. of Straws (Single Layer) (0.5ml each canister)	90	165	792	792	792	2244
	No. of Straws (Single Layer) (0.25ml each canister)	204	330	1788	1788	1788	5022
	No. of Straws (Double Layer) (0.5ml each canister)	—	—	—	—	—	—
	No. of Straws (Double Layer) (0.25ml each canister)	—	—	—	—	—	—
Performance	Volume of LN₂ (L)	2	2	3	6	10	10
	Static Evapouration* (L/Day)	0.07	0.08	0.12	0.12	0.12	0.21
	Static Holding Time** (Day)	28	24	26	52	86	48
Dimensions	Opening Diameter (mm)	30	35	50	50	50	80
	Height (mm)	399	428	435	482	552	557
	Outside Diameter (mm)	223	204	223	300	300	300
	Canister Outside Diameter (mm)	19	25	38	38	38	63
	Outside Height (mm)	120	120	120	120	120	120
	Empty Weight (kg)	2.8	2.6	3.1	4.8	6.1	6.2
	Full Weight (kg)	4.5	4.4	6	9.9	14.5	14.7
	Shipping Weight (kg)	5.1	4.9	5.8	8	9	9.3

	Model	YDS-10-125	YDS-13	YDS-15	YDS-20	YDS-30
Maximum Capacity	No. of Canister	1 (0)	6 (0)	6 (0)	6 (0)	6 (0)
	No. of Straws (Single Layer) (0.5ml each canister)	854	—	792	792	792
	No. of Straws (Single Layer) (0.25ml each canister)	1940	—	1788	1788	1788
	No. of Straws (Double Layer) (0.5ml each canister)	—	1284	—	1284	1284
	No. of Straws (Double Layer) (0.25ml each canister)	—	2832	—	2832	2832
Performance	Volume of LN₂ (L)	10	13	15	20	30
	Static Evapouration* (L/Day)	0.43	0.12	0.11	0.12	0.12
	Static Holding Time** (Day)	24	109	134	168	254
Dimensions	Opening Diameter (mm)	125	50	50	50	50
	Height (mm)	625	623	591	672	705
	Outside Diameter (mm)	300	310	394	394	462
	Canister Outside Diameter (mm)	97	38	38	38	38
	Outside Height(mm)	120	276	120	120/276	120/276
	Empty Weight (kg)	6.3	6.3	8.5	9.5	12.9
	Full Weight (kg)	15.1	17.3	20.5	28.1	36.6
	Shipping Weight (kg)	8.6	11	13	15	18

	Model	YDS-30-80	YDS-30-125	YDS-35	YDS-35-80	YDS-35-125	YDS-47-127
Maximum Capacity	No. of Canister	6 (0)	6 (0)	6 (0)	6 (0)	6 (0)	6 (0)
	No. of Straws (Single Layer) (0.5ml each canister)	2244	5124	792	2244	5124	6714
	No. of Straws (Single Layer) (0.25ml each canister)	5022	11952	1788	5022	11640	14070
	No. of Straws (Double Layer) (0.5ml each canister)	3624	—	1284	3624	9048	10704
	No. of Straws (Double Layer) (0.25ml each canister)	8460	—	2832	8460	20760	23604
Performance	Volume of LN₂ (L)	30	30	35	35	35	47
	Static Evapouration* (L/Day)	0.21	0.35	0.12	0.22	0.37	0.36
	Static Holding Time** (Day)	147	90	286	159	97	130
Dimensions	Opening Diameter (mm)	80	125	50	80	125	127
	Height (mm)	709	704	749	753	748	718
	Outside Diameter (mm)	462	462	462	462	462	508
	Canister Outside Diameter (mm)	63	97	38	63	97	72
	Outside Height (mm)	120/276	120	120/276	120/276	120/276	276
	Empty Weight (kg)	13	13	14.2	14.5	14.6	18.2
	Full Weight (kg)	37	38.9	42.7	42.9	43.2	54
	Shipping Weight (kg)	18.3	19.3	20	20.7	22	28

High Capacity Series for Storage or Transport (Round Canisters)

	Model	YDS-20B	YDS-30B	YDS-35B
Maximum Capacity	No. of Canister	6 (0)	6 (0)	6 (0)
	No. of Straws (Single Layer) (0.5ml each canister)	792	792	792
	No. of Straws (Single Layer) (0.25ml each canister)	1788	1788	1788
	No. of Straws (Double Layer) (0.5ml each canister)	1284	1284	1284
	No. of Straws (Double Layer) (0.25ml each canister)	2832	2832	2832
Performance	Volume of LN₂ (L)	20	30	35
	Static Evapouration* (L/Day)	0.2	0.2	0.2
	Static Holding Time** (Day)	101	159	179
Dimensions	Opening Diameter (mm)	50	50	50
	Height (mm)	672	705	749
	Outside Diameter (mm)	394	462	462
	Canister Outside Diameter (mm)	38	38	38
	Outside Height (mm)	120/276	120/276	120/276
	Empty Weight (kg)	9.5	12.9	14.2
	Full Weight (kg)	27.9	37.1	42.8
	Shipping Weight (kg)	15.1	18.3	20.1

	Model	YDS-35B-80	YDS-35B-125	YDS-50B	YDS-50B-125
Maximum Capacity	No. of Canister		6 (0)	6 (0)	6 (0)
	No. of Straws (Single Layer) (0.5ml each canister)	2244	5124	792	5124
	No. of Straws (Single Layer) (0.25ml each canister)	5022	11640	1788	11640
	No. of Straws (Double Layer) (0.5ml each canister)	3624	9048	1284	9048
	No. of Straws (Double Layer) (0.25ml each canister)	8460	20760	2832	20760
Performance	Volume of LN₂ (L)	35	35	50	50
	Static Evapouration* (L/Day)	0.3	0.41	0.24	0.45
	Duration of Normal Operation** (Day)	119	86	213	110
Dimensions	Opening Diameter (mm)	80	125	50	125
	Height (mm)	753	748	810	817
	Outside Diameter (mm)	462	462	462	462
	Canister Outside Diameter (mm)	63	97	38	97
	Outside Height (mm)	120/276	120/276	120/276	120/276
	Empty Weight (kg)	14.5	14.6	17.2	17.3
	Full Weight (kg)	43	43.5	60.3	62
	Shipping Weight (kg)	20.7	22	24	25.4

† A(B): A for maximum number of canisters, B for number of canisters in standard configuration

* Static evapouration and static holding time are theoretical values. Actual evapouration and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evaporate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

Vials Cane Specification

Canister	Height 120mm, Diameter 38mm (50mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	4	3	12
1.5ml	4	3	12
2ml	4	3	12
3ml	4	3	12
5ml	4	1	4

Canister	Height 276mm, Diameter 38mm (50mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	4	6	24
1.5ml	4	6	24
2ml	4	6	24
3ml	4	6	24
5ml	4	3	12

Canister	Height 120mm, Diameter 63mm (80mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	16	3	48
1.5ml	16	3	48
2ml	16	3	48
3ml	16	3	48
5ml	16	1	16

Canister	Height 276mm, Diameter 63mm (80mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	16	6	96
1.5ml	16	6	96
2ml	16	6	96
3ml	16	6	96
5ml	16	3	48

Canister	Height 120mm, Diameter 72mm (127mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	21	3	63
1.5ml	21	3	63
2ml	21	3	63
3ml	21	3	63
5ml	21	1	21

Canister	Height 276mm, Diameter 72mm (127mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	21	6	126
1.5ml	21	6	126
2ml	21	6	126
3ml	21	6	126
5ml	21	3	63

Canister	Height 120mm, Diameter 97mm (125mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	——	——	——
1.5ml	40	3	120
2ml	40	3	120
3ml	40	3	120
5ml	40	1	40

Canister	Height 276mm, Diameter 97mm (125mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	——	——	——
1.5ml	40	6	240
2ml	40	6	240
3ml	40	6	240
5ml	40	3	120

Canister	Height 120mm, Diameter 104mm (127mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	——	——	——
1.5ml	46	3	138
2ml	46	3	138
3ml	46	3	138
5ml	46	1	46

Canister	Height 276mm, Diameter 104mm (127mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	——	——	——
1.5ml	46	6	276
2ml	46	6	276
3ml	46	6	276
5ml	46	3	138

Accessories

Vial

Vial cane

Canister

High Capacity Series for Storage or Transport (Round Canisters)

Product List

Model	Product	Model	Description and Accessories
YDS-2-30	Liquid Nitrogen Container	YDS-2-30	Includes 3 canisters, lockable cap and protective jacket
	Canister (TT19)	TT2-30	Φ19 single tier canister, without goblets, suitable for YDS-2-30
	Cork (30)	GS2-30	Suitable for YDS-2-30
	Lockable Cap	SG-30	Suitable for container with 30mm neck opening, suitable for YDS-2-30
YDS-2-35	Liquid Nitrogen Container	YDS-2-35	Includes 3 canisters, lockable cap and braces for carrying, no protective jacket
	Canister (TT25)	TT2-35	Φ25 single tier canister, without goblets, suitable for YDS-2-35
	Cork (30)	GS2-35	Suitable for YDS-2-35
	Lockable Cap	SG-35	Suitable for container with 35mm neck opening, suitable for YDS-2-35
YDS-3	Liquid Nitrogen Container	YDS-3YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-3（2019）	Includes protective jacket only
	Canister (TT38)	TT3-50	Φ38 single tier canister, without goblets, suitable for YDS-3
	Cork (50)	GS10-50	Suitable for YDS-3 / YDH-3 / YDS-6 / YDS-10 / YDS-13 / YDS-25 / YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-6	Liquid Nitrogen Container	YDS-6YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-6	Includes protective jacket only
	Canister (TT38)	TT6-50	Φ38 single tier canister, without goblets, suitable for YDS-6
	Cork (50)	GS10-50	Suitable for YDS-3 / YDH-3 / YDS-6 / YDS-10 / YDS-13 / YDS-25 / YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-10	Liquid Nitrogen Container	YDS-10YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-10	Includes protective jacket only
	Canister (TT38)	TT10-50	Φ38 single tier canister, without goblets, suitable for YDS-10
	Cork (50)	GS10-50	Suitable for YDS-3 / YDH-3 / YDS-6 / YDS-10 / YDS-13 / YDS-25 / YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-10-80	Liquid Nitrogen Container	YDS-10-80-6YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-10-80	Includes protective jacket only
	Canister (TT63)	TT10-80	Φ63 single tier canister, without goblets, suitable for YDS-10-80
	Cork (80)	GS10-80	Suitable for YDH-6-80 / YDS-10-80
	Lockable Cap	SG-80	Suitable for container with 80mm neck opening
YDS-13	Liquid Nitrogen Container	YDS-13YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-13	Includes protective jacket only
	Canister (TTS38)	TTS13-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-13
	Cork (50)	GS10-50	Suitable for YDS-3 / YDH-3 / YDS-6 / YDS-10 / YDS-13 / YDS-25 / YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening

Product List

Model	Product	Model	Description and Accessories
YDS-15	Liquid Nitrogen Container	YDS-15YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-15	Includes protective jacket only
	Canister (TT38)	TT15-50	Φ38 single tier canister, without goblets, suitable for YDS-15
	Cork (50)	GS20-50	Suitable for YDS-15 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-20	Liquid Nitrogen Container	YDS-20-6YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-20YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket
	Liquid Nitrogen Container	YDS-20	Includes protective jacket only
	Canister (TT38)	TT30-50	Φ38 single tier canister, without goblets, suitable for YDS-20 / YDS-30
	Canister (TTS38)	TTS30-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-20 / YDS-30
	Cork (50)	GS20-50	Suitable for YDS-1 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-30	Liquid Nitrogen Container	YDS-30-6YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-30YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-30	Includes protective jacket only, roller base is optional
	Canister (TT38)	TT30-50	Φ38 single tier canister, without goblets, suitable for YDS-20 / YDS-30
	Canister (TTS38)	TTS30-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-20/YDS-30
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-50-370	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-13/YDS-20/YDS-30
	Cork (50)	GS20-50	Suitable for YDS-15 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-30-80	Liquid Nitrogen Container	YDS-30-80-6YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-30-80YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-30-80	Includes protective jacket only, roller base is optional
	Canister (TT63)	TT30-80	Φ63 single tier canister, without goblets, suitable for YDS-30-80
	Canister (TTS63)	TTS30-80	Φ63 double-tier canister, 2 goblets included. Suitable for YDS-30-80
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-80-370	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-20-80/YDS-30-80
	Cork (80)	GS20-80	Suitable for YDS-30-80 / YDS-35-80 / YDS-35B-80
	Lockable Cap	SG-80	Suitable for container with 80mm neck opening

Product List

Model	Product	Model	Description and Accessories
YDS-35	Liquid Nitrogen Container	YDS-35-6YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-35YS	Includes 6 canisters (height 120mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-35	Includes protective jacket only, roller base is optional
	Canister (TT38)	TT35-50	Φ38 single tier canister, without goblets, suitable for YDS-35
	Canister (TTS38)	TTS35-50	Φ38 double tier canister, 2 goblets included, suitable for YDS-35
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-50-400	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-35
	Cork (50)	GS20-50	Suitable for YDS-15 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-35-80	Liquid Nitrogen Container	YDS-35-80-6YS	Includes 6 canisters (height 276mm), lockable cap and protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-35-80	Includes protective jacket only, roller base is optional
	Canister (TT63)	TT35-80	Φ63 single tier canister, without goblets, suitable for YDS-35-80
	Canister (TTS63)	TTS35-80	Φ63 double-tier canister, 2 goblets included, suitable for YDS-35-80
	Roller Base	YSC-S (2019)	Suitable for all 30L/35L/50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-80-400	Used to monitor level and temperature for containers with 80mm neck opening, data can be transmitted to cloud platform, suitable for YDS-35-80
	Cork (80)	GS20-80	Suitable for YDS-30-80 / YDS-35-80 / YDS-35B-80
	Lockable Cap	SG-80	Suitable for container with 80mm neck opening
YDS-20B	Liquid Nitrogen Container	YDS-20B	Includes protective jacket only.
	Canister (TT38)	TT30-50	Φ38 single tier canister, without goblets, suitable for YDS-20 / YDS-30
	Canister (TTS38)	TTS30-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-20/YDS-30
	Cork (50)	GS20-50	Suitable for YDS-15 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-30B	Liquid Nitrogen Container	YDS-30B	Includes protective jacket only, roller base is optional
	Canister (TT38)	TT30-50	Φ38 single tier canister, without goblets, suitable for YDS-20 / YDS-30
	Canister (TTS38)	TTS30-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-20/YDS-30
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	Cork (50)	GS20-50	Suitable for YDS-15 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDS-35B	Liquid Nitrogen Container	YDS-35B	Includes protective jacket only, roller base is optional
	Canister (TT38)	TT35-50	Φ38 single tier canister, without goblets, suitable for YDS-35
	Canister (TTS38)	TTS35-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-35
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	Cork (50)	GS20-50	Suitable for YDS-15 / YDS-20 / YDS-30 / YDS-35 / YDS-20B / YDS-30B / YDS-35B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening

Product List

Model	Product	Model	Description and Accessories
YDS-35B-80	Liquid Nitrogen Container	YDS-35B-80	Includes protective jacket only, roller base is optional
	Canister (TT63)	TT35-80	Φ63 single tier canister, without goblets, suitable for YDS-35-80
	Canister (TTS63)	TTS35-80	Φ63 double-tier canister, 2 goblets included, suitable for YDS-35-80
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	Cork (80)	GS20-80	Suitable for YDS-30-80 / YDS-35-80 / YDS-35B-80
	Lockable Cap	SG-80	Suitable for container with 80mm neck opening
YDS-35B-125	Liquid Nitrogen Container	YDS-35B-125	Includes protective jacket only.
	Canister (TT97)	TT35-125	Φ97 single tier canister, without goblets, suitable for YDS-35-125
	Canister (TTS97)	TTS35-125	Φ97 double-tier canister, 2 goblets included, suitable for YDS-35-125
	Rack	FTT-25-5	Used to store 2ml cryo boxes (5*5), 5 layers in total, 5*5 cryo boxes included, suitable for YDS-35-125
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	Cork (125)	GS20-125	Suitable for YDS-30-125 / YDS-35-125 / YDS-47-127 / YDS-35B-125
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening
YDS-50B	Liquid Nitrogen Container	YDS-50B	Includes protective jacket only, roller base is optional
	Canister (TT38)	TT50-50	Φ38 single tier canister, without goblets, suitable for YDS-50
	Canister (TTS38)	TTS50-50	Φ38 double-tier canister, 2 goblets included, suitable for YDS-50
	Roller Base	YSC-S (2019)	Suitable for all 30L / 35L / 50L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-50-500	Used to monitor level and temperature for containers with 50mm neck opening, data can be transmitted to cloud platform, suitable for YDS-50
	Cork (50)	GS10-50	Suitable for YDS-3 / YDH-3 / YDS-6 / YDS-10 / YDS-13 / YDS-25 / YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
Other Racks	Rack (vertical type)	FDCJ-25-4	Used to store 2ml cryo boxes (5*5), 4 layers in total, suitable for YDS-10\20\30-125 (plastic cryoboxes included)
	Rack (vertical type)	FDCJ-25-5	Used to store 2ml cryo boxes (5*5), 5 layers in total, suitable for YDS-25\35-125; YDS-47-127 (plastic cryoboxes included)
	Rack (vertical type)	FDCJ-25-6	Used to store 2ml cryo boxes (5*5), 6 layers in total, suitable for YDS-50B-125 (plastic cryoboxes included)

Dryshipper Series for Transportation (Round Canisters)

Dryshipper Series for Transportation (Round Canisters) is designed for safe sample transportation under cryogenic conditions (vapour phase storage, temperature under -190°C). Since the risk of LN_2 release is avoided, it is suitable for air transportation of samples.

- Rugged and Durable

- 3 Year Vacuum Warranty

- Cryo Absorbant

- Vapour Phase Storage

- Secure

- No LN_2 Spillage

Key Features

- Straw and cryovial storage options
- Rugged and durable aluminium construction
- Designed to ensure no LN_2 spillage
- Vapour phase cryogenic storage

- Faster LN_2 fill times
- Lockable lids
- 3 year vacuum warranty

Product Advantages

Liquid Nitrogen Adsorption

Adsorbent materials are used to absorb and retain LN_2 for safe transport. No spillover of LN_2 can occur even when the tank is capsized.

Stainless Steel Mesh

Special stainless steel mesh divides storage space and LN_2 absorbents to prevent absorbent materials from contaminating the samples.

Complete Accessories Set

All models are offered a variety of stainless steel canisters and polycarbonate cryogenic boxes. Locking cover is optional.

Accessories

Plastic Cryo Box	Canister+Rack	Rack(vertical type)

Dryshipper Series for Transportation (Round Canisters)

Technical Parameters

Model	YDH-3	YDH-6-80	YDH-10 -125-F	YDH-15 -216-F	YDH-25 -216-F
Maximum Storage Capacity					
No. of Canister	1	1	1	1	1
No. of Straws (0.5ml / EA)	132	374	854	—	—
No. of Straws (0.25ml / EA)	298	837	1940	—	—
No. of 2.0 ml Cryovials	—	—	100	300	500
No. of Boxes in (2ml per holder)	—	—	4	3	5
Performance					
Volume of LN_2 (L)	3	6	10	15	25
Absorbable Volume of LN_2 (L)	1.3	2.9	3.4	6	9
Static Evapouration* (L/Day)	0.16	0.2	0.43	1.5	0.89
Liquid Phase Static Holding Time**(Day)	20	37	23	10	29
Vapour Phase Static Holding Time***(Day)	8	14	8	4	10
Dimensions					
Opening Diameter (mm)	50	80	125	216	216
Height (mm)	435	487	625	540	716
Outside Diameter (mm)	223	300	300	394	394
Canister Outside Diameter (mm)	38	63	97	—	—
Outside Height (mm)	120	120	120	—	—
Empty Weight (kg)	3.2	4.9	6.7	8.5	15
Full Weight (kg)	4.7	7.5	11	25	30
Shipping Weight (kg)	5.5	7.7	9.7	15.2	20.5

* Static evapouration and static holding time are theoretical values. Actual evapouration and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Liquid Phase Static Holding Time: the amount of days it takes for all of the LN to evapourate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

*** Vapour Phase Static Holding Time: the amount of days it takes for all of the LN to evapourate out after pouring liquid nitrogen into container to makeing absorbent materials fully absorb LN under standard atmospheric condition.

Product List

Model	Product	Model	Description and Accessories
YDH-3	Dry Shipper	YDH-3	Includes 1 canister (height 120mm), lockable cap and protective jacket
	Canister (TT38)	TT3H-50	Φ38 single tier canister, no goblet, suitable for YDH-3
	Cork (50)	GS10-50	Suitable for YDS-3 / YDH-3 / YDS-6 / YDS-10 / YDS-13 / YDS-25 / YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDH-6-80	Dry Shipper	YDH-6-80	Includes 1 canister (height 120mm), lockable cap and protective jacket
	Canister (TT63)	TT6H-80	Φ63 single tier canister, no goblet, suitable for YDH-6-80
	Cork (80)	GS10-80	Suitable for YDH-6-80 / YDS-10-80
	Lockable Cap	SG-80	Suitable for container with 80mm neck opening
YDH-10-125	Dry Shipper	YDH-10-125-F	Includes 1 rack (4 layers), 5*5 cryoboxes, lockable cap and protective jacket
	Dry Shipper	YDH-10-125	Includes lockable cap and protective jacket, no rack
	Rack	FTT-25-4	Used to store 2ml cryo boxes (5*5), 4 layers in total, 5*5 cryo boxes included, suitable for YDS-30-125 / YDS-10-125 (Plastic cryo boxes included)
	Canister (TT97)	TT10H-125	Φ97 single tier canister, no goblet, suitable for YDH-10-125
	Cork (125)	GS10-125	Suitable for YDS-10-125 / YDH-10-125 / YDS-50B-125
	Lockable Cap	SG-125	Suitable for container with 125mm neck opening
	Protective Case X	Protective Case X	Suitable for YDH-10-125
YDH-15-216	Dry Shipper	YDH-15-216-F	Includes 1 rack (3 layers), 9*9 cryoboxes and lockable cap, no protective jacket
	Rack (vertical type)	FDCJ-25-3	Used to store 2ml cryo boxes (5*5), 3 layers in total, suitable for YDS-15-125 (plastic cryoboxes included)
	Cork (216-2)	GS15-216	Suitable for YDS-15-216 / YDH-15-216
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
YDH-25-216	Dry Shipper	YDH-25-216-F	Includes 1 rack (5 layers), 9*9 cryoboxes and lockable cap, no protective jacket
	Rack	FTT-81-5	Used to store 2ml cryo boxes (9*9), 5 layers in total, 9*9 cryo boxes included, suitable for YDS-95-216 / YDH-25-216 (Plastic cryo boxes included)
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
Other Racks	Rack (vertical type)	FDCJ-81-5	Used to store 2ml cryo boxes (9*9), 5 layers in total, suitable for YDH-25-216 / YDS-95-216 (plastic cryoboxes included)

Self-pressurized Series for LN₂ Storage and Supply

Liquid Nitrogen Supplement Series for LN₂ Storage and Supply incorporates the latest innovation, its unique design utilises the pressure generated from the vapourisation of a small amount liquid nitrogen to discharge LN₂ into other containers. Storage capacities range from 5 to 500 litres.

- • 5 Year Vacuum Warranty
- • Decant Valves
- • Liquid Storage
- • Stainless Steel Construction
- • Pressure Raising
- • Integral Safety Mechanisms

Key Features

- • All models are equipped with safety valves
- • All welded stainless steel construction
- • Rotary ring construction
- • Labelled valves for easy identification
- • 5 year vacuum warranty

Product Advantages

Stainless Steel Structure
Stainless steel structure can withstand the most demanding environment and ensure long-lasting security. It also provides reduced evapouration loss rate, compared with conventional welding insulation tanks.

Variety of accessories
Each Self-pressurized Series for LN2 Storage and Supply model is equipped with a pressure valve, a drain valve, a relief valve, and a pressure gauge.

Casters
All models have four casters for better mobility and convenient use in different occasions.

Accessories

Transfer Hose

Float-type Liquidometer

Additional Series for Liquid Nitrogen Tank
(Comparison between Standard Series and K Series)

Standard series	K series

New Functions of K Series

Digital Display Level Gauge

DLZ-300
Digital display of fluid level
Remote data transmission function

Large diameter vent valve

Rapid relief of over pressure
Protection of safety valve

Pressure stabilizing valve

Stabilize fluid pressure during auto filling

Self-pressurized Series for LN₂ Storage and Supply

Technical Parameters

Model	YDZ-5	YDZ-15	YDZ-30	YDZ-50	YDZ-100 YDZ-100K
Performance					
Volume of LN₂ (L)	5	15	30	50	100
Static Evapouration (L/Day)	0.15	0.38	0.75	1	1.3
LN₂ Output (L/Min)	2	2	3	3	4
Dimensions					
Height (mm)	510	750	879	991	1185
Outside Diameter (mm)	329	404	454	506	606
Empty Weight (kg)	15	23	32	54	75
Full Weight (kg)	19.1	35.3	56.6	95.0	157.0
Shipping Weight (kg)	28	34	47	63	98
Pressure Parameters (MPA)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25				

Model	YDZ-150	YDZ-200 YDZ-200K	YDZ-240K	YDZ-300 YDZ-300K	YDZ-500 YDZ-500K
Performance					
LN₂ Capacity (L)	150	200	240	300	500
Static Evapouration (L/Day)	1.95	2.4	2.9	3.3	5.5
LN₂ Output (L/Min)	6	8	8	8	10
Dimensions					
Height (mm)	1188	1265	1350	1459	1576
Outside Diameter (mm)	706	758	758	857	1008
Empty Weight (kg)	102	130	148	202	255
Full Weight (kg)	225	296	350	448	665
Shipping Weight (kg)	132	164	177	232	324
Pressure Parameters (MPA)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25, 6. Rupture disc burst pressure 0.47.				

* Static evapouration and static holding time are theoretical values. Actual evapouration and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

Product List

Model	Product	Model	Description and Accessories
YDZ	Self-pressurized Filling Tank	YDZ-5	Includes transfer hoses (ZG-DN10/1.5)
	Self-pressurized Filling Tank	YDZ-15	
	Self-pressurized Filling Tank	YDZ-30	Includes transfer hoses (ZG-DN10/1.5)
	Self-pressurized Filling Tank	YDZ-50	
	Self-pressurized Filling Tank	YDZ-100	Includes transfer hoses (ZG-DN10/1.5) and float-type liquidometer
	Self-pressurized Filling Tank	YDZ-150	
	Self-pressurized Filling Tank	YDZ-200	
	Self-pressurized Filling Tank	YDZ-300	
	Self-pressurized Filling Tank	YDZ-500	
	Self-pressurized Filling Tank	YDZ-100K	Includes transfer hoses (ZG-DN10/1.5), Digital display level gauge (DLZ-300) and pressure stabilizer. Having the function of remote transmission of liquid level data, can be used for automatic filling
	Self-pressurized Filling Tank	YDZ-200K	
	Self-pressurized Filling Tank	YDZ-240K	
	Self-pressurized Filling Tank	YDZ-300K	
	Self-pressurized Filling Tank	YDZ-320K	
	Self-pressurized Filling Tank	YDZ-500K	
Accessories	Digital Display Level Gauge	DLZ-300 (YDZ-100K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-100K)
	Digital Display Level Gauge	DLZ-300 (YDZ-200K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-200K)
	Digital Display Level Gauge	DLZ-300 (YDZ-240K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-240K)
	Digital Display Level Gauge	DLZ-300 (YDZ-300K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-300K)
	Digital Display Level Gauge	DLZ-300 (YDZ-320K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-320K)
	Digital Display Level Gauge	DLZ-300 (YDZ-500K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-500K)
	Float-type Liquidometer	FZ-100	Suitable for YDZ-100
	Float-type Liquidometer	FZ-150	Suitable for YDZ-150
	Float-type Liquidometer	FZ-200	Suitable for YDZ-200
	Float-type Liquidometer	FZ-300	Suitable for YDZ-300
	Float-type Liquidometer	FZ-500	Suitable for YDZ-500
	Single-layer Transfusion Hose	ZG-DN10/1.5	Diameter10mm, length 1.5m, suitable for YDZ series

Model	Product	Model	Description and Accessories
Cryobox	Vial Cane	(3-type)	Used to hold 3 vials (2ml)
	Vial Cane	(6-type)	Used to hold 6 vials (2ml)
	Plastic Cryo Box	5×5(2.0)	Used to store 1.8ml / 2ml vial (25 holes)
	Plastic Cryo Box	9×9(2.0)	Used to store 1.8ml / 2ml vial (81 holes)
	Plastic Cryo Box	9×9 (5.0)	Used to store 4.5 /4.7/5ml vial (81 holes)
	Plastic Cryo Box	10×10 (2.0)	Used to store 1.8ml/2ml vial (interally threaded,100 holes)
	Plastic Cryo Box	Y-37	Suitable for round rack to store 1.8ml/2ml vial (37 holes)
	Plastic Goblets	SNT-97	Suitable for diameter 97mm canisters
	Blood Bag Cryo Box	25ml (791 OS/U)	One bag per box,rocker arm type
	Blood Bag Cryo Box	50ml (4R9951)	One bag per box,drawer type
	Blood Bag Cryo Box	250ml (4R9953)	One bag per box, rocker arm type
	Plastic Sleeve for Vial Cane	5016-0002 (6-type)	Suitable for vial cane that can hold 6 vials
	Aluminium Cryobox	8×1 (2.0)	Used to store 1.8ml/2ml vials (8 holes)
	Stainless Steel Cryo Box	5×5 (5.0)	Used to store 4.5ml/4.7ml/5ml vials (25 holes)
Other Accessories	Valve Adaptor	CGA295	Used to connect the valve of YDZ self-pressurized tank with transfer hose
	Cryogenic Solenoid Valve	DN7.0 (ASCO 24V)	Suitable for piping pressure≤0.5MPa
	Cryogenic Solenoid Valve	DN7.0 (JASA 24V)	Suitable for piping pressure≤0.5MPa
	Vacuum Insulated Hose	GRG-DN10/1.0	Diameter10mm, length 1m, special use for liquid nitrogen transferring, connection type for both side and length can be customized, charged by meter
	Vacuum Insulated Hose	GRG-DN10/2.0	Diameter10mm, length 2m, special use for liquid nitrogen transferring, connection type for both side and length can be customized, charged by meter
	Transfer Hose	ZG-DN10/1.5	Diameter10mm, length 1.5m, suitable for YDZ series
	Transfer Hose	BG-DN10/1.0	Diameter10mm, length 1.0m, suitable for liquid nitrogen pump YDB series
	Transfer Hose	RG-DN10	Diameter 10mm, used for liquid nitrogen transfering, fitting and length can be customized, charged in meters.
	Transfer Hose	RG-DN6	Diameter 6mm, used for liquid nitrogen transfering, fitting and length can be customized, charged in meters.
	Hose Heat Insulation Cotton	BMT-DN10	Suitable for DN10 single layer metal hose, 1 meter
	Cryogenic Gloves	ST-32	Overall length 320mm
	Cryogenic Gloves	ST-45	Overall length 450mm
	Cryogenic Gloves	ST-72	Overall length 720mm
	Level Measuring Scale	YWC-100	Measuring length1000mm

Biological Technology Co., Ltd

Stem Cell Bank

Biopharmaceuticals

Animal Health Company

A Hospital in Shanghai

A Hospital in Shenzhen

Biotechnology Co., Ltd

Haier Biomedical Product Portfolio

Cryo Freezer

DW-150W209

-86°C ULT Freezer

Touch Screen Series

DW-86L578S / DW-86L728S
DW-86L578S(A)T / DW-86L728S(A)T
DW-86L578BPST / DW-86L728BPST / DW-86L828BPST
DW-86L579BP/729BP / DW-86L829BP/959BP
DW-86L579BPT/729BPT / DW-86L829BPT/959BPT
DW-86L419   DW-86L579   DW-86L729   DW-86L829

Chest   Water Cooling Freezer   Controlled Rate Freezer

DW-86L338J / DW-86L338JA   DW-86L388J   DW-86L490J / DW-86L490JA   DW-86L578J / DW-86L578JA   DW-86L728J / DW-86L728JA   DW-86L828J / DW-86L828JA   DW-86L486E   DW-86L628E   DW-86L51J   DW-86L100J   DW-86W100J   DW-86W420J / DW-86W420JA   DW-86L828W   DW-86L959W   CJ-L37

Mini ULT Freezer
DW-80WZ15

-60°C Freezer
DW-60W138 /258 /388

-40°C Biomedical Freezer

Upright   Chest   Double Door

DW-40L92   DW-40L262   DW-40L278   DW-40L298J   DW-40L568J   DW-40W138J   DW-40W255J/380J   DW-40L348   DW-40L418D   DW-40L508   DW-40L528D

-30°C Biomedical Freezer
DW-30L420F   DW-30L278   DW-30L508   DW-30L818BP   DW-30L818   DW-30L1280F

-25°C Biomedical Freezer
DW-25L92   DW-25L262

Combined Refrigerator and Freezer
HYCD-282 / HYCD-319   HYCD-282A / HYCD-319A   HYCD-469   HYCD-469A

Pharmacy Refrigerator

New Generation   RFID Refrigerator

HYC-1099   HYC-1099T   HYC-1099F   HYC-1099TF   HYC-509   HYC-509T   HYC-509F   HYC-509TF   HYC-390R   HYC-509R

Pharmacy Refrigerator

Under-counter Pharmacy Refrigerator

HYC-290   HYC-309   HYC-310   HYC-390   HYC-390F   HYC-410   HYC-610   HYC-639   HYC-940   HYC-940F   HYC-1378   HYC-1031GD   HYC-68A   HYC-68   HYC-118A   HYC-118   HYC-85GD

Laboratory Refrigerator
HLR-310F

Spark Free Freezer/Refrigerator
DW-25L92SF   DW-30L278SF/FL   HLR-118SF/FL   HLR-310SF/FL

Smart Vaccine Refrigerator
HYC-361   HYC-61

Vaccine &Icepack Freezer
HBD-86   HBD-265

Solar Direct Drive Combined Refrigerator/Freezer
HTCD-160   HTCD-90

Haier Biomedical Product Portfolio

Solar Direct Drive Vaccine Refrigerator
HTC-40   HTC-110/112   HTC-120   HTC-240

Solar Direct Drive Blood Refrigerator
HTXC-240

Solar Direct Drive Freezer
HTD-40

Ice-lined Refrigerator
HBC-120   HBC-240   HBCD-90   HBC-80   HBC-150   HBC-260

RTMD
U-COOL   U-COOL-LoRa   U-COOL Pro

Blood Bank Refrigerator

New Generation   Baskets

HXC-429TR   HXC-629TR   HXC-1369TR   HXC-149R   HXC-429R   HXC-629R   HXC-629RB   HXC-629ZZ   HXC-106   HXC-149   HXC-279   HXC-429   HXC-629 / HXC-629B   HXC-1369   HXC-149T   HXC-429T   HXC-629T / HXC-629TB   HXC-1369T   HXC-158 / HXC-158B

Plasma Freezer
DW-30L818BPT   DW-30L1280FT

Plasma Apheresis System
XJ-III

Plasma Blast Freezer
XSD-24FL   XSD-24WFL   XSD-48WFL

Platelet Incubator with Agitator
HXZ-149   HXZ-1369

Transport Cooler

Active Cooling

HZY-8Z/8ZA   HZY-15Z/15ZA   HZY-40Z

Transport Cooler

Passive Cooling   Portable Transport Cooler   Medical Transport Cooler   Intelligent Control Cold Chain Transport Cooler

HZY-5B   HZY-35B   ALG50   BCD60   FS-12LS/18LS/35 LS   BW25-8A/12A/36A/64A / BW50-12A/36A

Laminar Flow Cabinet
HCB-900V   HCB-1600H   HCB-1300V / HCB-1300VS

Biological Safety Cabinet

Classical Series   New Generation   Smart Series   Type B2

HR30-IIA2   HR40-IIA2   HR700-IIA2   HR900-IIA2   HR900-IIA2-D/S   HR1200-IIA2-D   HR1200-IIA2-S   HR1200-IIA2   HR1500-IIA2   HR1200-IIA2-X / HR1500-IIA2-X / HR1800-IIA2-X   HR900-IIA2-N / HR1200-IIA2-N / HR1500-IIA2-N / HR1800-IIA2-N   HR40-IIB2

Liquid Nitrogen Container

Low Temperature Transport Trolley

YDC-3000H

CO₂ Incubator
HCP-80 / HCP-168 / HCP-258   HCP-168E

Standard Incubator
HZP-168   HFP-80

Drying Oven
HFS-160   HZS-60

Centrifuge
LX-165T2R   LX-155T100R / LX-185T100R   LX-60T100-J / LX-165T2-J

Vertical Autoclave
HRLM-80

Climate Chamber
HHS-256   HHS-506   HHS-756

Consumables

Walk-in Cold Room

Product Portfolio