



Multiple alarms



Hydrocarbon Refrigerant
& Eco-friendly Insulation Foam



High performance in
temperature uniformity



Intelligent frequency
conversion technology

TwinCool Frequency Conversion ULT

The Twincool Frequency conversion range of freezers utilize two key innovations to delivery outstanding sample security and energy efficiency – dual cooling and adaptive refrigeration technologies.



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Haier Biomedical



Haier Biomedical
International



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International

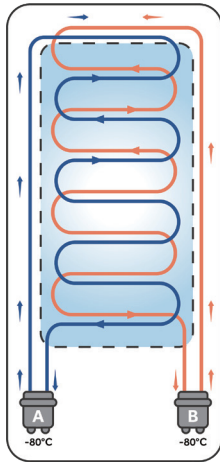


Haier Biomedical
International



Haier Biomedical
International

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



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



Environmental Protection

Environmentally friendly hydrocarbon refrigerant and sustainable insulation to reduce carbon footprint



Optional IoT System

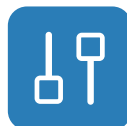
The optional IoT monitors the operating status of the equipment in real time. Equipped with multiple alarm functions and a self-diagnostics system to identify and warn users to ensure sample safety

Ergonomic Design



Low Noise Design

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



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



Large Loading Capacity

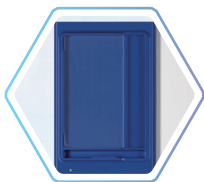
DW-86L578BPST: 40,000 cryovials (2ml)
DW-86L728BPST: 50,000 cryovials (2ml)
DW-86L828BPST: 60,000 cryovials (2ml)



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

Product Parts



Ergonomic design

Document holder for easy storage of documents



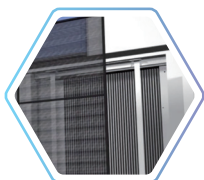
High quality door opening experience

The ergonomic chamfer design of the handle ensures smooth operation and maximum durability



Multiple safety lock

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



Magnetic filter screen

Filter screen is easy to clean



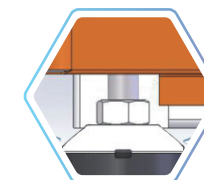
Microcomputer control

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



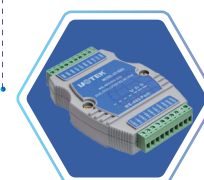
Multiple alarms

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



Adjustable feet

For easy positioning and levelling



Networking function

Equipped with RS485 interface to connect multiple freezers



Product Accessories (Optional)



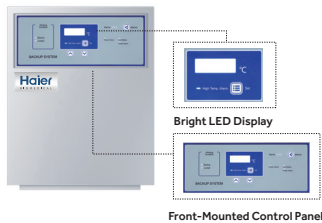
Temperature Recorder

- Front-mounted
- For independent temperature monitoring



CO₂ Backup System

- Small footprint, lightweight and easy to install
- User-adjustable temperature settings
- Simple programming and operation
- Flexible design – compatible with any ULT freezer equipped with an access port
- CO₂ injection pipe integrated with a filter to prevent blockage of the CO₂ backup system



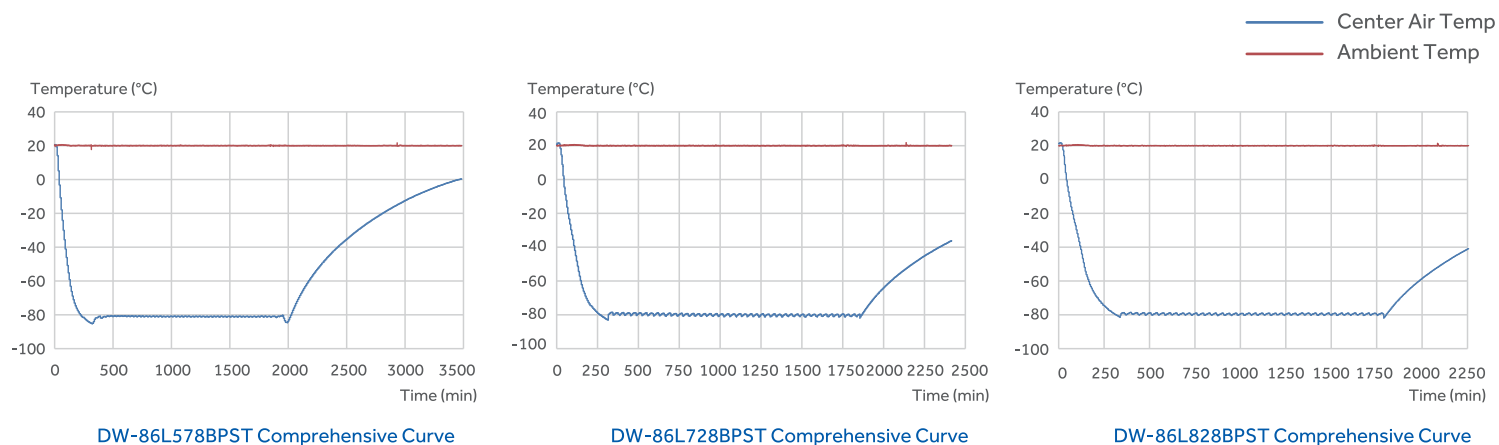
LN₂ Backup System

- Interlocked design to turn off LN2 injection upon door opening
- Protection circuit to prevent battery overcharging
- Lightweight and portable design, suitable for mounting on top of a freezer
- Alarm functions including low battery and sensor fault

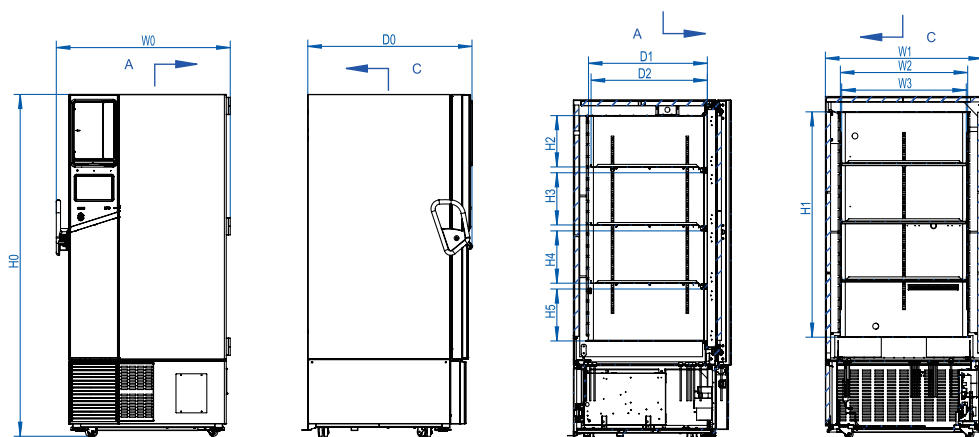
Rack Type	ULT Freezer	Freezer Rack						Freezer Rack Quantity	Box Capacity
		CAT.NO.	Model	Material	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H)(mm)		
 Sliding-drawer freezer rack	DW-86L578BPST	433001	(EXP) DCJ-55-B (SUS201)	SUS201	5*5	2 inch	686*141*291	16	400
	DW-86L728BPST							20	500
	DW-86L828BPST							24	600
	DW-86L578BPST	433002	(EXP) DCJ-55-B (SUS304)	SUS304	5*5	2 inch	686*141*291	16	400
	DW-86L728BPST							20	500
	DW-86L828BPST							24	600

Rack Type	ULT Freezer	Freezer Rack						Freezer Rack Quantity	Box Capacity
		CAT.NO.	Model	Material	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H)(mm)		
 Side-access freezer rack	DW-86L578BPST	4330012	(EXP) DCJ-55-A (SUS304)	SUS304	5*5	2 inch	686*141*291	16	400
	DW-86L728BPST							20	500
	DW-86L828BPST							24	600

Typical Performance Characteristics at 20°C Ambient



Product Size Drawing



Remark

W0=Total Width

W1=Freezer Width

W2=Inner Cabinet Width

W3=Inner Cabinet Shelf Width

H0=Total Height

H1=Inner Cabinet Height

H2=1st Floor Height

H3=2nd Floor Height

H4=3rd Floor Height

H5=4th Floor Height

D0=Total Depth

D1=Inner Cabinet Depth

D2=Inner Cabinet Shelf Depth

Parameter	W0	W1	W2	W3	H0	H1	H2	H3	H4	H5	D0	D1	D2
Model													
DW-86L578BPST	895mm	800mm	620mm	602mm	1980mm	1310mm	298mm	303mm	303mm	301mm	998mm	716mm	700mm
DW-86L728BPST	1046mm	946mm	766mm	750mm	1980mm	1310mm	298mm	303mm	303mm	301mm	998mm	716mm	700mm
DW-86L828BPST	1145mm	1050mm	870mm	854mm	1980mm	1310mm	298mm	303mm	303mm	301mm	998mm	716mm	700mm

Specifications

Model		DW-86L578BPST	DW-86L728BPST	DW-86L828BPST
Technical Data	Cabinet Type	Upright	Upright	Upright
	Ambient Temperature (°C)	10-32	10-32	10-32
	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 Touchscreen	LCD Touchscreen	LCD touchscreen
Electrical Data	Power Supply (V/Hz)	100-230/50/60	100-230/50/60	100~230/50/60
	Max Power (W)	1100	1100	1400
Dimensions	Capacity (L/Cu.Ft)	578/20.4	728/25.7	828/29.2
	Net/Gross Weight	kg lbs	325/355 716.5/782.6	350/385 771.6/848.8
	Interior Dimension (W*D*H)	mm in	620*716*1310 24.4*28.2*51.6	766*716*1310 30.2*28.2*51.6
	Exterior Dimension (W*D*H)	mm in	895*998*1980 35.2*39.3*78.0	1046*998*1980 41.2*39.3*78.0
	Packing Dimension (W*D*H)	mm in	953*1071*2127 37.5*42.1*83.7	1105*1066*2117 43.5*42*83.3
	Cabinet Width (without handle and hinge)	mm	800	946
Functions	Container Load (20'/40'/40'H)		12/24/24	10/20/20
	High/Low Temperature Alarm		Y	Y
	Hot Condenser Alarm		Y	Y
	Power Failure Alarm		Y	Y
	High/Low Voltage Alarm		Y	Y
	Sensor Error Alarm		Y	Y
	Low Battery Alarm		Y	Y
	High Ambient Temperature Alarm		Y	Y
	Door Ajar Alarm		Y	Y
Accessories	Start-up delay		Y	Y
	Caster		Y (4)	Y (4)
	Leveling Feet		Y (2)	Y (2)
	Porthole		2*rear, (25mm) diameter	2*rear, (25mm) diameter
	Inner Doors		4	4
	Shelves		3- stainless steel adjustable shelves	3- stainless steel adjustable shelves
	Shelf Dimensions (W*D) (mm)		606*650	752*650
	Max. Load per Shelf (kg)		72	90
	Freezer Racks Quantity (2" boxes)		16	20
	Capacity (2" boxes)		400	500
	USB Interface		Y	Y
	Remote Alarm		Y	Y
	5V Power Supply Port		Y	Y
	Temperature Chart Recorder		Optional	Optional
	RS232/485 Port		N/A / Standard	N/A / Standard
	CO ₂ Backup System		Optional	Optional
	LN ₂ Backup System		Optional	Optional
Others	Certifications		CE,UL,MDR,ACT,ENERGY STAR	CE,UL,MDR,ACT,ENERGY STAR