PRODUCT MANUAL







Qingdao Haier Biomedical Co.,Ltd.

No.280 Feng Yuan Road, High-tech Zone, Qingdao, 266109, P.R. China Tel: +86-0532-88935593 Website: www.haiermedical.com











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CONTENT

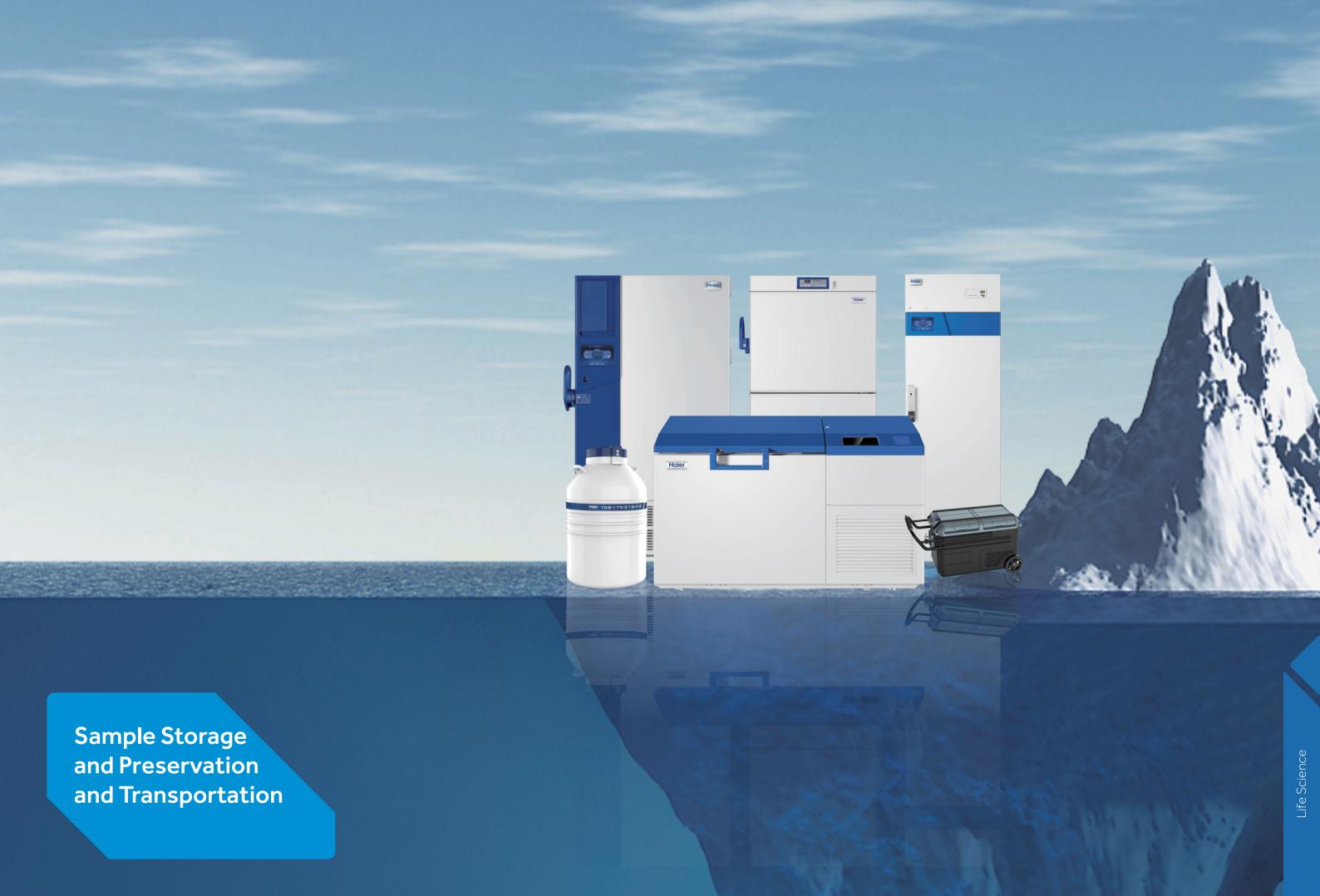
Life Science

C (/.50°C 100°C)	
Controlled rate freezer (+50°C ~ -180°C)	
Liquid Nitrogen Storage Solutions (-135 C ~ -196 C)	
Cryo Freezer (-130 °C ~ -150 °C) Ultra-low Temperature Freezer (-40 °C ~ -80 °C)	
Biomedical Freezer (-10 °C ~ -60 °C)	
Pharmacy refrigerator and Freezer (2°C ~ 8°C/-10°C ~ -40°C)	
Laboratory Refrigerator (3 °C ~ 16 °C)	
Transportation (+10 °C ~ -196 °C)	
Sample Preparation	1:
Centrifuge	
Freeze Dryer	
Liquid handling	
Incubator	13
CO2 Incubator	
Standard Incubator	
Refrigerated Incubator	
Constant Climate Chamber	
Safety Product	1
Biosafety Cabinet	
Animal Containment Workstation	
Aseptic Isolator	
Clean bench/Laminar flow cabinet	
Fume Hood	
Safety Storage Cabinet	
Spark Free Refrigerator/ Freezer	
Sterilization	19
Autoclave	
Drying oven	
Hydrogen Peroxide Disinfector	
Consumable	2:

Medical Innovation

Public Health-Vaccine Solution	25
Vaccine Storage and Preservation	
Vaccine Transportation	
Vaccine Safety - Remote Temperature Monitoring Solution	
Blood Treatment	29
Blood Storage and Preservation	
Blood Transportation	
Plasma Apheresis System	
Plasma Blast Freezer	
Plasma Freezer	
Platelet Incubator with Agitator	
Health Care Product	33

Air Purification Sterilizer
Portable Oxygen Concentrator
Infrared Thermometer
Blood Pressure Monitor
Finger Pulse Oximeter
AC Compressor Nebulizer



03/04

Sample Storage and Preservation and Transportation

Sample cold storage and transport solutions such as freezers, refrigerators, transport coolers and cryogenic storage tanks are critical to keeping priceless samples and valuable reagents safe. The right equipment will have enough space for your samples while providing you with peace of mind. Effective sample storage can significantly enhance research productivity. From low temperature storage to long term storage and transportation, Haier biomedical can provide range of products to achieve -196°C to +8°C full temperature range and complete scenario product solutions coverage.

Controlled Rate Freezer (+50°C~ -180°C)

The successful cryopreservation of biological samples depends on the rate of cryopreservation, precise temperature control, and reasonable temperature gradient. The controlled rate freezer CJ-L37 (sample handling equipment before low temperature storage) is designed to satisfy customers' priceless sample cooling treatment before storage and effectively improve the recovery efficiency of frozen cells, to better meet the needs of scientific research, biopharmaceutical, cell and gene therapy, biological sample library and other needs. It is suitable for primary cells and cooling cells that are highly sensitive to temperature changes.









- Standard System consists of Controlled Rate Freezer, LN2 Container, LN2 Transfer Hose, Sample probe, Printer
- Optional Accessories 2ml Vial Rack/ 50ml Bag Canister Rack
- Precise Temperature Control and Temperature Record
- Information traceability
- One-click freezing
- 7-inch touch screen

→ Liquid Nitrogen Storage Solutions (-135°C ~ -196°C)

When the temperature drops to -180° C, most biological samples can be transferred to liquid nitrogen for long-term preservation. With a complete range of products and excellent performance, Haier biomedical is a professional manufacturer of liquid nitrogen storage systems for liquid nitrogen storage and sample storage transportation of blood, biological samples (cord blood, cells, and sperm) in laboratories and various clinics. Our products have combined advanced intelligent monitoring technologies and IoT technologies to realize remote data monitoring, scientific and intelligent management, and intuitive display of users' sample storage situations. From the traditional -196° Cliquid nitrogen storage tank to the best -135° C or -190° C vapor phase liquid nitrogen tank products, a variety of storage models can be selected and customized, but also can conduct Liquid Nitrogen freezing project.

Stainless Steel Liquid Nitrogen Container

- Biobank Series LN2 Solutions YDD, 350L to 1880L, Storage range from 13,000 to 94,875 for standard 1.2ml and 2.0ml cryovials (internally threaded).
- Intelligent Liquid Nitrogen Container CryoBio—New Product, 370L, 15600
 Vials, 10-inch LCD Screen, Auto Liquid Filling System, Easy Operation.

Cor YOD-850-46 EL Cor YOD-850-445

Aluminum Alloy Liquid Nitrogen Container

 Medium Sized Storage Series (Square Racks) YDS, 65L to 175L, 5 models from 2,400 to 6,000 cryovial capacity/Supplied complete with square racks and boxes.





 Smart Series (Square Racks) YDS, 65L to 175L,5 models from 2,400 to 6,000 cryovial capacity, Color-coded rack handles for easy identification/Double lock and double control design to ensure the safety of the samples/Real time monitor of temperature and level.







 High Capacity Series for Storage or Transport (Round Canisters) YDS, 2L to 50L, Round Canisters for Straw Storage

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.
- Capacity with 5/15/30/50/100/150/200/240/300/500L, Stainless Steel Construction, Variety of Accessories (pressure valve/drain valve/relief valve/ pressure gauge), Standard Series and K Series.



Cryo Freezer (-130°C~ -150°C)

A mechanical cryogenic freezer is a safe alternative to LN2 and can reduce or eliminate the reliance on LN2, reducing safety concerns. Haier biomedical -150°C cryo freezer DW-150W209 has raised widespread competitive concern from global customers since its launch due to the products 100% hydrocarbon environmentally friendly technology and secure, stable and efficient performance.

- 100% Hydrocarbon energy-saving refrigeration technologies
- Superior insulation performance and uniformity
- Electric control, standard USB, optional fingerprint lock, NFC card lock
- Excellent temperature uniformity of ±5°C





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→ Ultra-low Temperature Freezer (-40°C ~ -80°C)

Haier Biomedical was founded to focus on the design, manufacturing, marketing and sales of low temperature storage equipment for samples such as viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semen, biological products, electronics and

We design and manufacture highly reliable ULT freezers to be used in hospital, industrial, biomedical and pharmaceutical fields as well as scientific field in general. The storage capacities range from 51L to 959L. We adopt world-leading energy saving refrigeration technology and design VIP thermal insulation system to significantly reduce heat gain and operating cost. Compared with the traditional HFC $refrigerating\ system, HC\ refrigerant\ produces\ zero\ pollution\ and\ is\ environmentally\ friendly.\ This\ competitive\ edge\ allows\ it\ to\ outperform$ other international brands and it is certified by Energy Star/ CE/UL. We also provide optional CO2/LN2 backup system to maintain the freezer temperature when there is a loss of power.

TwinCool Frequency Conversion ULT Freezer

Upright, Capacity with 578/728/828L, Temperature uniformity within ±3°C, TwinCool & Frequency Conversion.

Frequency Conversion ULT Freezer

Upright, Capacity with 579/729/829/959L, display with LCD/LED, temperature uniformity of ±3°C.

TwinCool ULT Freezer

Upright, Capacity with 418/578/728L, tempera-ture unifo rmity of ±5°C, dual refrigeration system.

Standard Low Energy ULT Freezer

Upright or chest, Capacity from 51L to 828L, display with LCD/LED, temperature uniformity of ±5℃

Water-Cooled ULT Freezer (828/959L)

Upright, Capacity with 828/959L, temperature uniformity of ±3°C, water cooling-





→ Biomedical Freezer (-10°C ~ -60°C)

⟨▼⟩-60°C Biomedical Freezer

- Temperature range -30°C ~-60°C, Direct Cooling, especially used for the storage of fishery products
- Chest cabinet type, Capacity with 138L/258/388L
- Energy saving and environmentally friendly refrigeration technology
- Optional SMS alarm function, real-time notification of any abnormality
- CE Certificate

√ -40°C Biomedical Freezer

- Temperature range -20°C~-40°C, direct cooling
- Upright cabinet type, single door capacity with 92/262/278/568L, double door capacity with 418/531/818L,
- Chest cabinet type, Capacity with 138/255/380L
- Multiple malfunction alarms, Alarm Types: buzzer, flashing light, remote alarm
- Optional USB interface/RS485/Temperature Recorder
- CE Certificate

√> -30°C Biomedical Freezer

- Temperature range -10°C ~-30°C
- Air cooling with 420/1280L, Directing cooling with 278/508/818L
- Single or double door models, Inner door
- High-performance refrigeration system
- Flexible internal storage, Backup battery
- CE Certificate















07/08

⟨C⟩-25°C Biomedical Freezer

- Temperature range -10°C ~-25°C, Directing cooling
- Upright cabinet, Capacity with 92/262L
- Microprocessor control, HC commercially available and environment safe refrigerant
- CE Certificate



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> Pharmacy Refrigerator and Freezer (2°C ~ 8°C/-10°C ~ -40°C)

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.

Combined Refrigerator and Freezer

- HYCD-282(A)/469(A) Refrigerator(Forced cooling): 2°C ~8°C / Freezer (Direct cooling): -10°C ~-40°C; Control accuracy 0.1°C (refrigerator) and 1°C (freezer)
- CE certificate





- Frequency Conversion Pharmacy Refrigerator
- Capacity with 509L/1099L
- Excellent temperature uniformity of ±2°C (setting temperature at 5°C)
- Solid or glass door options; LED display or Touchscreen
- Frequency conversion technology with adaptive control
- Environmentally-friendly and energy efficient HC refrigeration





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Standard Pharmacy Refrigerator

- Standard pharmacy refrigerators with forced-air cooling
- Solid or glass door, single or double door, capacity with 290/309/390/
- 410/610/639/940/1378L Under-counter model, capacity with 68/85/118L, solid or glass door, adjustable door opening direction
- New Model HYC-1031/GD HYC-85GD internal temperature uniformity can reach to ±1°C





RFID Refrigerator

- 2 models, Capacity with 390/509 Liters
- Intelligent inventory management
- Full RFID signal coverage inside the refrigerator, 100% inventory accuracy





Laboratory Refrigerator (3°C ~ 16°C)

This product is used to store chemicals, reagents and consumables within laboratories and research facilities.

- Adjustable set temperature range is 3°C to 16°C, internal temperature variation within ±3°C inside the chamber
- High Efficiency HC Cooling Technology, Forced cooling
- CE certificate





Life Science

Transportation (+10°C ~ -196°C)

Cold chain transportation of samples, reagents, blood products, specimens and pharmaceuticals et

(►) Temperature Range -135°C ~ -196°C

Low Temperature Transport Trolley YDC-3000H

It 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.

- Maximum storage 2ml tube with 3000 pieces / 200ml blood bag boxes with 50 bags, LN2 33L
- Touch Screen, Corrosion Resistant, Magnetic Insulation Cover
- Real time monitoring of the temperature and liquid level



Dryshipper Series for Transportation/ Mobile Cryo Station YDH Series

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 LN2 release is avoided, it is suitable for air transportation of samples. Comply with IATA.

- Capacity 3L/6L/10L/15L/25L
- Vapor phase storage
- Straw and cryovial storage options / Complete Accessories Set
- No LN2 spillage/ Lockable lids/ Cryo absorb



Portable Cryogenic Transfer Tank Bio-2T

It is suitable for small batch and short distance sample transport in laboratory units or hospitals-

- Compatible with 1.2ml, 1.5ml, 1.8ml, 2.0ml and 5.0ml cryogenic tubes, capacity with 54 internal thread 2ml Vials
- 2L LN2 to store 6-8h in vapor or liquid phase
- Lightweight design, only 3kg
- Real-time visual monitoring of temperature, dust-proof and waterproof part of the container





▼ Temperature Range -40°C ~ -80°C

Mini-ULT freezer DW-80WZ15 is suitable for biobanks, vaccination production and transportation users.

- Capacity 15L, HC energy saving
- One unit for multiple functions (long term storage with 220V power supply and Vehicle-mounted transportation with 24V (DC) power supply
- Superior Uniformity, temperature uniformity of ±3℃ at key points





Temperature Range +10°C ~ -20°C

Portable Transport Cooler ALG50/BCD60/BCD115

- Capacity with 50/60/115L
- Low voltage battery protection
- Widescreen LCD display/ LED lighting
- Voltage power supply AC110-240V, 50/60Hz, DC12/24V



Car refrigerator- W series WG45/55/65

- Capacity with 38/48/58L
- Double door double control series (Double chamber, but independent temperature control. Both compartment can be adjusted as a fridge or a freezer)
- Design of portable pull rod for air circulation
- Bluetooth APP/ Pluggable lithium battery (optional)
- Low noise and energy saving
- Low Voltage Battery Protection





Active Temperature Controlled RKN Container

- Robust construction
- Safe, reliable and secure
- Superior temperature uniformity
- Cost-effective performance





11/12

Sample Preparation

The sample preparation is a crucial step to obtain a representative material. It will be shown as a fundamental step for obtaining accurate and precise results. Our portfolio includes a wide range of instrumentation that needed for sample preparation, such as centrifuges, dryers, liquid handling equipment etc. Further progress in the automated systems for sample preparation is expected to meet the need for high sample throughput

> Centrifuge

Centrifuges are necessary equipment in most laboratories and meet application needs ranging from clinical and blood banking, microbiology, tissue culture, molecular biology and genomics, drug discovery and proteomics. It is used for rapid separation and extraction of samples of cells, macromolecular proteins, blood, body fluids, DNA/RNA, plasmids, bacteria and viruses.

Haier biomedical can provide multiple types of centrifuges that range from large floor models to bench- top varieties. To maximize usage of your centrifuge and increase the versatility, performance and ease-of-use, rotor adapters and accessories are available.

- ${\tt @~8}$ different sizes of floor-standing (LX-75L2400R, new product upcoming) and benchtop models
- Maximum speed from 18500rpm to 7500rpm, low speed or high speed type
- Microliter centrifuges with LX-50T2Z/LX-120T2Z
- Refrigeration and temperature control model with different capacity from 0.2ml to 500ml (LX-165T2R/LX-155T500R/LX-185T100R)
- Versatile accessories such as angle rotor, swing-out rotor, biosafety cover, adapters to meet different sample formats (tubes or blood bags)



> Freeze Dryer

Freeze-drying or lyophilization, is an established process that involves the removal of water or another solvent from a frozen product by means of sublimation, applicable to biological research, medical laboratories for drying of biotechnological and pharmaceutical products, e.g. tissues and tissue extracts, bacteria, vaccines, and sera, also suitable to food research, chemical industry and other related scenarios for efficient lyophilization of samples. This process is commonly used for improving product stability, for long-term preservation, for product purification, and for sample preparation. Haier biomedical can provide a simple way to design a complete lab freeze dry system that fits your needs.

- Ice Holding Capacity 4.5L, Collector Temperature -65°C, sample loads 0.1m²
- Rapid sublimation speed and high drying efficiency
- Intelligent storage of the freeze-drying parameters, without setting them separately each time
- Multiple alarm functions, IoT real-time management
- Optional Vacuum pump, drying accessories and parts, glassware
- Gland type/Multi-manifold freeze dryers new product upcoming 0.1m² & -80°C/ 0.12m² & -65°C/ 0.18m² & -65°C new product upcoming





>Liquid Handling

Liquid handling is a core process in practically every life science laboratory. Automated liquid handlers are especially useful for applications that require repetitive pipetting tasks, such as serial dilutions, PCR. Haier biomedical can provide automated pipettes to take the manual labor out of repeated pipetting and can offer various advantages.

Automatic Liquid Handling Workstation N96

5 to 200 μ l Liquid Transfer / Continuous Dispensing / Serial Dilution/ Precise 96 channel liquid handling with loading or unloading tips automatically / Can be placed in a clean bench or safety cabinet.



Automatic Sample Processing System ES96

 $10\,to\,1000\,\mu l$ sample processing / Flexible and Compatible / High Processing Efficiency (1 sample /20 seconds) / Traceable Sample Information





Incubator

Incubator is an equipment having a chamber of controlled atmosphere, temperature, humidity and illuminance for the purpose of maintaining live organisms in an environment suitable for their growth.

Microorganisms require incubation at the temperature and in the humidity and gaseous atmosphere most suited to their metabolism. More elaborate Microbiological Incubators may also include the capability to lower the temperature (via refrigeration), or the ability to manage humidity or CO2 levels. Haier biomedical can provide a range of products such as Microbiological incubator (for bacteria and fungi), Refrigerated incubator (for bacteria that grow at low temperatures), Illumination incubator (for plant cells and tissues), CO incubator (for mammalian cells and tissues) to meet diverse requirements.

CO₂ Incubator

CO₂ incubators allow researchers to create optimal environments for cell and tissue culture-

- Control temperature, humidity, gas density
- 3 model size (80/170/258 liters volume), air jacket
- Temperature Setting Range RT+3~55°C, Temperature Uniformity±0.3°C, RH (Relative Humidity) Setting 37 °C≥90%, CO2 Range 0-20%
- 180°C Dry-heat Sterilization or 90°C moist Heat Sterilization
- New IR Sensor Control Technology for Precise CO₂ Concentration
- O₂ Control (Optional) Only for HCP-168
- Optional Accessories





> Standard Incubator

Microbiology incubators provide ideal conditions for growing microorganisms. It is widely used for bacteria, fungi and microorganism cell culture as well as enzyme digestion reaction, ligation reaction, embedded incubation and other related constant temperature experiments.

- Control temperature
- Forced convection or Natural convection, Capacity with 80/168L
- Temperature Setting Range RT+5~105°C, Temperature Uniformity±0.3°C to±0.5°C
- Precise Temperature Control, Energy-efficient and Quiet
- Large arc angle interior, easy to clean
- High quality insulation and cabinet construction



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Laboratory incubators with refrigeration are designed to hold their contents at a constant temperature. Used in pharmaceutical labs for storage of drugs and by microbiology, cell biology and plant biology labs for cell, plant, tissue and fungal cultures. Refrigerated incubators can keep samples at the ideal temperature to either promote or stop growth.

- Control temperature
- 2 model size (160/260 liters)
- Temperature set range 0~70 °C, Temperature Uniformity±0.5°C
- Quick recovery after door openings



Constant Chamber

An environmental testing chamber commonly used in laboratories and factories for environmental simulation. It consists of a temperature control module and a humidity control module.

Animal and plant tissue culture, drug stability tests, cosmetic stability tests, food shelf life tests, electronic components aging tests, packaging material stability tests. Through simulation of the different temperature and humidity conditions of the natural environment, it is widely used in in low temperature constant temperature test, culture test, environment test.

- 3 model size (256/506/756 liters), stainless steel interior chamber
- Temperature set range 5~70 °C, Temperature Uniformity±0.2°C, Humidity Setting Range 10-90% RH, Humidity Fluctuation at 25 °C&40% RH (±0.5 %RH)
- Compliant with FDR 21 CFR Part 11 and ICH Temperature and Humidity
- Concise Test Results with Accurate Temperature Control







Safety Product

Haier biomedical can provide safe, convenient and intelligent solutions to meet the needs of different industries related to the safety scenarios. We have multiple types of safety products to provide complete safety solutions for your workflow to protect samples, people and environment.

Biosafety Cabinet

Biosafety cabinets are typically used to protect samples, users and environment from substances and to prevent cross contamination. All exhaust air is filtered to remove hazardous agents such as viruses and bacteria. Biosafety cabinets are used in many laboratories including clinical and research labs. They are divided into three classes: I, II and III. Class I provides protection for the user and surrounding environment, but no protection for the sample being manipulated. Class II provides protection for the user, environment and sample, and is divided into four types: A1, A2, B1 and B2. The main differences are their minimum inflow velocities and exhaust systems. Class III, also known as glove boxes, provides maximum protection; the enclosure is gas-tight, and all materials enter and leave through a dunk tank or double-door autoclave.

Choice of cabinet therefor depends on level of protection needed for the laboratory worker and the sample of interest. Haier biomedical offer a range of products for user protection from biohazardous material, chemical vapours as well as product and process protection from cross-contamination.

Class II Biological Safety Cabinets-Type A2& B2

A class II biological safety cabinet is a partially enclosed workspace that has built in protection for the worker, the environment, and the material inside of it. Choice of cabinet therefor depends on level of protection needed for the laboratory worker and the sample of interest. Haier biomedical offer a range of products for user protection from biohazardous material, chemical vapours as well as product and process protection from cross-contamination.





- ® Type B2, 100% exhaust, width 1167mm, optional external exhaust fan, height adjustable support 680-900mm
- o Class series with single HEPA exhaust, HR30/40-IIA2, solid side, 1x AC fan, height adjustable support 680-900mm
- Intelligent Series with Single Exhaust, HR900/1200/1500-IIA2 Solid sides, 1x AC fan
- Intelligent Series with Single Exhaust Dual Fans HR900/1200-IIA2-S, Glass sides, 2 x DC fan
- Intelligent Series with Double Exhaust Dual Fans HR900/1200-IIA2-D, Glass sides, 2 x DC fan
- $\bullet Smart \ IoT Series \ with Single Exhaust, HR1200/1500/1800-IIA2-X, Solid \ sides, 2\times DC \ fans, Intelligent \ IoT \ module, Dural \ cameras \ for \ fans, Intelligent \ for \ for \ fans, Intelligent \ for \ for \ fans, Intelligent \ fans, Intelligent \ for \ fans, Intelligent \ fans, Intelligent$
- $\bullet \text{ NSF Series, HR900/1200/1500/1800-IIA2-N, full voltage coverage(} \ 110-230 \text{v} \ 50/60 \text{hz} \ \text{), 2 x DC fans }$
- Mini Biological Safety Cabinet HR700-IIA2

Class III Biological Safety Cabinets

Class III biological safety cabinets, also known as glove boxes or isolation glove boxes, are enclosed work areas designed to protect the worker, the environment, and the sample from contamination.

Specially designed for P3/ P4 laboratories to deal with infectious agents that are transmitted through aerosols or other unknown routes and are highly hazardous to the human body, animals, plants, or the environment. It's also applied in Pharmacy Intravenous Admixture Services (PIVAS) for the admixture of cytotoxic drugs (antitumor drugs) . Additionally, it can be used for the experimental cage box changing of the experimental infected animals, the airtight transport and aseptic processing of the infected cage boxes, and the surface sterilization of the new replacement cage boxes.

- Dual Negative Pressure Display
- The cabinet body is made of 304 stainless steel, which is corrosion resistant and easy to clean
- The front door can be fully opened for easy access
- Hermetic design avoids cross infection of biological samples
- The double DC fan ensures low noise, energy consumption and high reliability
- Working Area Dimensions 1796*650*750mm



Animal Containment Workstation

Animal workstation plays an important role in providing operator and environmental protection during animal handling for clinical researches. This workstation protects the operator from viruses, bacteria, fungi, parasites, hazardous substances, toxins, allergens, anesthetic gases, and physical injuries.

Applicable for laboratory animal operations (surgery, weighing, etc.) in experimental animal centers of scientific research institutions, hospitals, colleges and universities, or experimental animal research and development projects and breeding institutions.

- The debris capture reduces fan an filter's maintenance frequency and prolongs service life
- ${\bf \bullet}$ The dual system ensures maximum safety, The double fan ensures stable operation
- $\bullet \ \ \text{Protecting the operator from exposure to allergens as well as the cabinet from hair and other debrise}$
- Interior Dimension 1530*600*653mm



> Aseptic Isolator

Aseptic Isolators are critical for the provision of an isolated ISO Class 5/Grade A environment required for the manufacture of sterile products and for carrying out aseptic processes. Samples, people and environment are completely isolated to provide the strongest protection needs.

- GMP dynamic class A/ Vertical unidirectional flow, Downdraft 0.36-0.54m/s
- Working pressure 0-80pa
- Leakage rate < 0.5% under 2 times of working pressure
- External dimension 2900×975×2600mm



Clean Bench/Laminar Flow Cabinet

Laminar airflow is defined as air moving at the same speed and in the same direction, with no or minimal cross-over of air streams (or "lamina"). Compared with biosafety cabinets, it only provides product protection, no protection for operator and environment.

Featuring many patented technologies and certified to ISO146644.1 Class 5 standard, Haier Biomedical laminar flow units are suitable for a wide range of clean air applications within various sectors including pharmaceutical, clinical, life science research, photoelectric or microelectronics manufacturing.

- Clean bench, horizontal airflow HCB1600H
- Clean bench, vertical airflow HCB900V/1300V
- Cleanliness better than level 100/ Fire retardant glass fiber HEPA with filtration efficiency of 99.99% @0.3um
- Patented UV sterilization operation/power-on delay
- Pre-cleaning function/ Intelligent interlocking





> Fume Hood

A laboratory fume hood is a workspace designated for containment of hazardous reagents used in experiments or assays, or toxic fumes that result from reactions or experiments. Found in all types of labs, the primary goal of the hood is to protect the user from these reagents, and to protect other laboratory staff, animals and/or experiments from contamination. Air is pulled away from the user and filtered or released to the external environment.

Fume hoods and associated accessories such as filters are tools created to limit exposure of the experimenter to hazardous or toxic fumes, vapors or dusts. Hoods are used in analytical chemistry, microbiology, molecular biology, forensic and academic laboratories.

Haier biomedical ductless fume hood HTF-1200W/ HTF-1500W will go on the market as soon as possible.

> Safety Storage Cabinet

There are many dangers involved when storing and handling flammable and hazardous liquids in the workplace. When these dangers are underestimated, fatal incidences can occur.

Haier biomedical Safety cabinets are used to store flammable/combustible liquid chemicals, corrosive chemicals, toxic chemicals and acidic/alkaline chemicals. They are requisite safety protection equipment and widely used in universities, laboratories, scientific research institutions, and bio-pharmaceuticals to help customer safely store fuels, chemicals, and solvents to reduce the risk of fire and protect people and property.













- Capacity with 15L 415L, single or double or four door
- Flammable Cabinet / Combustible Cabinet / Weak Corrosive Cabinet / Toxic Cabinet / Acidic & Alkaline Cabinet
- Highly-visible color to identify potentially hazardous chemicals
- Keep different dangerous liquids safely stored and organized for indoor use
- Improve security with locking mechanism
- Compliance to CE, NFPA, OSHA, EN IEC 60079-0/EN 60079-2 and EN14470-1

Spark Free Refrigerator/ Freeze

Spark free refrigerator/ freezer can be used for safe storage of potentially flammable items and other temperature sensitive samples at low temperatures.

⟨▼⟩Spark Free Refrigerator 3~16°C

- ATEX II C-T6 E.U. Explosion Proof Certification
- 3~16°C Setting Temperature Range.
- One-touch Search for Historic Data.
- High Efficiency HC Cooling Technology

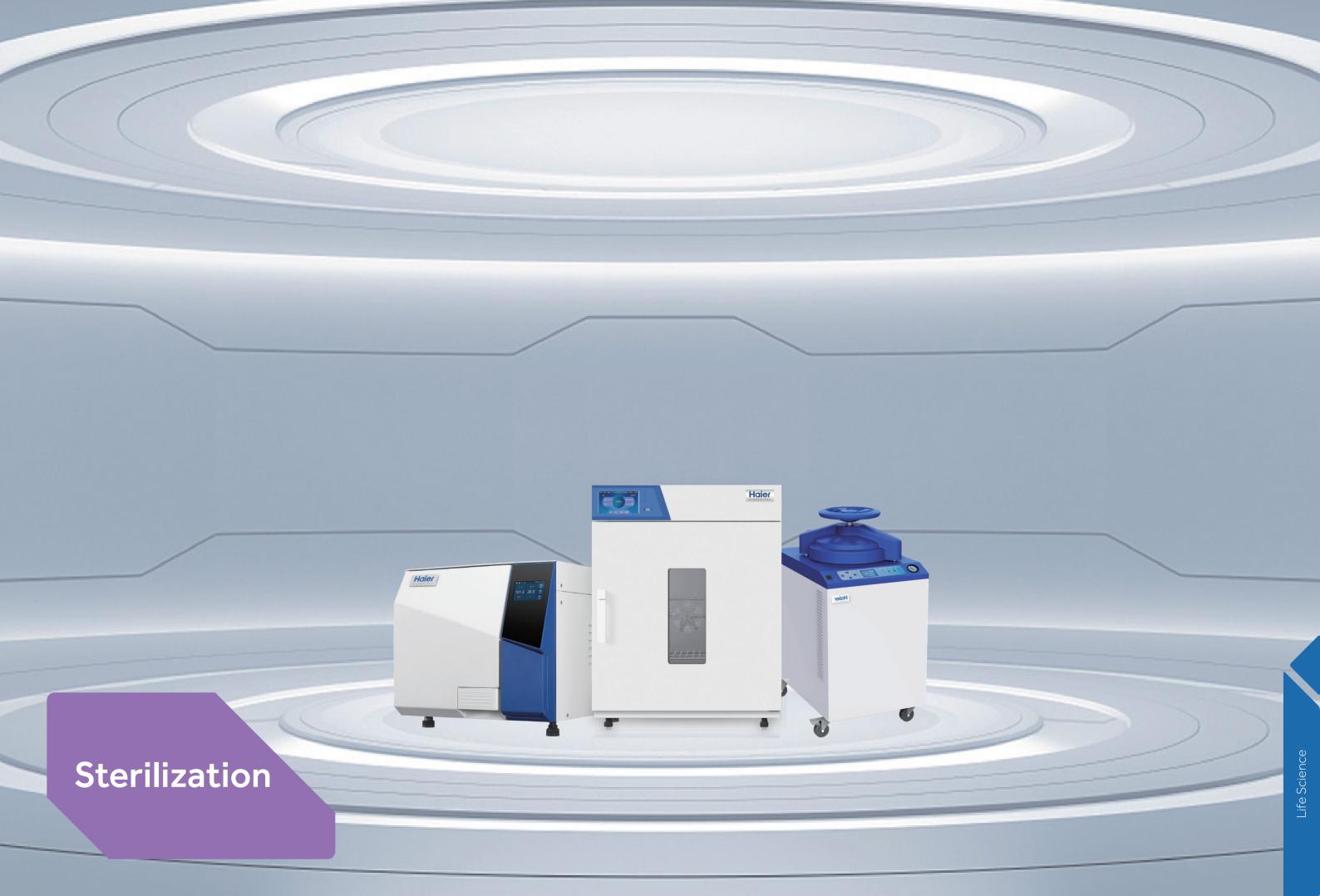




- Explosion Proof Interior (SF series with a non-anti-static liner, door lining and drawers; FL series with an anti-static liner, door lining and drawers)
- Hydrocarbon Energy-saving
- Excellent Temperature Uniformity
- Low Noise Direct cooling







Sterilization

Effective sterilization of equipment and supplies is a necessity for any laboratory, as insufficient cleaning can lead to severe consequences for both experiments and lab personnel. Several sterilization methods are available, including solvents, radiation, filtration, steam, and dry heat, with the latter two being the most common.

Haier biomedical have launched a new range of sterilization equipment to satisfy diverse demands.

> Autoclave

Haier biomedical steam sterilizer is 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, et .

- Capacity with 60/80/110L, Vertical Pressure Steam Sterilizer.
- Capacity with 18/23/45L, Benchtop Steam Pressure Sterilizer, especially used in dental clinics
- Sterilization temperature range 105-136°C.
- Cabinet and door material SUS304 stainless steel.



> Drying Oven

While steam sterilization remains the method of choice for the majority of applications, there are some cases in which dry heat is the preferred method. Drying oven is typically used for drying and sterilization of laboratory consumables, instruments and samples (such as fats, oils, powders) as well as heating and curing, drying and dehydration, heat removal, moisture content determination of materials and samples. 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.

Forced convection or Natural convection, Capacity with 60/160L.

Temperature Setting Range RT+10~200 °C, temperature Control Precision $\pm 0.1 ^{\circ}\text{C}$.

Precise Temperature Control, Energy-efficient and Quiet.

Easy to clean 304 stainless steel interior with wide arc corners.

High quality insulation and cabinet construction.



> Hydrogen Peroxide Disinfector

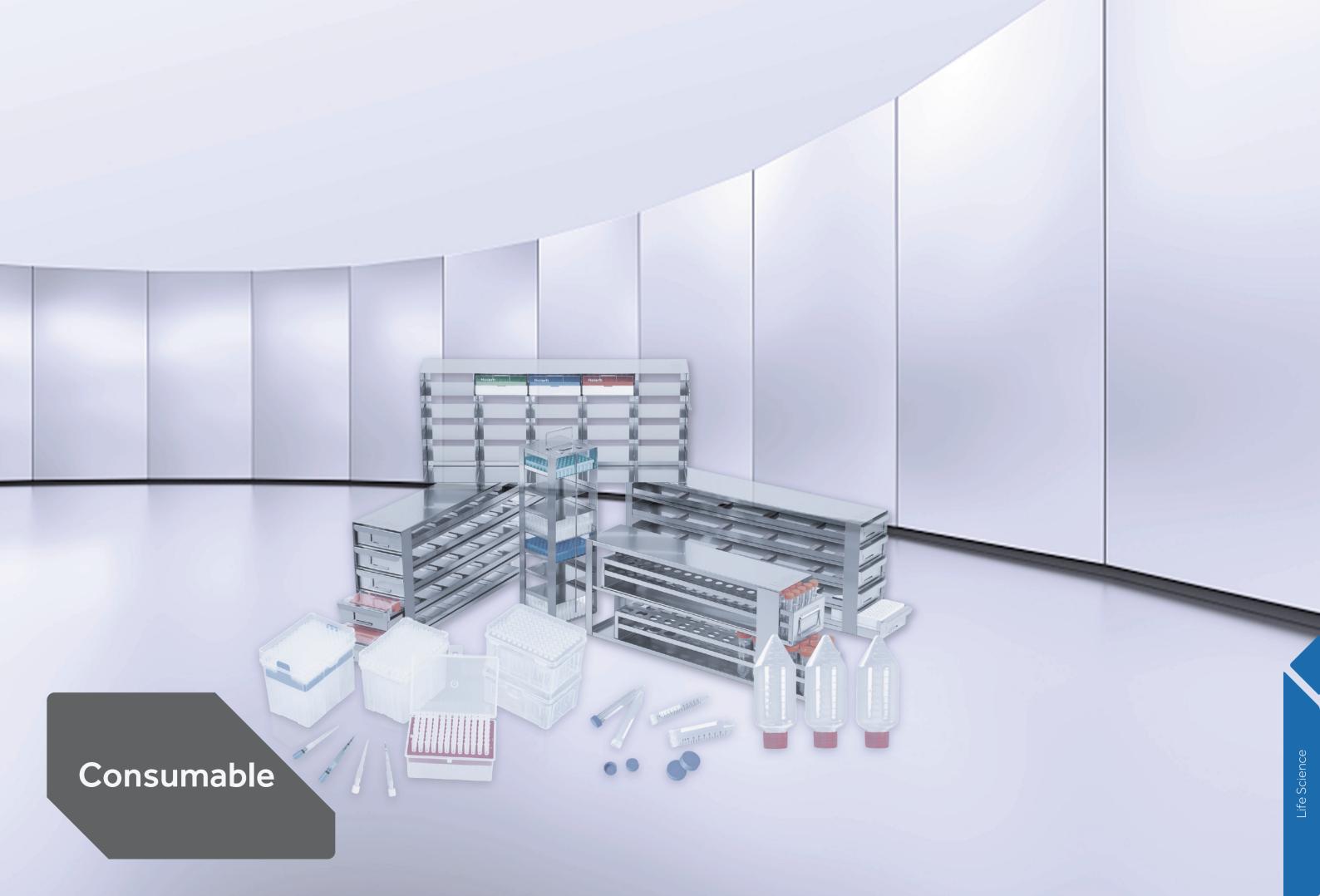
The product is applicable to biosafety cabinets, pass-through box, incubator, airlocks and channels, flow cytometer, PIVAS, microbiological incubators, robot arm work bins, desktop sealed operating bins, mobile biosafety vehicles, ambulances, first aid inflatable tents and military mobile experimental isolators as key examples.

- Vaporization Rate 1-10ml/min, Maximum Vaporization 500ml, Disinfection Efficiency >99.9%
- Safety and Environmental Protection
- Energy Saving and High Efficiency
- Mini and Portable









Consumable

Consumables are all the things the lab needs to execute its scientific work. They are a hugely diverse set of materials. We offer a wide selection of laboratory consumables, from affordable disposable pipettes, frozen racks, centrifuge tubes, PCR series, cell culture etc. Regardless of your budget and application we have the right basket to serve your needs.

> 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 10u, 200ul and 1000ul, 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.
- Free from DNase, RNase, and pyrogen.



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.



Low Retention 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
- Free from DNase, RNase, and pyrogen



Centrifuge Tube Series

Centrifuge tubes

- 15ml /50ml conical bottom design, high clarity, black clear scale line on the tube body, and a preset white writing area.
- $\bullet \ \, \text{Double threaded tube cover, easy to grip for single-handed operation and reliable sealing}. \\$
- 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.
- Free from DNase and RNase.
- 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.



Microcentrifuge Tubes

- 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.
- \bullet Can withstand a temperature range: -80° C -120° C -this is used for centrifuge, sourced from Kangsheng, I think shall not change. and suit high-speed centrifugation.



Centrifuge Bottle

- 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
- $\, \bullet \,$ Clear scale for accurate and convenient data reading.
- Sterile and free from DNase, RNase, and pyrogen.



> PCR Series

PCR Tubes

- 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
- Free from DNase, RNase, pyrogens, PCR inhibitors
- Suitable for the mainstream PCR and real-time PCR instruments





PCR 96-Well Plates

- High-quality polypropylene, manufactured in accordance with high quality standards to produce a reliable plate, delivering excellent uniformity across experiments.
- $^{\rm f 0}$ With a maximum volume of 0.3 ml, it is suitable for 0.2 ml PCR instruments.
- The thin wall of the tube ensures uniform heat transfer and superior light transmittance.
- The whole surface of the plate is srnooth firm. and non-deformation.
- Free from DNase, RNase, and pyrogen.



>Cell Culture

Cell Culture Dish

- Cell culture dishes are ideal for all types of culturing. Flat transparent surface for distortion-free observation under microscope. Numeric indicators at the bottom for easy identification of cell locations
- Free from pyrogens and endotoxins
- Made from high clarity medical polystyrene
- Flat transparent surface for distortion-free observation under microscope
- Electron beam sterilization
- Vacuum Gas Plasma treated for uniform and consistent cell attachment
- Stackable for easy storage and handling



Cell Culture Bottle

- Packing in sterile self-sealing bag
- Stackable design, safe & stable, easy for storage
- Clear lot numbers for batch traceability
- Unique patent design, no dead angle in bottle
- High definition, 100% polystyrene
- Electron beam sterilization
- Free from pyrogens and endotoxins
- Permeable cover (filter cover), 0.22pm hydrophobic membrane to facilitate air exchange and prevent microbial pollution



Cell Culture Plate

- Electron beam sterilization
- Vacuum plasma treatment
- DuPont Tyvek hot melt independent packaging, moistureproof, waterproof
- Free from pyrogens and endotoxins
- Made from high clarity, 100% polystyrene
- Clear lot numbers for batch traceability
- Products are available in bags or with brackets



Erlenmeyer Flasks with Flat Cap

PETG/PE flat-bottomed erlenmeyer flask saves preparation time and avoids the risk of contamination, making it an ideal choice for cell suspension culture, medium configuration, mixing and storage. The high clarity PETG/PE is firm and hard to crack, which reduces any personnel safety risks and is an ideal choice for shaker culture applications.



>Frozen Rack

Standard Frozen Rack

- Made of high quality 304 stainless steel
- The rack is stable when used at high temperatures, ultra low temperature and corrosive environments





- Public Health-Vaccine Solution

25/26

Public Health-Vaccine Solution

It is not always easy to deliver vaccines to the ones who need it the most (from vaccine transportation, preservation, management to inoculation). However, Haier Biomedical can ensure vaccine safety and security across the entire cold chain network (from manufacturer to the inoculator) and continue to strive and meet the challenge of vaccine security to the last mile.

Cold room, vaccine refrigerators & freezers and transport coolers are combined to work for the whole process of vaccine storage, preservation and transportation. We can provide precise temperature control and reliable operation featuring multiple alarms and safety features for optimal product security. You can choose from multiple vaccine refrigerators, cold room and transport coolers models that are suitable for different conditions.

Vaccine Storage and Preservation

Cold Room

Generally used for storing large quantities of temperature-sensitive products such as vaccines and drugs. Haier Biomedical Cold Rooms are equipped with WHO/PQS qualified refrigerant, used for national or regional vaccine centers, hospitals and biopharmaceutical industries suitable for immunization project.

Solar Direct Drive Cold Room

Using solar cooling, combined with ice lining technology, maintains the temperature in the cold room at 2-8°C throughout the day.

- Power off and maintain 2-8°C for more than 48 hours at 43°C ambient temperature.
- Solar photovoltaic power generation system
- Solar direct drive compressor without battery
- Supporting single phase 110-220V AC power supply



Walk-In Cold/ Freezer Room

The complete unit is also designed for installations in housed areas such as warehouses that need to meet specific temperature standards. In the Walk-In Cold Room (WIC), the interior temperature can be controlled within 2 °C to 8 °C. In the walk-in freezer (WIF), the temperature is set at -20°C.

- CFC-free high-density foam insulation
- Temperature recorder and forced air-cooling system
- Alarm system
- Automatic defrosting



Solar Direct Drive Vaccine Refrigerator/Freezer

In addition to the cold chain storage solution at a national level, we also have following solutions at the district and facility station level to supplement. Haier Biomedical solar-powered refrigerators are vital to remote, rural and other effected regions in order to ensure the right temperature for vaccines even during power shortages. Haier Biomedical produces a range of chest and upright refrigerators and freezers available in many different sizes with WHO/PQS certificate.

- Chest refrigerator, 3 models HTC-40/110/112, with Vaccine Storage Capacity 22.5/59/75L
- Upright refrigerator, 2 models HTC-120/240, with Vaccine Storage Capacity 100/200L.
- Combined refrigerator and freezer, chest model HTCD-90, Upright model HTCD-160, with Vaccine Storage Capacity 37.5/100L
- Freezer for Icepacks, chest model HTD-40.
- Optional 30 Days Temperature Logger or Remote Temperature Monitoring Device (RTMD).





Ice-lined Vaccine Refrigerator

Haier Biomedical Ice-Lined Refrigerators are specifically designed to secure safety and potency of sensitive vaccines which need to be $cooled \ at a \ controlled \ and \ stable \ temperature. \ Equipped \ with \ a \ solar-powered \ display \ panel, \ rated \ for \ a \ wide \ ambient \ range \ of \ 5-43^{\circ}C, \ this$ refrigerator is appropriate for unstable electricity supply regions.

- Chest refrigerator, 3 models HBC-80/150/260, with Vaccine Storage Capacity 61/122/211L.
- Upright refrigerator, 2 models HBC-120/240, with Vaccine Storage Capacity 100/200L
- Combined refrigerator and freezer, chest model HBCD-90, with Vaccine Storage Capacity 30L.
- Optional 30 Days Temperature Logger or RTMD or voltage stabilizer.



⟨▼⟩ Vaccine and Icepack Freezer

 $Haier\ Biomedical\ Vaccine\ and\ Icepack\ Freezer\ is\ applicable\ for\ cryogenic\ storage\ of\ vaccines\ and\ other\ biological\ reagents\ between\ -15^{\circ}C$ and -25°C in hospitals, CDC, vaccination stations and other units in areas with insufficient or unstable power supply.

- Upright freezer, 2 models HBD-86/265, with Vaccine Storage Capacity 61/211L, icepack Freezing Capacity 17.6/32.4 kg per24h, holdover Time at 43°C 7h18min/11hrs25min.
- Hydrocarbon energy-saving, Optimized refrigeration system.
- Optional voltage stabilizer or RTMD.
- CE, WHO/PQS certificate.





> Vaccine Transportation

Cold chain transportation of vaccines, drugs, biological products, medical raw materials, fresh food and other products have strict requirements on temperature control. Haier Biomedical vaccine transport solution can ensure vaccine safety and security to the last mile.

Refrigerated Vaccine Vehicle

This product is suitable for cold chain transportation of drugs, vaccines, biological products, medical raw materials, fresh food and other products with strict requirements on temperature control, especially suitable for the vaccine transport in areas with poor road conditions.

- Complies with WHO PQS Specification E002/ RV01.2.
- Double drive refrigeration system, can be powered by diesel generator or 220V AC.
- +2°C~+8°C accurate temperature control, high uniformity.
- Low fuel consumption, high horsepower and low transportation cost.



⟨⟨ Vaccine Transport Cooler |

Haier biomedical can provide range of products to achieve -80°C to +8°C full temperature transport solutions.



Temperature range -80°C

- Vaccine Carry Transport Solution, Suitable for storage & transport of mRNA vaccine (-80°C).
- Loading volume (10L), Neck opening of the container (125mm/216mm), Optional temperature recorder, Static storage life 60/20 days, Insulation medium: Dry ice.

Temperature Range +25°C~ -25°C

- Intelligent Control Cold Chain Transport Cooler BW series -25°C~-10°C /2°C -8°C/15°C-25°C.
- Payload size with 8/12/18/36/64L, VIP insulation technology, light weight, easy to carry.





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Temperature Range +22 °C ~ -20 °C

- Active Cooling HZY-40Z.
- Capacity 33L, Forced air cooling, HFC refrigerant, AC 110-240V 50/60Hz DC12/24V, Optional USB.

Temperature Range 0°C ~ 10°C

 $\label{thm:medical} \mbox{Medical Transport Cooler FS series, Cold chain transportation for samples, reagents, blood products, specimens and drugs$

FS-5LS/ 12LS/ 18LS/ 35LS/ 54LS/ 100LS/ 110LS (0° C \sim 10° C), Duration \geq 4h, 4 pieces of Icepacks, Real-time Temperature Display, Non-pollution material with superior temperature control performance



> Vaccine Safety - Remote Temperature Monitoring Solution

Temperature Monitoring Equipment

Based on GPRS, 4G, LoRa and other communication technologies, Haier Biomedical provides three RTMD devices: U-COOL, U-COOL-LoRa and U-COOL Pro, which can meet customers' demand for real-time monitoring of temperature changes of cold chain equipment and facilitate customers to remotely monitor the running status of cold chain equipment through computers, mobile phones and other electronic devices. Applicable for the monitoring of the stored items in the fridge, cold rooms, refrigerated vehicles, transport coolds liquid nitrogen containers in hospitals, disease control centers, blood stations, laboratories, warehouses, pharmacies and machine rooms.

- Remote monitoring function: users can remotely monitor data through the Web terminal and APP
- Power failure detection function (LoRa)
- Door opening and closing detection: the information uploaded to the platform through 2G/3G/4G network (U-COOL Pro and LoRa)
- Buzzer and LED flashing alarm/ SMS, voice and email alarms
- Data export: local storage of 60,000 pieces of exportable data in PDF







Haier biomedical can also provide 30-day electronic temperature logger HETL-01 which can be placed in cold box or vaccine refrigerator to provide continuous, real-time, whole-process traceable monitoring for vaccine safety storage. It is approved by WHO PQS and sourced by WHO procurement.

- Temperature range -20°C~ +50°C
- \bullet Accuracy ±0.5°C for -20°C~ +40°C, ±1°C for the others, LCD display
- The bracket is included as standard

▼ Vaccine EMS (Equipment Monitoring System)

The physical address of the global equipment monitoring system server is located in Europe. Users can remotely log in the system using only the user name and password to view temperature and humidity data, alarm information, location information, device management, and data export. If the temperature exceeds the threshold, the system sends SMS, emails and phone calls to the management personnel. The system has the characteristics of strong data processing ability, high reliability and fast operation, and users can monitor the cold chain related data in real time.



- Blood Treatmen

Haier biomedical are devoted to helping our blood bank customers deliver the highest standard of patient care by providing professional blood storage and processing solutions for different scenarios and leverage the wonders of science and technology to protect life, in a relentless effort to create a better life for people around the world.

With rich experience in providing a suite of innovative medical technology solutions, Haier biomedical can offer a full range of blood bank equipment including refrigerators, freezers, transport coolers, platelet storage, plasma separator, plasma blast freezer etc.

→ Blood Storage and Preservation

Appropriate blood storage is vitally important. The right blood storage solution helps your facility address blood demands and requirements. Haier biomedical can provide automated blood management surveillance of the overall process from blood collection to clinical use or from vein to vein, mainly include blood network solution, hospital solution, blood station product and hospital-blood department products

Blood bank Refrigerator

Haier Biomedical blood bank refrigerator is specially designed to store whole blood and blood derivatives. These refrigerators can also be used to store pharmacy and biological materials in hospitals and laboratories. The temperature range is 2°C - 6°C . Through microcomputer control, the temperature inside the unit is controlled within 4±1°C with temperature control accuracy of 0.1°C, combined with multiple safety guarantees to keep blood safe.

- Automated blood bank refrigerator with LCD series, HXC-149T/429T/629T/1369T, Loading Capacity (450ml bags) 60/195/312/324, Drawer-Type, Multiple storage partitions
- Automated blood bank refrigerator with LED series, HXC-149/429/629/1369, Basket-Type
- Standard blood bank refrigerator HXC-158/158B, Drawer-Type or Basket-Type, Loading Capacity (450ml bags) 84
- Glass door HXC-106, Loading Capacity (400ml bags) 54
- Blood bank refrigerator HXC-279, 5 inner doors, Long insulation time, 15 blood baskets with labels for a maximum storage of 120 bags (400ml).





We can also provide series of automated management refrigerators specially used at blood bank center, hospital and mobile blood storage points set up by blood stations etc.

- Unattended self-help blood distribution refrigerator HXC-629ZZ, Loading Capacity (450ml bags) 72
- RFID series HXC-149R/ 429R/ 629R, Loading Capacity (450ml bags) 18/60/88





Solar Direct Drive Blood Refrigerator

Haier Biomedical solar direct drive blood refrigerator are specifically designed to secure safety of whole blood, medicines, biological products and other laboratory products that need to be stored at 4°C. Equipped with a solar-powered display panel, rated for a wide ambient range of 5-43°C, this refrigerator is appropriate for areas that have power shortages.

- Upright, Precise temperature control at 2°C ~ 8°C, direct cooling, gross volume 240L
- Long holdover time: 100 hours at 43°C and 7 days and nights at 32°C
- Optional RTMD /Stainless steel drawer/ Automatic drainage design
- Grade A anti-freezing protection & CE, WHO/PQS certificate

Blood /Fluid Warming Cabinet

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

- Upright, one glass door, capacity 111L, Forced air warming, LCD touch screen
- Temperature range 26-50°C, above ambient temperature
- Fast and efficient heating
- Standard UV sterilization for effective sterilization and other sterilization options available.
- Multiple over heating protections to ensure product viability

Blood Transportation

The transport cooler is a specially designed transport temperature/ humidity controlled storage device with integral wireless monitoring to transport blood products and biological samples.

Transport Cooler for Biological Products (Blood) 2°C ~ 10°C

Active Cooling Solution

- Blood bags capacity 8/15
- Active semiconductor cooling, energy saving and environment friendly
- Precise temperature control at 2°C ~ 10°C for transfer and 2°C ~ 6°C for storage
- Built-in, 4°C phase change PCM, ice row cooling, long-term insulation after power failure, to ensure the safety of specimen
- Multiple fault alarms, safer to use
- The power supply is equipped with a car cigarette lighter plug, which is convenient for vehicle Transport.

CE certificate for HZY-8Z/15Z

















CE

Passive Cooling Solution

- Blood bagscapacity5/35
- Real-time display of insidetemperature
- CE certificate for HZY-35B



CE

CE

Transport Cooler for Infectious Materials 2°C ~ 10°C

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. Haier biomedical can provide solutions to ensure the viability of the samples and the safety of transport personnel. It is applicable for cold chain transportation of samples, reagents, blood products, specimens and drugs, especially for the safe transportation of Category A (UN2814, UN2900), Category B (UN3373) infectious substances.

Active Cooling Solution

- Three layer packaging system
- Main container
- Auxiliary Container (Pressure sealed tank)
- Outer packaging

Passive Cooling Solution/Biosafety Transport Cooler

- Passive cooling, long heat preservation time, suitable for air transportation
- PCM ice row, frozen at 4oC, 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



> Plasma Apheresis System

As one of the supporting equipment to produce medical and biological products, the plasma separator plays an important role in plasma collection and separation in plasma stations and hospitals.

Haier biomedical XJ-III plasma separator applies modern and advanced computer automated blood processing and separating technology, peristaltic pump blood delivery technology and blood processing safety monitoring technology to separate and collect plasma components in human blood, including source plasma and clinical fresh frozen plasma. This solution support variety of customers, including blood centers, research institutions, medical institutions and pharmaceutical companies. The process is completely traceable with intelligent interconnection method; this design improves the safety and security for the donor, thus enhance experience for donors.

- Suitable for plasma stations and mobile collections with limited space
- Intelligent identification, safe and effective error prevention system, prevents manual process
- The whole process of blood component (plasma) separation is traceable.
- Disposable Plasma Apheresis Set (Puncture needle, tubing set, separator cup, plasma collection bag etc).
- Available consumables are versatile and compatible with multiple models
- Disposable plastic blood bags.





To avoid damage to cell walls caused by a slow freezing speed, it is necessary to freeze the fresh plasma quickly so that the plasma activity can be maintained. The plasma rapid-freezing device/blood plasma shock freezer is mainly intended for the quick-frozen treatment of blood plasma or biological samples to a core below -30°C within 1 hour in blood stations, hospitals or medical institutions.

The shock freezer uses the cold plate as an evaporator to directly contact with the plasma bag for heat exchange, thus realizing rapid-freezing of plasma. Haier biomedical can provide integrated design or split type design blast freezers with different capacity to meet your demands.

- Integrated design XSD-24FL, four universal casters, easy to move.
- Split type design XSD-24WFL, lowered indoor noise and heat dissipation, more
- Dual rapid-freezing system XSD-48WFL, large capacity design, doubled volume to improve rapid-freezing efficiency.
- Rapid-freezing temperature can be reduced to -60°C, superior performance, the central temperature of full-load plasma can be quickly frozen to below -30°C within 45 minutes.
- Low-temperature storage in -30°C.
- Hot gas defrosting.

> Plasma Freezer

Haier biomedical plasma freezer can provide superior temperature uniformity and reliability for safe storage of plasma. We deliver optimized control in below important areas: temperature, noise, energy and RIFD solution with real-time IoT technology.

- Capacity with 1280L/576 bags loading quantity, temperature range -10 ~-35°C, 10-in large screen
- RFID radio frequency
- Multiple alarms, safe and reliable
- NFC combined with an electromagnetic lock

Platelet Incubator with Agitator

Life-saving platelet products are critical to patient care. After thawing, platelets need to be kept in a constant temperature environment of 20°C to 24°C while waiting for infusion to patients. Haier biomedical can provide excellent performance for optimized platelet storage. Our incubator includes an integrated platelet agitator and is designed to create the optimal storage environment of platelets after collection. It is suitable for hospitals, blood stations and research applications.

- HXZ-1369, capacity with 18 layers, 216 bags, 3 sets of oscillators, suitable to Hospital blood transfusion department and blood bank
- HXZ-149, capacity with 9 layers, 36 bags, suitable to Blood bank
- Reliable Oscillation, Oscillation frequency: 60±5 times/min; LCD screen; with lamp
- ullet Semiconductor temperature control, internal temperature is maintained at 22°C±1°C
- USB/optional printing function















Health Care Product

Health care product refers to medical equipment for the purpose of testing, treatment, health care and rehabilitation. Most household medical equipment is small in size, easy to carry, easy to operate, its professional degree is no less than large medical equipment. Haier Home Care manufacture base is constructed in Jiangxi Province China, we can provide a range of home medical equipment to meet different needs.

→ Air Purification Sterilize

Bacterial and viruses inactivation rate > 99.9% to reduce the infection rate of the vaccination staff; can reach class 100000 cleanliness after continuously operating for 1 hour and release healthy negative ions, providing clean air for users to experience forest air quality. It is especially applicable for schools, community hospitals etc.

- Bactericidal factor: ultraviolet/ plasma / photocatalyst /nano silver ions
- Applicable space: ≤60m³
- Product advantages: multiple disinfection + negative ions, Internet of Things, air quality monitoring (VOC, temperature and humidity, particulate matter), human-machine coexistence
- $\small \bullet \ \ Sterilization\ efficiency: Staphylococcus\ albus > 99.99\%, natural\ bacteria > 93\% \\$

Dimensions: 370x400x796mm



CE

CE

> Portable Oxygen Concentrator

Medical oxygen administered by the concentrator is beneficial to cure respiratory, heart, cardiovascular and chronic pulmonary diseases as well as other diseases requiring concentrated oxygen as key examples. It adopt high quality molecular device and use low noise compressor as the power to achieve efficient oxygen separation. Portable oxygen concentrator produces oxygen quickly, oxygen concentration is high, suitable for all kinds of people oxygen therapy and oxygen health care.

- Product Model with CP303/CP502/CP801/CP101.
- Purity 0.5-3L/ min/ 0-5L/ min/ 0-8L/ min/ 0-10L /min 93±3%; high concentration oxygen generation
- High quality molecular sieve, durable and efficient, Multiple intake filtration Elegant design
- ${\color{blue}\bullet}$ High quality compressor, low noise level, low power consumption and long service life
- One-key start Light-touch switch
- Warning Function High definition display
- Dow Corning material silicone tube, safe and odorless



Infrared Thermometer

Haier biomedical medical infrared thermometer AET-R1B1 has functions of rapid induction and accurate measurement. Ergonomic design makes it comfortable to hold. The body is solid and stable, handiness comfortable grip, firm grasp.

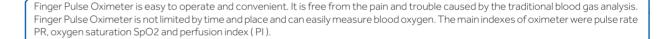
- Measurement range 32.0-42.2°C, resolution 0.1°C, accuracy ± 0.2 °C (35.0 $^{\circ}42.0$) ± 0.3 °C (32.0 $^{\circ}$ 34.9) / (42.1.0 $^{\circ}$ 42.2)
- Automatic power off 60s, power supply 2*AAA (DC 3V)
- Highly sensitive infrared probe
- Noncontact measurement
- 1 second can be measured

→ Blood Pressure Monitor

Blood pressure is one of important indicator to reflect human blood circulatory system. The home blood pressure monitor is easy to use frequently. Haier biomedical automatic blood pressure monitor/Sphygmomanometers can measure the upper and lower pressure value simultaneously by fuzzy logic control.

- The screen of sphygmomanometer reaches 3.5 inches and the large font design is convenient for users to read
- The built-in MCU chip bring accurate results and comfortable experience
- Product Size 132mm×112mm×71mm
- Memory 2*99 groups
- Measurement range Static pressure: 0~290mmHg (0~38.66kPa); Pulse: 40~180 beats/min
- Power supply 4*AA battery (DC 6V)
- Automatic power-off 30s

> Finger Pulse Oximeter



- 3 models YK-80C, YK-82C, BSX 255
- Power Requirements 2pcs AAA-size batteries
- Display mode four directions
- SpO2 (70-99%) PR (30-240BPM) for YK-80C, YK-82C/SpO2 (36-99%) PR (30-250BPM) for BSX 255

AC Compressor Nebulizer

Compared with the traditional means of medication for asthma and other respiratory diseases, nebulizer atomizes the medicine liquid into tiny particles, and the medicine is deposited into the respiratory tract and lung through breathing inhalation, thus achieving painless, rapid and effective treatment.

Haier compressed air atomizer C5 uses compressed air to form high-speed air flow through the small pipe mouth, and the negative pressure generated drives the medicine liquid to be sprayed onto the obstruction together.

- Power Source AC 230V, 50Hz / AC 110V, 60Hz, (USA) / AC 110V, 50/60Hz (Japan)
- Free Flow Rate 4L/min-7L / min
- Nebulization Rate ≥0.3 ml / min
- Particle Size(EN13544-1) ≤ 3 um
- Capacity of Medicine Cup ≤8 ml, Drug Residual≤ 0.1ml
- Wait time 8s
- Spherical shockproof footpads, more stable and more effective noise reduction
- Double row waterproof grooves, water will flow out quickly and will not deposit in inner of main unit even if water enters
- Heat emission hole, protect the machine, prolong the life



