



Your Haier Biomedical Partner



ULT Freezer Solutions

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24-06-2025_v6



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Note: If a slight difference occurs between pictures and actual products, please refer to actual products. Our company reserves the right of final interpretation of this brochure, please contact us for any further information if required.

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**-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 $\pm 5^{\circ}\text{C}$ 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 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.



Follow the QR code and learn more about the Cryo Freezer DW-150W209 from Haier Biomedical

Specifications

Model		DW-150W209A	DW-150W209
Technical Data	Cabinet Type	Chest	Chest
	Ambient Temperature (°C)	10~28	10~28
	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 Touchscreen	LCD Touchscreen
Electrical Data	Power Supply (V/Hz)	208~230/60	220~240/50
	Max Power (W)	2000	1750
Dimensions	Capacity (L/Cu.Ft)	209/7.4	209/7.4
	Net/Gross Weight	kg	260/295
		lbs	573.2/650.4
	Interior Dimension (W*D*H)	mm	667*462*677
		in	26.3*18.2*26.7
	Exterior Dimension (W*D*H)	mm	1650*860*1010
		in	65.0*33.9*39.8
	Packing Dimension (W*D*H)	mm	1810*960*1170
		in	71.3*37.8*46.1
Functions	Cabinet Width (without handle and hinge)	mm	667
	Container Load (20'/40'/40'H)		12/24/24
	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
Accessories	Door Ajar Alarm	Y	Y
	Start-Up Delay	Y	Y
	Caster	Y(4)	Y(4)
	Leveling Feet	Y(2)	Y(2)
	Porthole	1*Rear, (25mm) Diameter	1*Rear, (25mm) Diameter
	Inner Doors	2	2
	Freezer Racks Qty (2" boxes)	12	12
	Capacity (2" boxes)	144	144
	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	N/A	N/A
	LN ₂ Backup System	Optional	Optional
Other	Certification	UL	CE, MDR

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

UltraEco ULT Freezer



Super energy-saving technology and precise temperature control. Designed to provide long-term storage for various biological samples and sensitive items to ensure the integrity and stability of precious materials. With its outstanding energy-saving features, it not only reduces electricity consumption but also contributes to a greener environment.

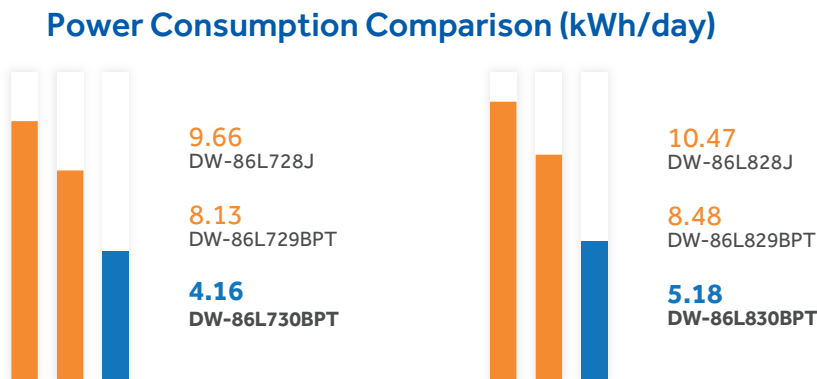


DW-86L730/830BPT

Optimal Energy Efficient Performance

HC refrigerant, frequency conversion technology and optimized structural design combine to lower operating costs compared to previous generation by up to 50%.

ENERGY STAR certified with world-leading energy efficiency



*Above power consumption base on ENERGY STAR report

Significantly Enhanced Performance

The upgraded compressor, along with the enhanced refrigeration system and improved insulation structure, significantly elevates the performance of UltraEco series. In comparison to the previous generation, UltraEco series features lower energy consumption, a longer holdover time, faster temperature recovery time and re-entry time, as well as reduced noise. All these enhancements will bring customers a completely new experience.

49%

⚡ Decrease in Energy Consumption

80%

🕒 Faster Re-Entry Time

42dB(A)

🔊 Lower Sound Level

*Above data based on DW-86L730BPT

16%

🕒 Improvement in Warm-Up Time from -80°C to -50°C

15 min

🚪 1 Min Door Opening Recovery Time

±2°C

🌡 Outstanding Temperature Uniformity

Model	DW-86L729BPT	DW-86L730BPT	DW-86L829BPT	DW-86L830BPT
Temperature Uniformity (°C)	±3	±2	±3	±3
ENERGY STAR Power Consumption (kWh/day)	8.13	4.16	8.48	5.18
1-Minute Open Door Recovery Time (20° C Ambient Running at -75°C)(mins)	24	15	35	32
Warm-Up Time at 20° C Ambient (from -80°C to -50°C)(mins)	300	348	315	378
Re-entry Time (Seconds)	300	60	300	60

*Freezer performance will vary based on customer product volume, storage format, operating conditions, test methodology and performing recommended maintenance

Green and Environmental Friendly



Naturally occurring Hydrocarbon (HC) refrigerants and insulation materials with ultra-low global warming potential (GWP) levels exert an extremely minimal impact on the environment. These are not only eco-friendly but also contribute to a sustainable future by reducing the carbon footprint and safeguarding the delicate balance of our ecosystem.

Safety and Reliability

- Dual sensors ensure accurate detection of temperature changes, providing double the security for sample storage.
- The self-diagnostic feature of the compressor triggers immediate alarms in case of issues, enabling swift maintenance to prevent sample damage.
- VIP insulation technology provides 6-hour durable thermal retention and safeguards samples during brief power failures.
- Optional built-in independent backup system guarantees sample safety even in the event of a long power outage.

Ergonomic Design



10 Inch Capacitive Touch Screen
State-of-art UI design coupled with sample management system to provide the optimal user experience



Improved Pressure Relief Port
Re-entry time shortened to just 60 seconds



Haier
UltraEco

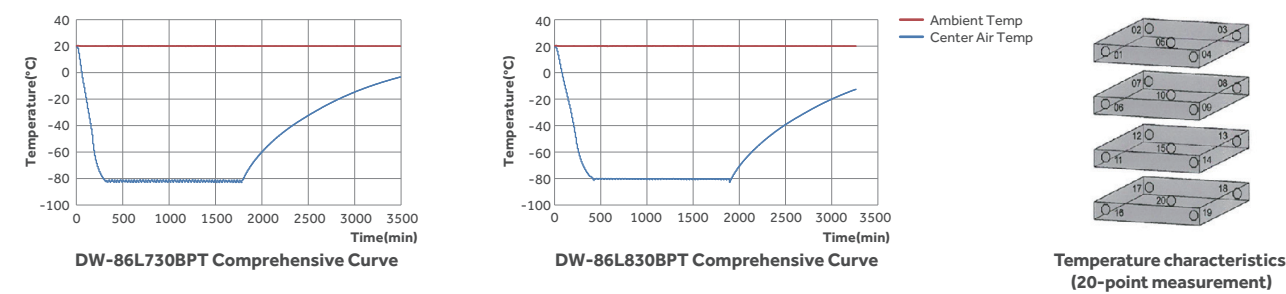


USB Interface
Enables users to download historical temperature data for compliance/auditing purposes



Innovative Light Bar Design
Clearly indicate the operating status of the freezer and offer strengthened visual alarm indications for effortless at-a-glance monitoring

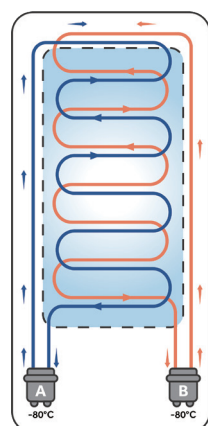
Typical Performance Characteristics at 20°C Ambient



Specifications

Model		DW-86L730BPT	DW-86L830BPT
Technical Data	Cabinet Type	Upright	Upright
	Ambient Temperature (°C)	10~32	10~32
	Cooling Type	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual
	Refrigerant	HC	HC
	Sound Level (dB(A))	≤42	≤46
Performance	Cooling Performance (°C)	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor
	Display	LCD touchscreen	LCD touchscreen
Electrical Data	Power Supply (V/Hz)	100-230/50/60	100-230/50/60
	Max Power (W)	900	1050
Dimensions	Capacity (L/Cu.Ft)	730/25.8	830/29.3
	Net/Gross Weight (approx)	kg	315/368
		lbs	694.5/811.3
	Interior Dimensions (W*D*H)	mm	766*716*1310
		in	30.2*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	1046*998*1970
		in	41.2*39.3*77.6
	Packing Dimensions (W*D*H)	mm	1110*1150*2160
		in	43.3*45.3*85
	Cabinet Width (without handle and hinge)	mm	946
Functions	Container Load (20'/40'/40'H)	10/20/20	8/20/20
	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	Y	Y
	High Ambient Temperature Alarm	Y	Y
	Door Ajar Alarm	Y	Y
	Start-Up Delay	Y	Y
Accessories	Caster	Y(4)	Y(4)
	Leveling Feet	Y(2)	Y(2)
	Porthole	2*rear, (15mm)diameter	2*rear, (15mm)diameter
	Inner Doors	4	4
	Shelves	3- Stainless Steel Adjustable Shelves	3- Stainless Steel Adjustable Shelves
	Shelf Dimensions (W*D)(mm)	752*650	856*650
	Max. Load per Shelf (kg)	90	108
	Freezer Racks Qty (2" boxes)	20	24
	Capacity (2" boxes)	500	600
	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
Others	LN ₂ Backup System	Optional	Optional
	Certifications	CE, UL, ENERGY STAR	CE, UL, ENERGY STAR

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 LBA foam material



Optional IoT System

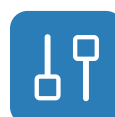
The optional IoT monitors the operating status of the equipment in real time. Equipped with multiple alarm functions and a self-diagnostics system to identify and warn users to ensure sample safety

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

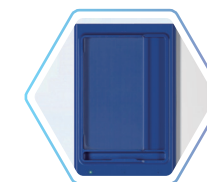
DW-86L578BPST: 40,000 cryovials (2ml)
DW-86L728BPST: 50,000 cryovials (2ml)
DW-86L828BPST: 60,000 cryovials (2ml)



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

Ergonomic Design



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



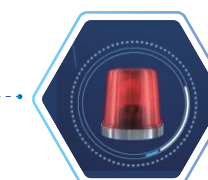
Magnetic filter screen

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



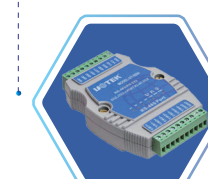
Multiple alarms

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

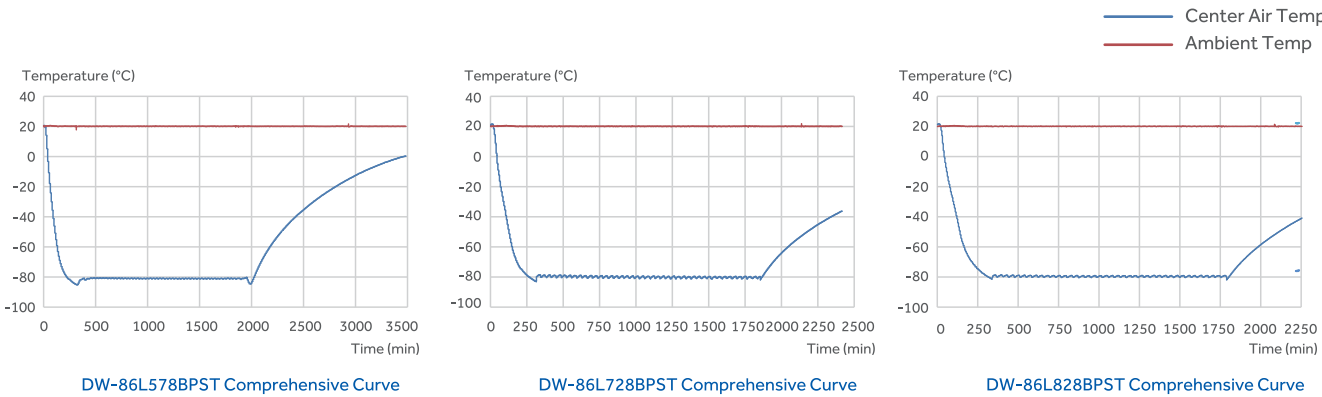
Equipped with RS485 interface to connect multiple freezers

DW-86L828BPST

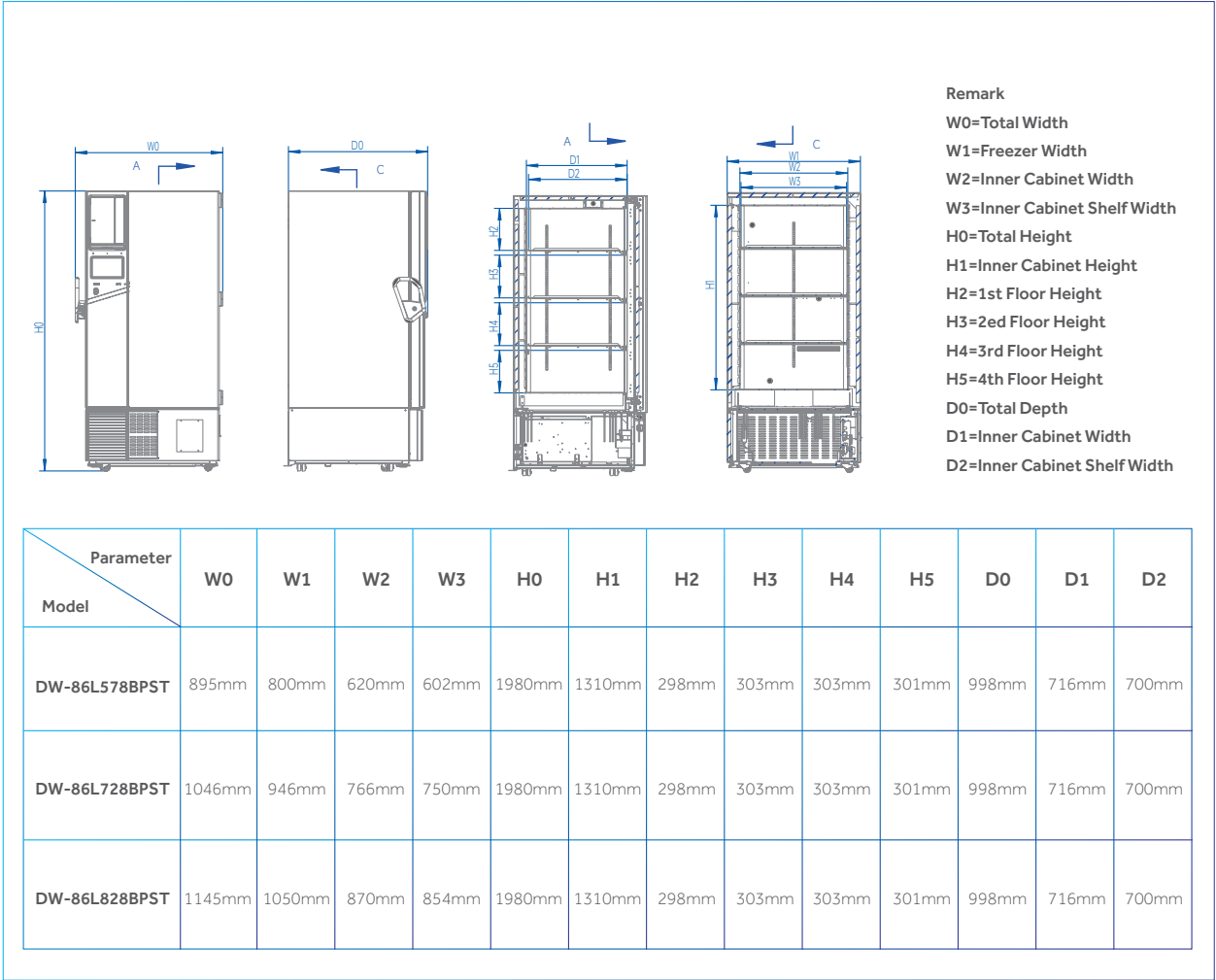


Follow the QR code and learn more about the
TwinCool Frequency Conversion ULT Freezer DW-86L828BPST from Haier Biomedical

Temperature Curve



Product Dimensions



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	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	35.2*39.3*78.0	41.2*39.3*78.0
	Packing Dimension (W*D*H)	mm	953*1071*2127	1105*1066*2117
		in	37.5*42.1*83.7	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	8/20/20
	High/Low Temperature Alarm	Y	Y	Y
	Hot Condenser Alarm	Y	Y	Y
	Power Failure Alarm	Y	Y	Y
	High/Low Voltage Alarm	Y	Y	Y
	Sensor Error Alarm	Y	Y	Y
	Low Battery Alarm	Y	Y	Y
	High Ambient Temperature Alarm	Y	Y	Y
	Door Ajar Alarm	Y	Y	Y
	Start-up delay	Y	Y	Y
Accessories	Caster	Y (4)	Y (4)	Y (4)
	Leveling Feet	Y (2)	Y (2)	Y (2)
	Porthole	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter
	Inner Doors	4	4	4
	Shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves
	Shelf Dimensions (W*D) (mm)	606*650	752*650	856*650
	Max. Load per Shelf (kg)	72	90	108
	Freezer Racks Quantity (2" boxes)	16	20	24
	Capacity (2" boxes)	400	500	600
	USB Interface	Y	Y	Y
Others	Remote Alarm	Y	Y	Y
	5V Power Supply Port	Y	Y	Y
	Temperature Chart Recorder	Optional	Optional	Optional
	RS232/485 Port	N/A / Standard	N/A / Standard	N/A / Standard
	CO ₂ Backup System	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional
	Certifications	CE, UL, MDR, ACT, ENERGY STAR	CE, UL, MDR, ACT, ENERGY STAR	CE, UL, MDR, ACT, ENERGY STAR

The Haier Biomedical ULT RFID freezer offers enhanced protection for high-value samples like genetic material, biosamples, and tissue. With quick freezing, secure access, and comprehensive inventory management features, it ensures product integrity and visibility while eliminating manual processes. Ideal for research facilities and laboratories seeking efficient sample storage solutions.



DW-86L728BPSTR

Product Features

- Enhanced Efficiency**

Effortlessly locate and inventory sample tubes without the need to open the door. The system automatically records the exact position of each sample in real-time, streamlining manual processes.
- Rapid Inventory Management**

Save time and effort with a single click inventory feature that completes within 5 seconds. Say goodbye to errors and delays.
- Precision Identification**

Achieve accurate and swift recognition with a 3-second automatic identification process for sample information and location. This system excels at high-density batch reading tasks.
- Enhanced Safety Measures**

The dual refrigeration system features double independent hydrocarbon refrigeration units, both capable of maintaining -80°C. This design not only ensures the safety of stored samples but also enhances reliability.

Ergonomic Design Features

- Intuitive Monitoring Software**

Benefit from a tailored sample management software that allows real-time tracking and monitoring of operational status, ensuring seamless workflow oversight.
- Comprehensive Security Integration**

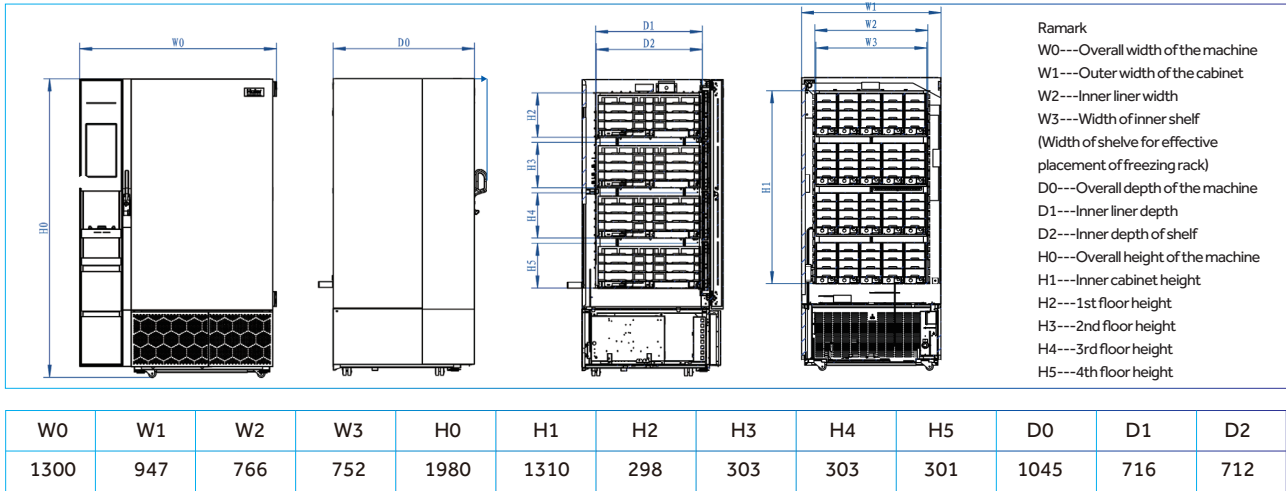
Utilize the four-code integration tube system, combining RFID tags, bottom QR codes, tube barcodes, and tube digital codes for heightened security and reliability in sample management.

- Streamlined User Interface**

Navigate effortlessly through operations with a 15.6-inch LCD touch screen that provides an intuitive display of vital information. Accessing and managing tasks is made simple and efficient.
- Free Sample Placement**

Samples can be placed freely without the need to be stored in specific locations, and the relevant sample information will be updated automatically.

Product Dimensions



Ergonomic Design



Specifications

Model			DW-86L728BPSTR			
Technical Data	Cabinet Type		Upright			
	Ambient Temperature (°C)		10~32			
	Cooling Type		Direct cooling			
	Defrost Mode		Manual			
	Refrigerant		HC			
	Sound Level (dB (A))		42			
Performance	Cooling Performance (°C)		-86			
	Temperature Range (°C)		-40~-86			
	Inventory Speed (Sec)		5			
	Query Speed (Sec)		2			
	Recognition Speed (Sec)		3			
Control	Controller		Microprocessor			
	Display		Touch Screen LCD			
Electrical Data	Power Supply (V/Hz)		220/50			
	Max Power (W)		1700			
Dimensions	Capacity (L/Cu.Ft)		728/25.7			
	Net/Gross Weight	kg	555/640			
		lbs	1223.5/1410.9			
	Interior Dimension (W*D*H)	mm	766*716*1310			
		in	30.2*28.2*51.6			
	Exterior Dimension (W*D*H)	mm	1300*1045*1980			
		in	51.1*41.1*77.9			
	Packing Dimension (W*D*H)	mm	1480*1175*2215			
		in	58.2*46.2*87.2			
Functions	Cabinet Width (without handle and hinge)		1300			
	High/Low Temperature Alarm		Y			
	Hot Condenser Alarm		Y			
	Power Failure Alarm		Y			
	High/Low Voltage Alarm		Y			
	Sensor Error Alarm		Y			
	Low Battery Alarm		Y			
	High Ambient Temperature Alarm		Y			
	Door Ajar Alarm		Y			
	Start-up delay		Y			
	Caster		Y			
	Leveling feet		Y			
	Porthole		Y/2			
	Inner Doors		4			
	Accessories	Shelves		3 - stainless steel shelves		
Shelf Dimensions (W*D) (mm)		752*650				
Max. Load per Shelf (kg)		90				
Freezer Racks Qty (2" boxes)		20				
Capacity (2" boxes)		400				
USB Interface		Y				
Remote Alarm		Y				
5V Power Supply Port		Y				
Temperature Chart Recorder		Optional				
RS232/485 Port		N/A / Standard				
CO ₂ Backup System		Optional				
LN ₂ Backup System		Optional				
Others		Certification		CE		









Stirling Compact ULT Freezer

It is applicable to products and samples with strict storage requirements, and ideal for long-term storage, meeting the typical storage needs of hospitals, disease control centers, research institutions, and biomedical engineering institutes.



DW-86L100STL

Product Features

-  Featuring a space-saving design, it offers full-performance ULT storage for benchtop setups, stacked arrangements, or undercounter installations.
-  Ideal for precisely regulated temperature changes across an expansive set point range of -86°C to -20°C, maintaining a temperature uniformity of $\pm 2^{\circ}\text{C}$.
-  The advanced refrigeration system utilizes 100% natural refrigerants to reduce the impact on climate.
-  Optimized for energy efficiency delivering a power consumption of just 3 kWh/day at -80°C.
-  Improved pressure relief port, re-entry shortened to just 60 seconds.
-  The sound level is $\leq 46\text{dB (A)}$, creating a quiet environment.
-  Adopting the PID temperature control technology enables precise temperature control and keeps the temperature fluctuation within $\pm 0.5^{\circ}\text{C}$ from -20°C to -86°C.
-  Innovative refrigeration technology without compressor and oil ensures safety, reliability and a long service life.

Ergonomic Design



The engine room is moved up, and the height of the storage space is reduced for easy access.



7 inch LCD touch screen, intelligent human-computer interaction.



An ergonomic handle and a unique slide track design make opening the door much easier.

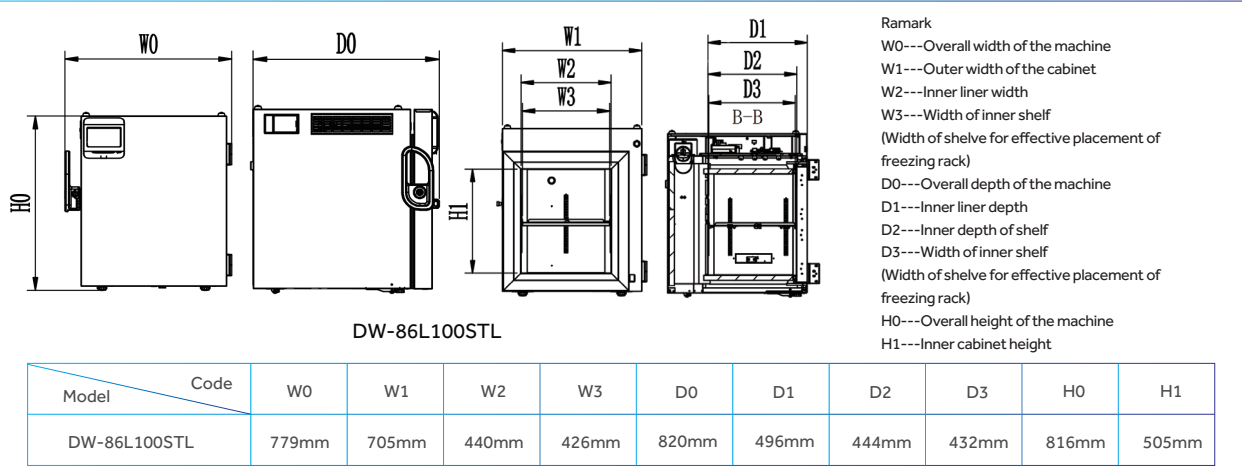


Equipped with multiple security lock and multiple security guarantee, including secret lock, padlock, optional fingerprint lock.



Multiple interface configurations: standard USB interface, RS485 interface.

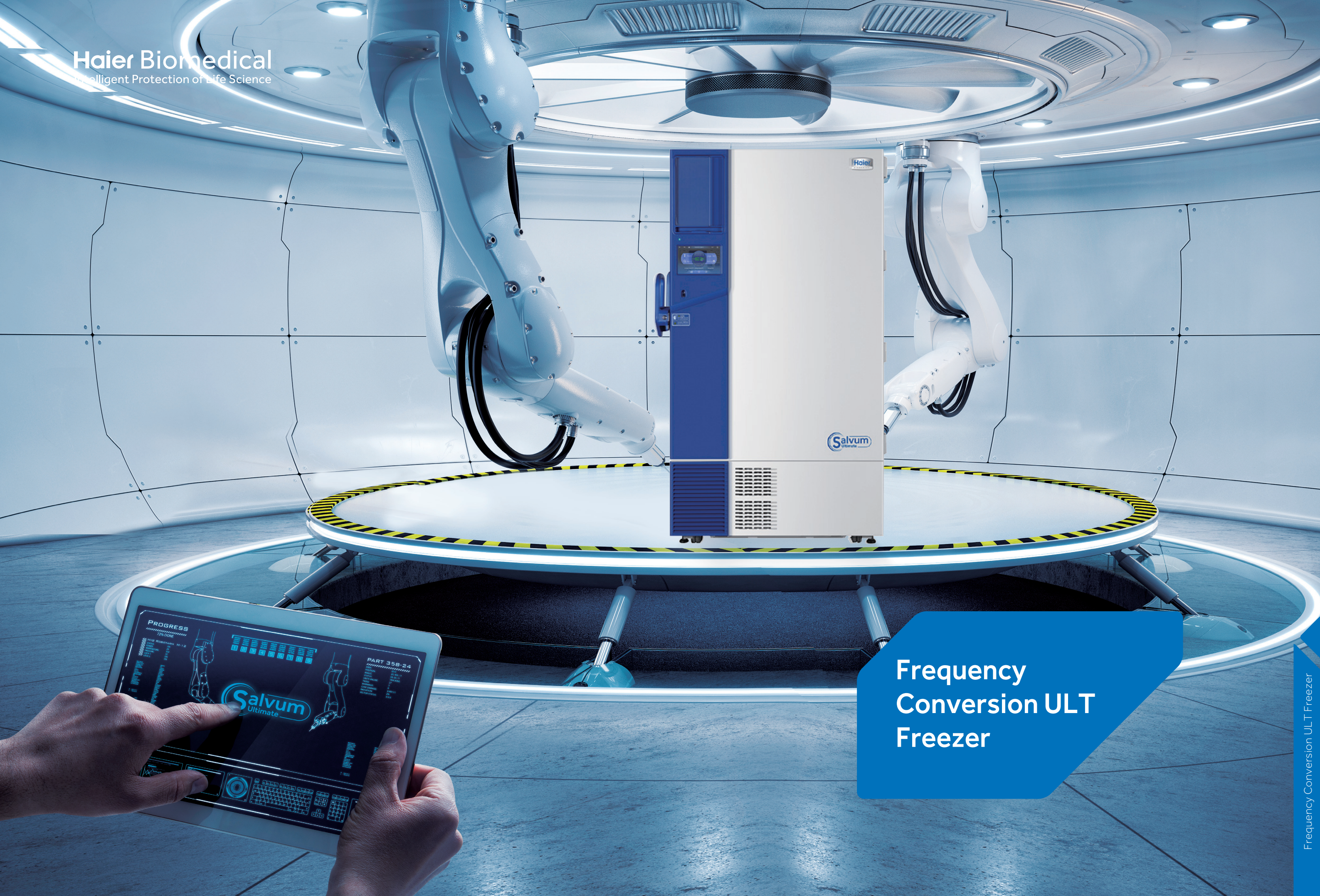
Product Dimensions



Stirling Compact ULT Freezer

Specifications

Model		DW-86L100STL	
Technical Data	Cabinet Type	Upright	
	Ambient Temperature (°C)	10~32	
	Cooling Type	Direct cooling	
	Defrost Mode	Manual	
	Refrigerant	HC	
	Sound Level(dB(A))	≤46	
Performance	Cooling Performance (°C)	-86	
	Temperature Range (°C)	-20~-86	
Control	Controller	Microprocessor	
	Display	LCD touchscreen	
Electrical Data	Power Supply (V/Hz)	220~240/50/60	110~120/50/60
	Max Power (W)	300	
Dimensions	Capacity (L/Cu.Ft)	100/3.5	
	Net/Gross Weight	kg	110/145
		lbs	260.2/326.3
	Interior Dimension (W*D*H)	mm	440*444*505
		in	17.3*17.5*19.9
	Exterior Dimension (W*D*H)	mm	779*820*816
		in	30.7*32.3*32.1
	Packing Dimension (W*D*H)	mm	850*920*1000
		in	33.5*36.2*39.4
	Cabinet Width (without handle and hinge)	mm	705
Functions	Container Load (20'/40'/40'H)	24/52/52	
	High/Low Temperature Alarm	Y	
	Hot Condenser Alarm	N/A	
	Power Failure Alarm	Y	
	High/Low Voltage Alarm	N/A	
	Sensor Error Alarm	Y	
	Low Battery Alarm	Y	
	High Ambient Temperature Alarm	Y	
	Door Ajar Alarm	Y	
	Start-up delay	Y	
Accessories	Caster	Y	
	Leveling Feet	Y	
	Porthole	Y/1	
	Inner Doors	2	
	Shelves	1- Stainless Steel Adjustable Shelves	
	Shelf Dimensions (W*D) (mm)	425*430	
	Max. Load per Shelf (kg)	90	
	Freezer Racks Quantity (2" boxes)	6	
	Capacity (2" boxes)	72	
	USB Interface	Y	
Others	Remote Alarm	Y	
	5V Power Supply Port	Y	
	Temperature Chart Recorder	N/A	
	RS232/485 Port	N/A / Standard	
	CO ₂ Backup System	Optional	
	LN ₂ Backup System	Optional	
	Certifications	CE	UL



Frequency
Conversion ULT
Freezer

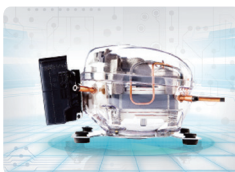
Suitable for long term storage applications and compliant with typical storage requirements found in hospitals, disease control and prevention centres, scientific research institutions, biomedical engineering institutes, the agriculture/fishery sector as well as the electronics and chemical industries.

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.

Product Parts

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

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

Energy Saving Refrigeration

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



Multilayered Sealing Structure

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

USB Interface

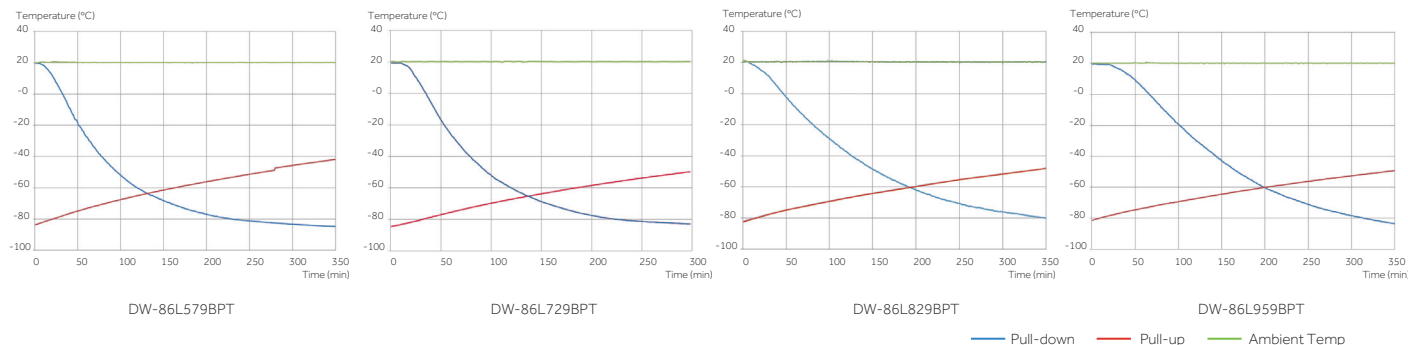
Enables users to download historical temperature data for compliance/auditing purposes

Improved Handle Design

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

DW-86L829BPT

Temperature Curve



Follow the QR code and learn more about the Smart Frequency Conversion ULT Freezer DW-86L829BPT from Haier Biomedical

Ergonomic Design



Safe and secure

Equipped with key lock, padlock and optional 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
	Ambient Temperature (°C)	10~32	10~32	10~32	10~32
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC
Performance	Sound Level (dB(A))	43.5	43.5	43.5	47
	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)	100~230/50/60	100~230/50/60	208~230/50/60 100~230/50/60	208~230/50/60 100~230/50/60
	Max Power (W)	1100	1100	1400	1750
Dimensions	Capacity (L/Cu.Ft)	579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight	kg	325/355	350/385	380/415
		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
		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
		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	953*1071*2127	1105*1066*2117	1204*1072*2125
		in	37.6*42.2*83.8	43.6*42*83.4	47.5*42.3*83.7
	Cabinet Width (without handle and hinge)	mm	800	946	1050
Functions	Container Load (20'/40'/40'H)	12/24/24	10/20/20	8/20/20	8/16/16
	High/Low Temperature Alarm	Y	Y	Y	Y
	Hot Condenser Alarm	Y	Y	Y	Y
	Power Failure Alarm	Y	Y	Y	Y
	High/Low Voltage Alarm	Y	Y	Y	Y
	Sensor Error Alarm	Y	Y	Y	Y
	Low Battery Alarm	Y	Y	Y	Y
	High Ambient Temperature Alarm	Y	Y	Y	Y
	Door Ajar Alarm	Y	Y	Y	Y
	Start-up delay	Y	Y	Y	Y
	Caster	Y (4)	Y (4)	Y (4)	Y (4)
	Leveling Feet	Y (2)	Y (2)	Y (2)	Y (2)
	Porthole	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter
Accessories	Inner Doors	4	4	4	4
	Shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves
	Shelf Dimensions (W*D) (mm)	606*650	752*650	856*650	1002*650
	Max. Load per Shelf (kg)	72	90	108	126
	Freezer Racks Quantity (2" boxes)	16	20	24	28
	Capacity (2" boxes)	400	500	600	700
	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
	RS232/485 Port	N/A / Standard	N/A / Standard	N/A / Standard	N/A / Standard
	CO ₂ Backup System	Optional	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional	Optional
Others	Certifications	CE, UL, MDR	CE, UL, ENERGY STAR, MDR	CE, ENERGY STAR, CE, UL, ENERGY STAR, MDR	CE, ENERGY STAR, UL, ENERGY STAR, MDR

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.



DW-86L829BP

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 $\pm 3^{\circ}\text{C}$.



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).

Ergonomic Design



USB Interface

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



Multilevel Alarms

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



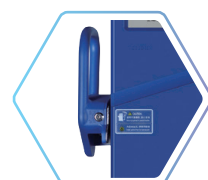
Pressure Equalisation Port

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



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

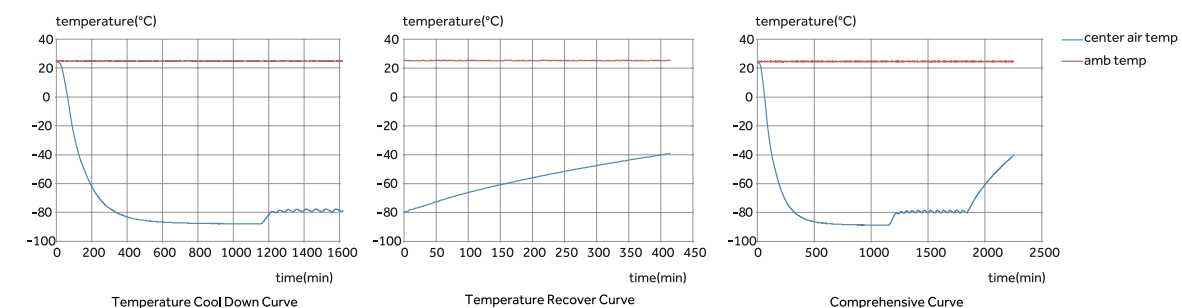


Energy Saving Refrigeration

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

DW-86L829BP

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



Model		DW-86L579BP	DW-86L729BP	DW-86L829BP		DW-86L959BP	
Technical Data	Cabinet Type	Upright	Upright	Upright		Upright	
	Ambient Temperature (°C)	10~32	10~32	10~32		10~32	
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling		Direct Cooling	
	Defrost Mode	Manual	Manual	Manual		Manual	
	Refrigerant	HC	HC	HC		HC	
Performance	Sound Level (dB(A))	43.5	43.5	43.5		47	
	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	LED	LED	LED		LED	
Electrical Data	Power Supply (V/Hz)	100-230/50/60	100-230/50/60	208-230/50/60	100-230/50/60	208-230/50/60	100-230/50/60
	Max Power (W)	1100	1100	1400		1750	
Dimensions	Capacity (L/Cu.Ft)		579/20.4	729/25.7	829/29.2		959/33.9
	Net/Gross Weight	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	953*1071*2127	1105*1066*2117	1204*1072*2125		1365*1102*2164
		in	37.6*42.2*83.8	43.6*42*83.4	47.5*42.3*83.7		53.8*43.4*85.2
	Cabinet Width (without handle and hinge)	mm	800	946	1050		1196
Functions	Container Load (20'/40'/40'H)		12/24/24	10/20/20	8/20/20		8/16/16
	High/Low Temperature Alarm		Y	Y	Y		Y
	Hot Condenser Alarm		Y	Y	Y		Y
	Power Failure Alarm		Y	Y	Y		Y
	High/Low Voltage Alarm		N/A	N/A	N/A		N/A
	Sensor Error Alarm		Y	Y	Y		Y
	Low Battery Alarm		Y	Y	Y		Y
	High Ambient Temperature Alarm		Y	Y	Y		Y
	Door Ajar Alarm		Y	Y	Y		Y
	Start-up delay		Y	Y	Y		Y
Accessories	Caster		Y (4)	Y (4)	Y (4)		Y (4)
	Leveling Feet		Y (2)	Y (2)	Y (2)		Y (2)
	Porthole		2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter		2*rear, (25mm) diameter
	Inner Doors		4	4	4		4
	Shelves		3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves		3- stainless steel adjustable shelves
	Shelf Dimensions (W*D) (mm)		606*650	752*650	856*650		1002*650
	Max. Load per Shelf (kg)		72	90	108		126
	Freezer Racks Quantity (2" boxes)		16	20	24		28
	Capacity (2" boxes)		400	500	600		700
	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
	RS232/485 Port		N/A / Standard	N/A / Standard	N/A / Standard		N/A / Standard
	CO ₂ Backup System		Optional	Optional	Optional		Optional
	LN ₂ Backup System		Optional	Optional	Optional		Optional
Others	Certifications		CE, UL, MDR	CE, UL, ENERGY STAR, MDR	CE, ENERGY STAR	CE, ENERGY STAR, MDR	UL, ENERGY STAR

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

Product Advantages

All-New Upgrade

Both the appearance and performance have been upgraded and optimized compared to the previous generation, delivering users an optimal experience

HC Energy-Saving

The high efficiency hydrocarbon compressor along with the up-graded refrigeration technology leads to a significant reduction in energy consumption



Superior Uniformity

The temperature uniformity is within ±4°C at -80°C setpoint, which ensures reliable preservation and maintains sample integrity over time

Environmental Protection

Adopt environmentally friendly hydrocarbon refrigerant and green LBA insulation to reduce the carbon footprint and protect the environment

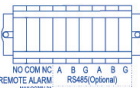
Multiple Alarm Functions

Including high/low temperature alarm, sensor failure alarm, power failure alarm, low battery alarm, door ajar alarm and high ambient temperature alarm. Alarm mode is sound and flash



Rich Configurations

Standard: RS485 interface, remote alarm, USB interface, 10-inch touch screen, adjustable stainless steel shelves
Optional: temperature recorder, backup system, stainless inner



Optimized Design



Upgraded VIP Insulation Technology

The Vacuum Insulated Panels (VIP) has been upgraded from a spliced form to an integrated one, ensuring unparalleled temperature performance



Improved Pressure Relief Port

The re-entry time has been shortened to just 60 seconds, effectively ensuring continuous access to the freezer



Intelligent Control

The 10 - inch LCD touchscreen integrated with a microprocessor controller system can intuitively display internal temperature, ambient temperature, set point and other data as well as temperature curves. The set temperature is adjustable between -40 ° C and -86 ° C, with a temperature display precision of 0.1°C



Safe and Secure

Equipped with keyed door lock, padlock, optional electronic lock, providing multiple safeguards for sample safety

Product Parts



Document holder for easy storage of files and pens



The handle designed with a unique sliding-track makes opening and closing the door easier



The tool-free removable filter makes it easy and quick to clean



The outer door is equipped with four layers of seals and the inner door with one layer, which significantly reduces heat loss



Standard USB interface enables users to download historical temperature data (up to 15 years)



4 swivel casters and 2 adjustable leveling legs for easy maneuvering and precise positioning

Specifications

	Model	DW-86L419	DW-86L579	DW-86L729	DW-86L829
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Ambient Temperature (°C)	10~32	10~32	10~32	10~32
	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)	800	1000	1700	1900
Dimensions	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
		lbs	562.2/630.5	661.4/727.5	771.6/848.8
	Interior Dimensions (W*D*H)	mm	465*716*1310	620*716*1310	766*716*1310
		in	18.3*28.2*51.6	24.4*28.2*51.6	30.2*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	830*990*1980	903*990*1960	1049*990*1980
		in	32.7*39.0*78.0	35.6*39.0*77.2	41.3*39.0*78.0
	Packing Dimension (W*D*H)	mm	870*1070*2110	950*1075*2110	1120*1090*2130
		in	34.3*42.1*83.1	37.4*42.3*83.1	44.1*42.9*83.9
	Cabinet Width (without handle and hinge)	mm	725	800	946
Functions	Container Load (20'/40'/40'H)		12/26/26	12/24/24	10/20/20
	High/Low Temperature Alarm	Y	Y	Y	Y
	Hot Condenser Alarm	Y	Y	Y	Y
	Power Failure Alarm	Y	Y	Y	Y
	High/Low Voltage Alarm	Y	Y	Y	Y
	Sensor Error Alarm	Y	Y	Y	Y
	Low Battery Alarm	Y	Y	Y	Y
	High Ambient Temperature Alarm	Y	Y	Y	Y
	Door Ajar Alarm	Y	Y	Y	Y
	Start-up delay	Y	Y	Y	Y
Accessories	Caster	Y(4)	Y(4)	Y(4)	Y(4)
	Leveling feet	Y(2)	Y(2)	Y(2)	Y(2)
	Porthole	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter
	Inner Doors	2	4	4	4
	Shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves
	Shelf Dimensions(W*D)(mm)	441*657	606*649	752*650	856*650
	Max. Load per Shelf(kg)	54	72	90	108
	Freezer Racks Quantity(2" boxes)	12	16	20	24
	Capacity(2" boxes)	300	400	500	600
	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
	RS232/485 Port	N/A / Standard	N/A / Standard	N/A / Standard	N/A / Standard
	CO ₂ Backup System	Optional	Optional	Optional	Optional
Others	LN ₂ Backup System	Optional	Optional	Optional	Optional
	Certifications	CE, MDR	CE,MDR	CE,MDR	CE,MDR

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

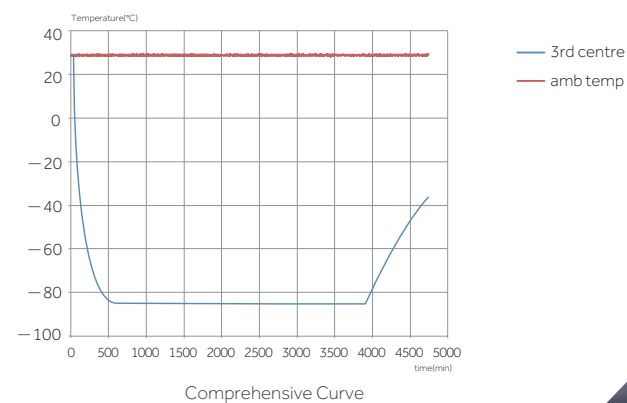
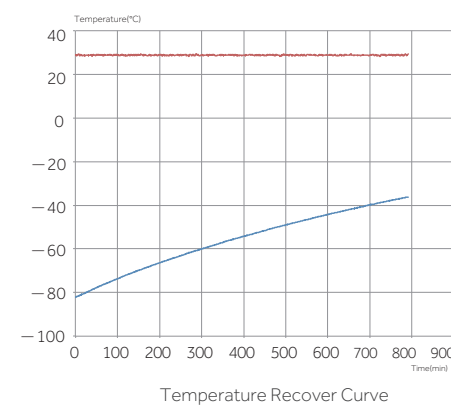
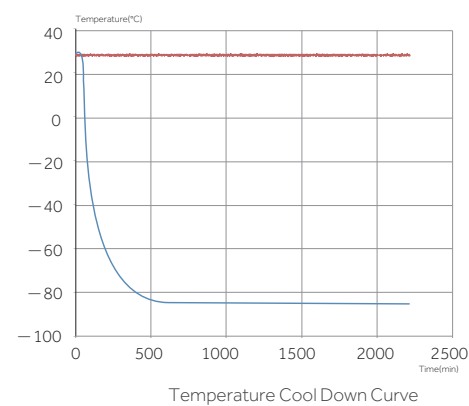
Alarms (Visual and Audible)

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

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

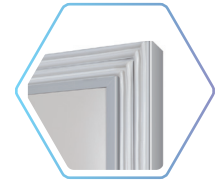


Ergonomic Design



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

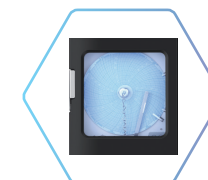
Total of five gaskets to safeguard the freezer temperature, including four seals for the exterior door, one for each inner door.



High Efficiency Refrigeration Components



Two port holes for ease of temperature monitoring

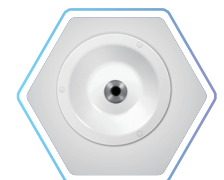


Temperature Recorder (Optional)

Front-mounted.
For independent temperature monitoring.



DW-86L728J

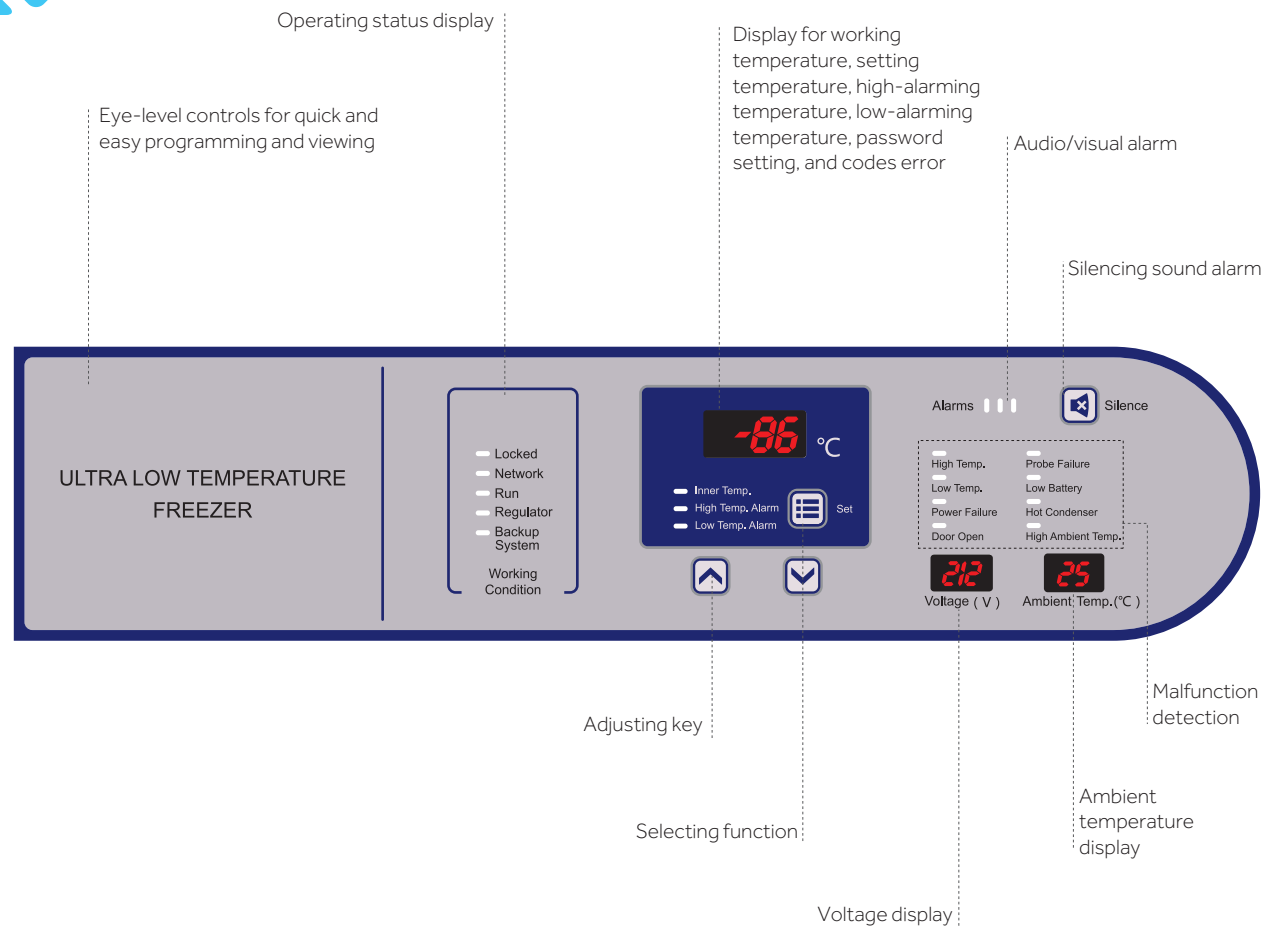


Pressure Equalization Port

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.

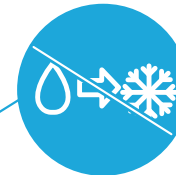


Optimized slideway design, easier to open and close the door.



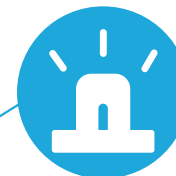
Specifications

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°C



Field proven reliability

- 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



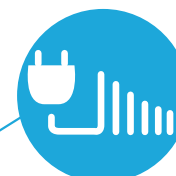
Installation & Application

- Wide range operating voltage system from 185V to 260 V designed to allow units installed in areas with poor voltage condition
- Suitable for 10°C to 32°C 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



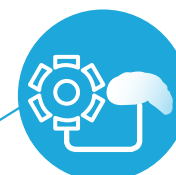
Low sound level

- 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°C to -86°C for cabinet space with 1°C 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

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 the ambient temperature of laboratory
- 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



Specifications

Model		DW-86L828W	DW-86L959W
Technical Data	Cabinet Type	Upright	Upright
	Ambient Temperature (°C)	10-32	10-32
	Cooling Type	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual
	Refrigerant	HC	HC
Performance	Sound Level (dB (A))	43.5	47
	Cooling Performance (°C)	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor
	Display	LCD touchscreen	LCD Touch Screen
Electrical Data	Power Supply (V/Hz)	208-230/50/60	208-230/50/60
	Max Power (W)	1100	1300
Dimensions	Capacity (L/Cu.Ft)	828/29.2	959/33.9
	Net/Gross Weight (approx)	kg	380/415
		lbs	837.7/914.9
	Interior Dimension (W*D*H)	mm	870*716*1310
		in	34.3*28.2*51.6
	Exterior Dimension (W*D*H)	mm	1145*998*1980
		in	45.1*39.3*78.0
	Packing Dimension (W*D*H)	mm	1204*1072*2125
		in	47.5*42.3*83.7
	Cabinet Width (without handle and hinge)	mm	1050
Functions	Container Load (20'/40'/40'H)	8/20/20	8/16/16
	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
	Start-up delay	Y	Y
Accessories	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)	856*650	1002*650
	Max. Load per Shelf (kg)	108	126
	Freezer Racks Quantity (2" boxes)	24	28
	Capacity (2" boxes)	600	700
	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
Others	LN ₂ Backup System	Optional	Optional
	Certifications	CE, MDR	CE, MDR

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.

**Compact Design**

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

**Ergonomic Design**

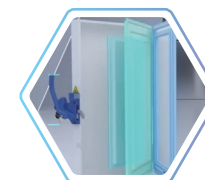
Ergonomic handle design ensures easy one-hand door opening.

**Quiet Operation**

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



Follow the QR code and learn more about the Under Counter ULT Freezer DW-86L100J from Haier Biomedical

**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.



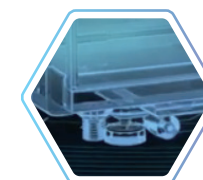
- User-settable parameters such as set point and alarms.
- Real-time cabinet temperature display, alarm information, power supply and compressor start/stop state.
- Standard USB port capable of storing >15 years of operating data for compliance.



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.



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



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

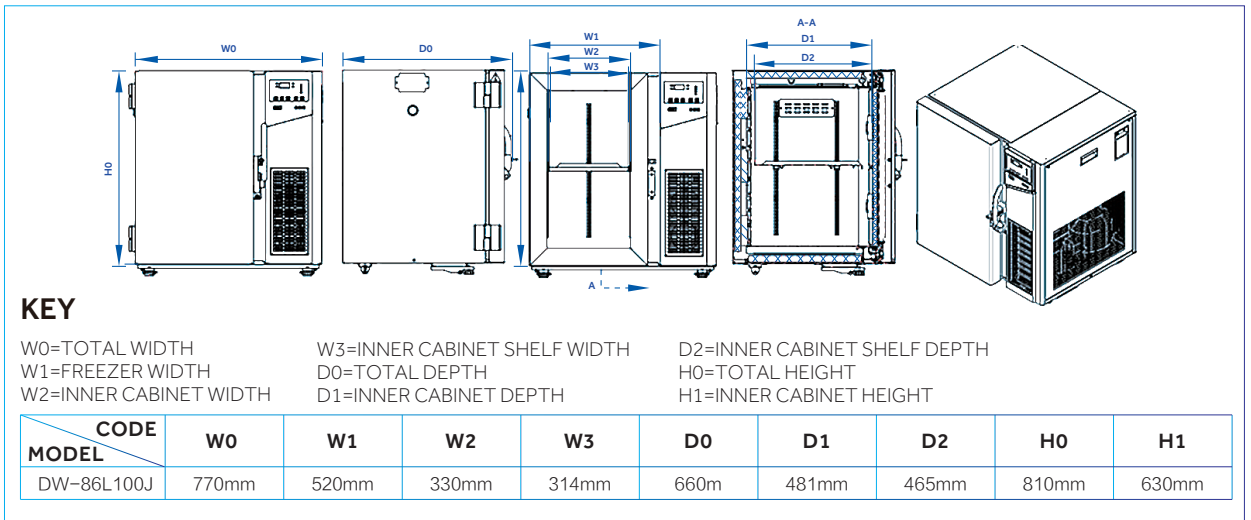
- Standard door lock and padlock to ensure sample security and prevent unauthorised access.



USB data storage

- Capable of storing more than 15 years of data.

Product Dimensions



Specifications

Model		DW-86L100J	
Technical Data	Cabinet Type	Upright	
	Ambient Temperature (°C)	10~32	
	Cooling Type	Direct cooling	
	Defrost Mode	Manual	
	Refrigerant	HC	
Performance	Sound Level (dB (A))	46.8	
	Cooling Performance (°C)	-86	
	Temperature Range (°C)	-40~-86	
Control	Controller	Microprocessor	
Electrical Data	Display	LED	
	Power Supply(V/Hz)	220~240/50	120/60
Dimensions	Max Power(W)	680	
	Capacity(L/Cu.Ft)	100/3.5	
	Net/Gross Weight	kg	108/132
		lbs	238/291
	Interior Dimension (W*D*H)	mm	330*481*630
		in	13*19*25
	Exterior Dimension (W*D*H)	mm	770*660*810
		in	30*26*32
	Packing Dimension (W*D*H)	mm	830*730*1000
		in	32.7*28.7*39.4
Functions	Cabinet Width (without handle and hinge)	mm	520
	Container Load (20'/40'/40'H)	44/88/88	
	High/Low Temperature Alarm	Y	
	Hot Condenser Alarm	Y	
	Power Failure Alarm	Y	
	High/Low Voltage Alarm	Y	
	Sensor Error Alarm	Y	
	Low Battery Alarm	Y	
	High Ambient Temperature Alarm	Y	
	Door Ajar Alarm	Y	
	Start-up Delay	Y	
Accessories	Caster	Y(4)	
	Leveling Feet	Y(2)	
	Porthole	1 left side, (25mm)diameter	
	Inner Doors	2	
	Shelves	1- stainless steel adjustable shelves	
	Shelf Dimensions (W*D) (mm)	316*424	
	Max. Load per Shelf (kg)	22	
	Freezer Racks Quantity (2" boxes)	4	
	Capacity (2" boxes)	60	
	USB Interface	Y	
	Remote Alarm	Y	
	5V Power Supply Port	Y	
	Temperature Chart Recorder	N/A	
	RS232/485 Port	N/A / Standard	
	CO ₂ Backup System	Optional	
Others	LN ₂ Backup System	Optional	
	Certification	CE, MDR	UL

Specifications



Model		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	
	Ambient Temperature (°C)	10~32			10~32	10~32	10~32		10~32		10~32	
	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	HC	HC		HC		HC	
	Sound Level (dB (A))	50			50	49	50		50		49	
Performance	Cooling Performance (°C)	-86			-86	-86	-86		-86		-86	
	Temperature Range (°C)	-40~-86			-40~-86	-40~-86	-40~-86		-40~-86		-40~-86	
Control	Controller	Microprocessor			Microprocessor	Microprocessor	Microprocessor		Microprocessor		Microprocessor	
	Display	LED			LED	LED	LED		LED		LED	
Electrical Data	Power Supply (V/Hz)	220~240/50	120/60	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
	Max Power (W)	900	900	1400	900	1000	1600		1700	900	1600	1200
Dimensions	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	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	830*900*1871		830*980*1980	953*900*1980	873*900*1980		903*980*1960		1035*900*1980	
		in	32.7*35.4*73.7		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	879*974*2013		877*1070*2114	1020*1020*2130	934*980*2116		952*1063*2089		1110*1005*2130	
		in	34.6*38.3*79.3		34.5*42.1*83.2	40.2*40.2*83.9	36.8*38.6*83.3		37.5*41.9*82.2		43.7*39.6*83.9	
	Cabinet Width (without handle and hinge)	mm	725		725	850	770		800		940	
Container Load (20'/40'/40'H)		12/24/24		12/24/24	12/24/24	12/24/24		12/24/24		12/24/24		
Functions	High/Low Temperature Alarm	Y		Y	Y	Y		Y		Y		
	Hot Condenser Alarm	Y		Y	Y	Y		Y		Y		
	Power Failure Alarm	Y		Y	Y	Y		Y		Y		
	High/Low Voltage Alarm	N/A		N/A	N/A	N/A		N/A		N/A		
	Sensor Error Alarm	Y		Y	Y	Y		Y		Y		
	Low Battery Alarm	Y		Y	Y	Y		Y		Y		
	High Ambient Temperature Alarm	Y		Y	Y	Y		Y		Y		
	Door Ajar Alarm	Y		Y	Y	Y		Y		Y		
Start-Up Delay	Y		Y	Y	Y		Y		Y			
Accessories	Caster	Y (4)		Y (4)	Y (4)	Y (4)		Y (4)		Y (4)		
	Leveling Feet	Y (2)		Y (2)	Y (2)	Y (2)		Y (2)		Y (2)		
	Porthole	2*rear, (25mm)diameter		2*rear, (25mm)diameter	2*rear, (25mm)diameter	2*rear, (25mm)diameter		2*rear, (25mm)diameter		2*rear, (25mm)diameter		
	Inner Doors	2		2	4	4		4		4		
	Shelves	3- stainless steel adjustable shelves		3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves		3- stainless steel adjustable shelves		3- stainless steel adjustable shelves		
	Shelf Dimensions (W*D) (mm)	451*597		443*657	576*597	576*567.5		606*650		746*567.5		
	Max. Load per Shelf (kg)	44		54	58	58		72		72		
	Freezer Racks Quantity (2" boxes)	12		12	16	16		16		20		
	Capacity (2" boxes)	216		300	320	288		400		400		
	USB Interface	Y		Y	Y	Y		Y		Y		
	Remote Alarm	Y		Y	Y	Y		Y		Y		
	5V Power Supply Port	Y		Y	Y	Y		Y		Y		
	Temperature Chart 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		
	LN ₂ Backup System	Optional		Optional	Optional	Optional		Optional		Optional		
Others	Certifications	CE,MDR	UL	CE,MDR	CE,MDR	CE,MDR	UL	CE,MDR	UL	UL	CE,MDR	

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		Chest		Chest	
	Ambient Temperature (°C)	10~32			10~32			10~32		10~32		10~32	
	Cooling Type	Direct Cooling			Direct Cooling			Direct Cooling		Direct Cooling		Direct Cooling	
	Defrost Mode	Manual			Manual			Manual		Manual		Manual	
	Refrigerant	HC			HC			HC		HC		HC	
Performance	Sound Level (dB (A))	50			50		51.5	46.8		49		50	
	Cooling Performance (°C)	-86			-86			-86		-86		-86	
	Temperature Range (°C)	-40~-86			-40~-86			-40~-86		-40~-86		-40~-86	
Control	Controller	Microprocessor			Microprocessor			Microprocessor		Microprocessor		Microprocessor	
	Display	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
	Max Power (W)	1700			1700			680		800		1600	
	Capacity (L/Cu.Ft)	728/25.7			828/29.2			100/3.5		100/3.5		420/14.8	
Dimensions	Net/Gross Weight	kg	345/385		380/410			108/132		138/160		310/357	
			760.6/848.8		837.7/903.9			238/291		304.2/352.7		683.4/787.0	
	Interior Dimension (W*D*H)	mm	766*716*1310		870*716*1310			330*481*630		470*450*480		1367*462*652	
			30.2*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	
	Exterior Dimension (W*D*H)	mm	1049*980*1980		1153*980*1980			770*660*810		769*825*1120		2130*870*1020	
			41.3*38.6*78.0		45.4*38.6*78.0			30*26*32		30.3*32.5*44.1		83.9*34.3*40.2	
	Packing Dimension (W*D*H)	mm	1100*1069*2130		1197*1050*2117			830*730*1000		835*860*1280		2210*910*1160	
			43.3*42.1*83.9		47.1*41.3*83.3			32.7*28.7*39.4		32.9*33.9*50.4		87*35.8*45.7	
	Cabinet Width (without handle and hinge)	mm	946		1050			520		733		733	
Functions	Container Load (20'/40'/40'H)	12/20/20			8/20/20			44/88/88		12/24/48		6/12/24	
	High/Low Temperature Alarm	Y			Y			Y		Y		Y	
	Hot Condenser Alarm	Y			Y			Y		Y		Y	
	Power Failure Alarm	Y			Y			Y		Y		Y	
	High/Low Voltage Alarm	N/A			N/A			Y		N/A		N/A	
	Sensor Error Alarm	Y			Y			Y		Y		Y	
	Low Battery Alarm	Y			Y			Y		Y		Y	
	High Ambient Temperature Alarm	Y			Y			Y		Y		Y	
	Door Ajar Alarm	Y			Y			Y		Y		Y	
	Start-Up Delay	Y			Y			Y		Y		Y	
Accessories	Caster	Y (4)			Y (4)			Y (4)		Y (4)		Y (4)	
	Leveling Feet	Y (2)			Y (2)			Y (2)		Y (2)		Y (2)	
	Porthole	2*rear, (25mm)diameter			2*rear, (25mm)diameter			1*left side, (25mm)diameter		1*rear, (25mm)diameter		1*rear, (25mm)diameter	
	Inner Doors	4			4			2		1		3	
	Shelves	3- stainless steel adjustable shelves			3- stainless steel adjustable shelves			1- stainless steel adjustable shelves		/		/	
	Shelf Dimensions (W*D) (mm)	752*650			856*650			316*424		/		/	
	Max. Load per Shelf (kg)	90			108			22		/		/	
	Freezer Racks Quantity (2" boxes)	20			24			4		9		27	
	Capacity (2" boxes)	500			600			60		72		270	
	USB Interface	Y			Y			Y		Y		Y	
	Remote Alarm	Y			Y			Y		Y		Y	
	5V Power Supply Port	Y			Y			Y		N/A		N/A	
	Temperature Chart Recorder	Optional			Optional			N/A		Optional		Optional	
	RS232/485 Port	Optional			Optional			N/A / Standard		Optional		Optional	
	CO ₂ Backup System	Optional			Optional			Optional		Optional		Optional	
	LN ₂ Backup System	Optional			Optional			Optional		Optional		Optional	
Others	Certifications	CE, MDR	UL		CE, MDR		UL	CE, MDR		UL		CE, MDR	UL

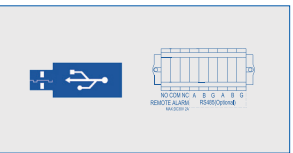
Suitable for pharmaceutical, clinical and medical research use, for the long-term storage of samples and products under ultra-low temperature conditions.

Advantage



Microprocessor Control System

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



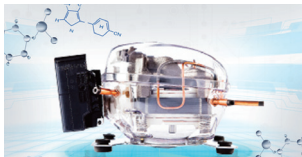
Multiple Ports

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



Quick Access Filter Design

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



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



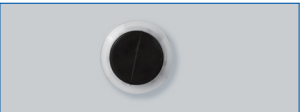
Stainless Steel Inner Door

Prevents loss of internal air to keep samples safe



Ergonomic Design

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



Porthole

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



DW-86L51J

Advantage



DW-80WZ15



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.

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	
	Ambient Temperature (°C)	10~32		10~32	
	Cooling Type	Direct Cooling		Direct Cooling	
	Defrost Mode	Manual		Manual	
	Refrigerant	HC		HC	
Performance	Sound Level (dB (A))	60		46.8	
	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, DC24	110/60, DC24	120V/60	220-240/50
	Max Power (W)	280		750	500
Dimensions	Capacity (L/Cu.Ft)		15/0.53	51/1.8	
	Net/Gross Weight	kg	27/33	77/90	73/86
		lbs	59.5/72.8	169.8/198.4	160.9/189.6
	Interior Dimension (W*D*H)	mm	260*180*330	330*481*316	
		in	10.2*7.1*13.0	13*16.5*12.4	
	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	
	Packing Dimension (W*D*H)	mm	805*430*725	570*735*1010	
		in	31.7*17.0*28.5	22.4*28.9*43.3	
	Cabinet Width (without handle and hinge)	mm	/	470	
Functions	Container Load (20'/40'/40'H)		105/210/210	64/120/120	
	High/Low Temperature Alarm		Y	Y	
	Hot Condenser Alarm		N/A	Y	
	Power Failure Alarm		Y	Y	
	High/Low Voltage Alarm		N/A	Y	
	Sensor Error Alarm		Y	Y	
	Low Battery Alarm		N/A	Y	
	High Ambient Temperature Alarm		N/A	Y	
	Door Ajar Alarm		N/A	Y	
	Start-up delay		N/A	Y	
Accessories	Caster		N/A	Y (4)	
	Leveling Feet		Y (4)	Y (2)	
	Porthole		N/A	1*right side, (25mm)diameter	
	Inner Doors		N/A	1	
	Shelves		/	1- stainless steel adjustable shelves	
	Shelf Dimensions (W*D) (mm)		/	316*424	
	Max. Load per Shelf (kg)		/	22	
	Freezer Racks Quantity (2" boxes)		N/A	2	
	Capacity (2" boxes)		10	30	
	USB Interface		N/A	Y	
	Remote Alarm		N/A	Y	
	5V Power Supply Port		N/A	N/A	
	Temperature Chart Recorder		N/A	N/A	
	RS232/485 Port		N/A	N/A / Standard	
	CO ₂ Backup System		N/A	N/A	
Others	LN ₂ Backup System		N/A	N/A	
	Certifications	CE, MDR	UL	UL	CE, MDR

ULT Freezer	Freezer Rack						Freezer Rack Quantity	Total Boxes
	CAT.No.	Model	Type	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H) (mm)		
DW-150W209/150W209A	433028	DCJ-12-A(SUS304)	Vertical	12*1	2 inch	141*141*662	12	144
DW-86L388J/419	433012	DCJ-55-A(SUS304)	Side-access	5*5	2 inch	686*141*291	12	300
	433001/433002	DCJ-55-B(SUS201/304)	Sliding-drawer	5*5	2 inch	686*141*291	12	300
DW-86L578J/578JA/579/579BP/579BPT/578BPST	433012	DCJ-55-A(SUS304)	Side-access	5*5	2 inch	686*141*291	16	400
	433001/433002	DCJ-55-B(SUS201/304)	Sliding-drawer	5*5	2 inch	686*141*291	16	400
DW-86L728J/728JA/729/729BP/729BPT/728BPST/730BPT	433012	DCJ-55-A(SUS304)	Side-access	5*5	2 inch	686*141*291	20	500
	433001/433002	DCJ-55-B(SUS201/304)	Sliding-drawer	5*5	2 inch	686*141*291	20	500
DW-86L828J/828JA/829/829BP/829BPT/828W/828BPST/830BPT	433012	DCJ-55-A(SUS304)	Side-access	5*5	2 inch	686*141*291	24	600
	433001/433002	DCJ-55-B(SUS201/304)	Sliding-drawer	5*5	2 inch	686*141*291	24	600
DW-86L959BP/959BPT/959W	433012	DCJ-55-A(SUS304)	Side-access	5*5	2 inch	686*141*291	28	700
	433001/433002	DCJ-55-B(SUS201/304)	Sliding-drawer	5*5	2 inch	686*141*291	28	700
DW-86L486E	433013	DCJ-54-A(SUS304)	Side-access	5*4	2 inch	552*141*291	16	320
	433003/433004	DCJ-54-B(SUS201/304)	Sliding-drawer	5*4	2 inch	552*141*291	16	320
DW-86L628E	433013	DCJ-54-A(SUS304)	Side-access	5*4	2 inch	552*141*291	20	400
	433003/433004	DCJ-54-B(SUS201/304)	Sliding-drawer	5*4	2 inch	552*141*291	20	400
DW-86L338J/DW-86L338JA	433016	DCJ-44-A(SUS304)	Side-access	4*4	2 inch	552*141*240	6	96
	433013	DCJ-54-A(SUS304)	Side-access	5*4	2 inch	552*141*291	6	120
	433007/433008	DCJ-44-B(SUS201/304)	Sliding-drawer	4*4	2 inch	552*141*240	6	96
	433003/433004	DCJ-54-B(SUS201/304)	Sliding-drawer	5*4	2 inch	552*141*291	6	120
DW-86L490J/490JA	433016	DCJ-44-A(SUS304)	Side-access	4*4	2 inch	552*141*240	8	128
	433013	DCJ-54-A(SUS304)	Side-access	5*4	2 inch	552*141*291	8	160
	433007/433008	DCJ-44-B(SUS201/304)	Sliding-drawer	4*4	2 inch	552*141*240	8	128
	433003/433004	DCJ-54-B(SUS201/304)	Sliding-drawer	5*4	2 inch	552*141*291	8	160
DW-86L100J	433005/433006	DCJ-53-B(SUS201/304)	Sliding-drawer	5*3	2 inch	417*141*291	4	60
DW-86L51J	433005/433006	DCJ-53-B(SUS201/304)	Sliding-drawer	5*3	2 inch	417*141*291	2	30
DW-86W420J/420JA	433026	DCJ-10-A(SUS304)	Vertical	10*1	2 inch	141*141*552	27	270
DW-86W100J	433025	DCJ-08-A(SUS304)	Vertical	8*1	2 inch	141*141*442	9	72

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

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

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

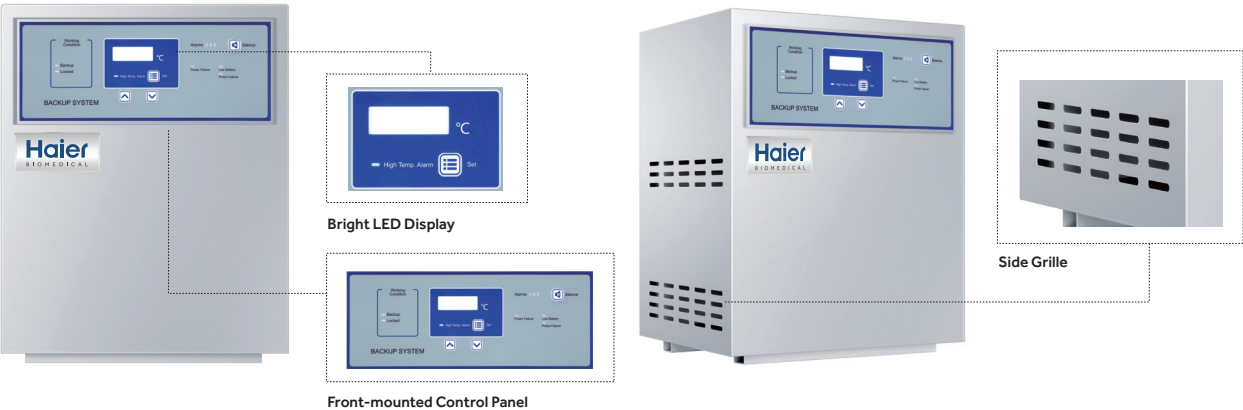


Specifications

	Model	HBX-1C
Technical Data	Ambient Temperature (°C)	10~32
	Cooling Type	Direct Cooling
	Refrigerant	CO ₂
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
Dimensions	Electrical Current (A)	0.25
	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
Alarms	Packing Dimensions (W*D*H)	550*390*330
		21.7*15.4*13.0
	CO ₂ Margin Insufficient Alarm	Y
	Low Battery Alarm	Y
	Sensor Error Alarm	Y
	Main Power Off Alarm	Y
Accessories	Charge Indicator	Y
	CO ₂ Injection Test Button	Y
Others	Foot	4
	Certifications	CE/UL



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.



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

Specifications

	Model	HBX-IIA
Technical Data	Cabinet Type	Horizontal
	Cooling Type	Direct Cooling
	Refrigerant	LN ₂
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
	Power (W)	115/60
	Electrical Current (A)	20
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
Alarms	Packing Dimensions (W*D*H)	450*375*720
		17.7*14.8*28.3
	Low Battery Alarm	Y
	Sensor Error Alarm	Y
Others	Main Power Off Alarm	Y
	Charge Indicator	Y
	Certification	CE/UL

Controlled Rate Freezer

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

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, ADRC control algorithm, temperature fluctuation range is ±0.5°C
- 21 CFR Part 11-compliance
Use of electronic records and signatures during the manufacturing process, that may help improve operational efficiency, improve system security, and decrease the number of records with defects

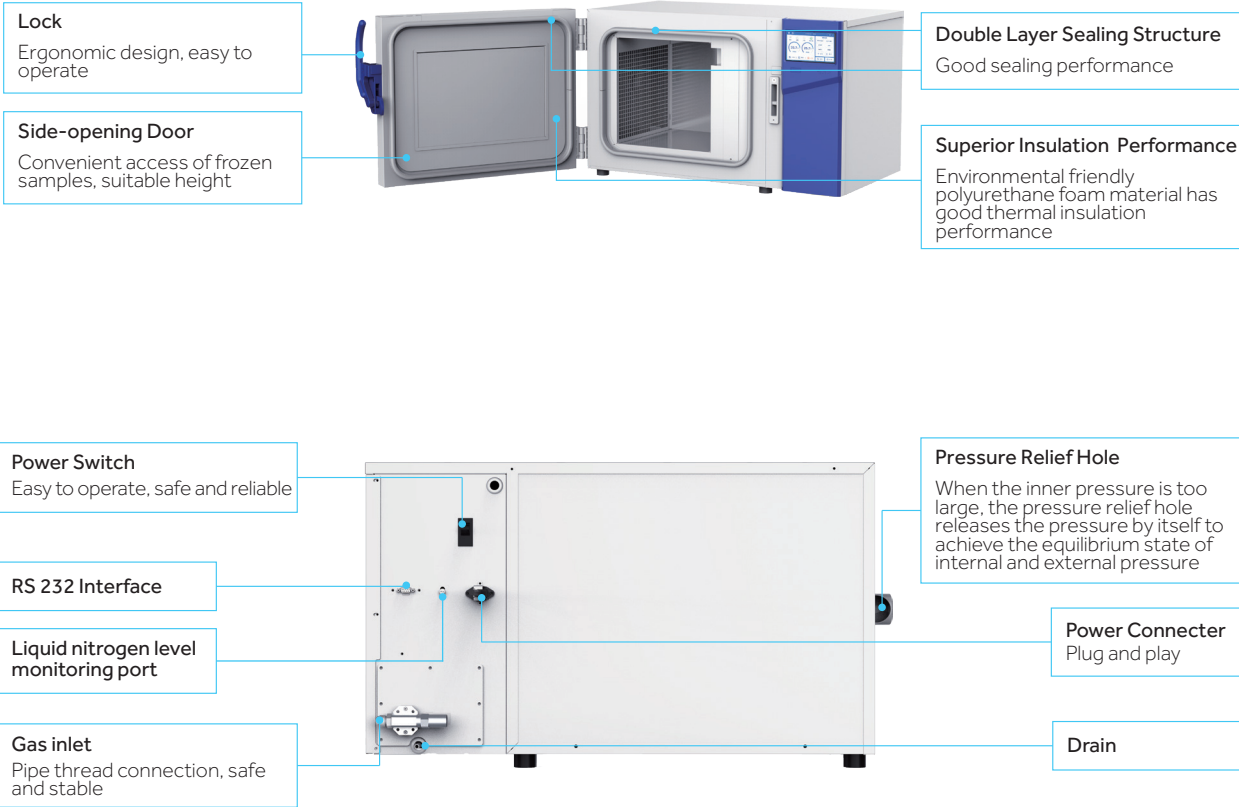


Ergonomic Design

- 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

Product Functions

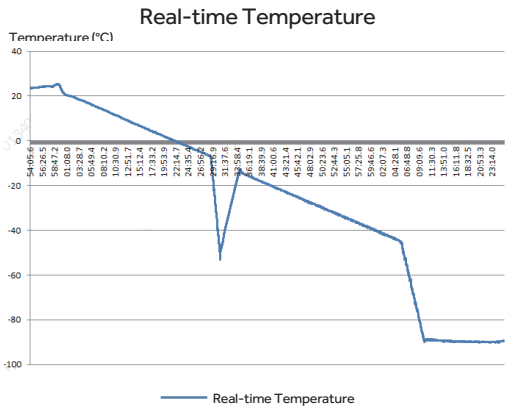




Product Performance

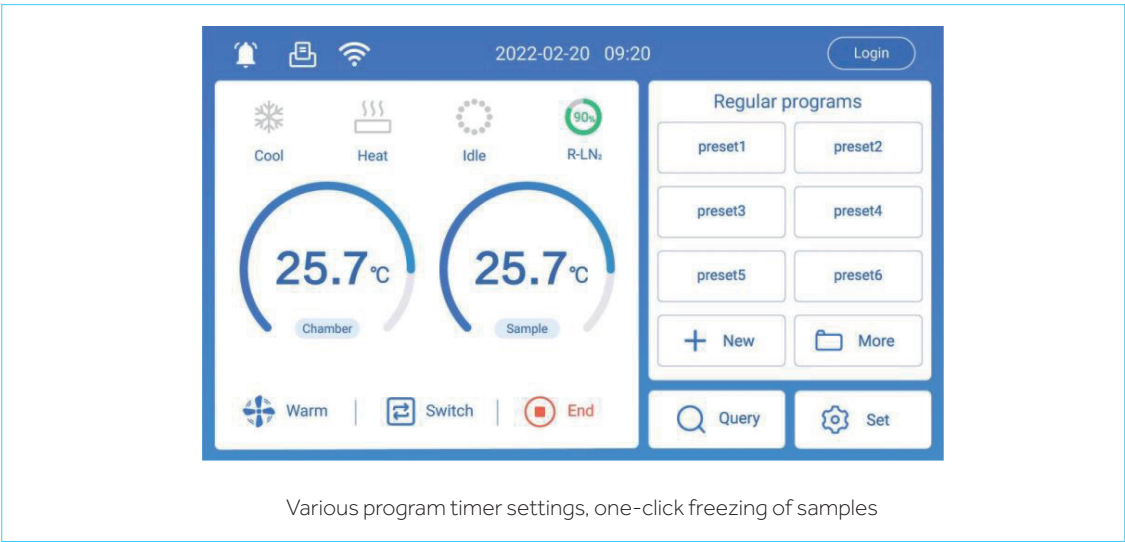


ADRC control algorithm, more accurate temperature control, temperature fluctuation range is $\pm 0.5^{\circ}\text{C}$



Double solenoid valve design and special jet ring design to realize the cooling rate of $0.1\sim 99^{\circ}\text{C}/\text{min}$
The heating rate is $0.1\sim 12^{\circ}\text{C}/\text{min}$ by heater design

One-Click Freezing



Specifications

Model	CJ-L19	CJ-L37	CJ-L54
Effective Volume(L)	19	37	54
Temperature Range($^{\circ}\text{C}$)	-180~50		
Cooling Rate($^{\circ}\text{C}/\text{min}$)	0.1~99.9		
Heating Rate($^{\circ}\text{C}/\text{min}$)	0.1~12		
Temperature Uniformity($^{\circ}\text{C}$)	<2		
Power Supply (V/Hz)	220-50/60		
Display Screen	7 "colorful LCD touch screen		
Refrigerant	Liquid nitrogen		
Liquid Nitrogen Monitoring	Alarm reminder for liquid nitrogen less than 20%		
Exterior Dimensions (W*D*H mm)	775*571*527	941*571*527	1093*571*527
Interior Dimensions (W*D*H mm)	170*340*330	330*340*330	485*340*330
Packing Dimensions (W*D*H mm)	890*710*705	1050*700*705	1200*710*705
Net/Gross Weight (Kg)	66/106	73/114.5	84.5/118
Serial Port Form	USB Interface/RS232 serial port		
Accessories	1 Printer, 2 Sample probe		
Certification	CE		

Optional Freezing Rack

Description	Dimensions (W*D*H mm)	Vials/Bags Per Rack	Number of Racks		
			Model		
			CJ-L19	CJ-L37	CJ-L54
2/5ml freezing rack	308*327*300	810(2ml vial) 486(5ml vial)		1	1+1
2/5ml freezing rack	143*326*300	550(2ml vial) 330(5ml vial)	1		
50ml freezing rack	100*153*259	13(25/50ml bag)	3	6	9
250ml freezing rack	160*240*256	8(250/500ml bag)	1	2	3
100ml freezing rack	112*164*301	10(100ml bag)	2	4	6



Vials Freezing Rack

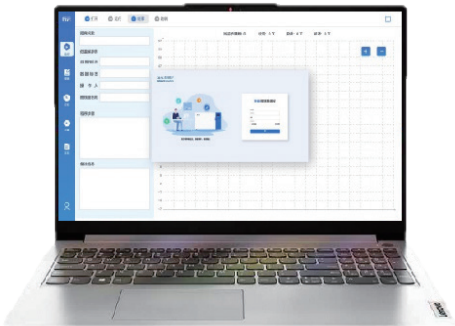


Bag Freezing Rack



Bag Freezing Box

PC Software(with PC)



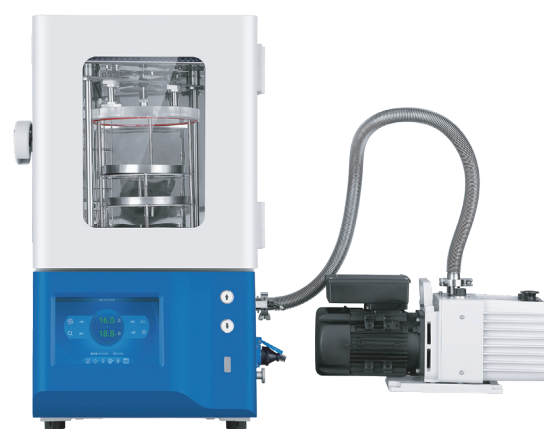
- Optimized profile design and easy to operate.
- Real-time acquisition of freezing curve, sample temperature, operating steps, etc.
- Remote control of controllable rate freezer.
- Update and enhance the creation of freezing programs.
- Realize the comparative analysis of historical data, output running records and print program reports.

Self-pressurized LN₂ Storage



Model	YDZ-100/1.5
Volume of LN ₂ (L)	100
Static Evaporation (L/Day)	1.3
LN ₂ Output (L/Min)	4
Height (mm)	1185
Outside Diameter (mm)	606
Empty Weight (kg)	75
Full Weight (kg)	157
Pressure Parameters (MPa)	1. Standard working pressure 0.09 2. Maximum working pressure 0.15 3. First stage safety valve relief pressure 0.15 4. Second stage safety valve release pressure 0.24 5. Pressure gauge range 0-0.25

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.



DG-65Z04-10A

Product Advantages



Automatic parameter storage

Intelligent storage of the freeze-drying parameters, without setting them separately each time



The refrigeration efficiency is greatly improved

The evaporator is located in the freezing chamber, which directly cools the sample and improves the refrigeration efficiency, it can reach -60°C within 25 minutes



The integrated design and totally enclosed environment make the sample pollution-free

The whole working cabin is closed, the freeze-drying process is isolated from the outside environment



IoT real-time management

Separate account, authority management, configuration record function, data traceability, real-time monitoring of equipment status



Multiple alarm functions

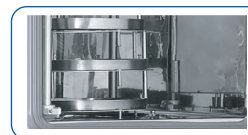
Multiple alarms including cold trap cooling overtime, vacuum pump oil replacement reminder, temperature sensor fault/cold trap temperature sensor fault, vacuum sensor fault, condenser sensor fault, ambient temperature sensor fault, abnormal refrigeration, motor overcurrent, condenser dirty blockage, vacuum alarm, heating lamp life less than 10% alarm



High sublimation speed and high drying efficiency

Excellent temperature uniformity, free from external influences, more energy-saving and environment-friendly

Ergonomic Design



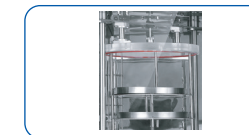
Automatic lifting shelves without manual operation



External vacuum pump, convenient for oil change

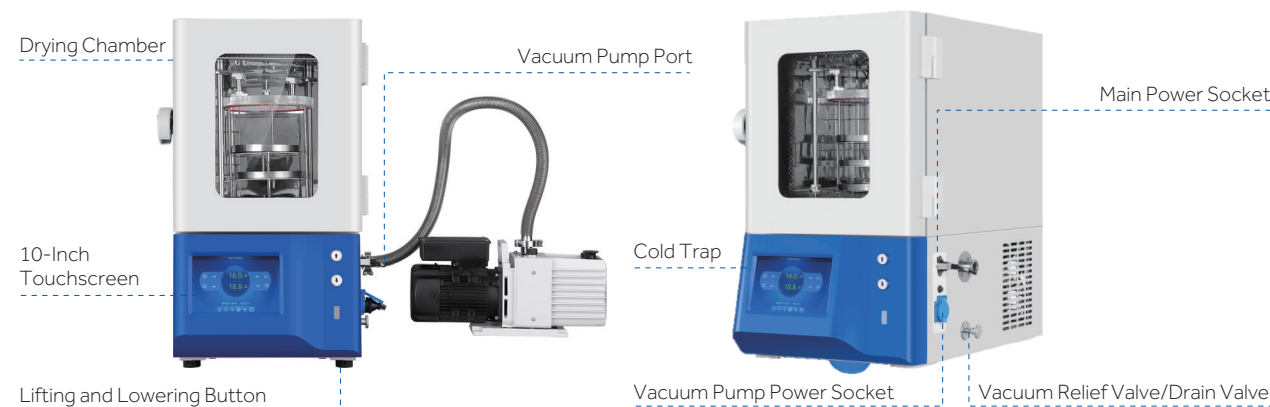


The filter can be easily replaced



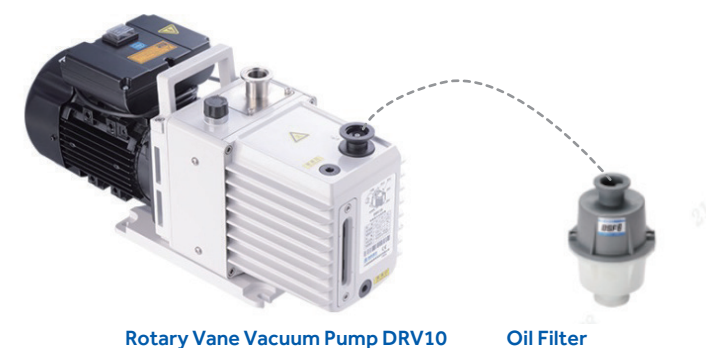
The design of glass door ensures the working situation in the drying chamber visible at the glance

Product Parts



Vacuum Pump

- The two-level gas ballast design offers greater convenience in meeting the steam discharge requirements of diverse processes.
- The automatic anti-backflow oil design provides more reliable protection for the vacuum system, preventing it from being contaminated by oil after shutdown.
- The built-in gear wheel pump and constant pressure oil supply mechanism ensure forced oil supply, allowing stable and reliable operation even under high suction pressure.



Rotary Vane Vacuum Pump DRV10

Oil Filter

Vacuum Pump

Model		DRV10
Power Supply (V/Hz)		220/50
Pumping Speed (m³/h)		9.9
Ultimate Pressure	Gas Ballast Off (Pa)	5*10 ⁻¹
	Gas Ballast On (Pa)	5
Motor Power (kw)		0.4
Required Oil (L)		1.1
Air Inlet		KF25
Air Outlet		KF25
Sound Level (db)		65
Weight (kg)		25

Model		DG-65Z04-10A
Ice Condenser Temperature (°C)		-65
Condensation Efficiency		4kg/24h
Sound Level (dB(A))		≤60
Weight (kg)		145 (equipment)+25 (pump)
Ultimate vacuum (Pa/mbar)		5/5*10 ⁻²
Maximum Condensation (kg)		4
Power (w)		950
Power Supply (V/Hz)		220/50
Dry Chamber Interior Dimesion (W*D*H)(mm)		404*374*398
Dry Chamber Capacity (L)		60
Freeze Cabinet Capacity (L)		13
Area (m²)		0.1
Shelves		3 layers
Material Tray Diameter (mm)		Φ200
Maximum Spacing Between Material Trays (mm)		70
Exterior Dimension (W*D*H)(mm)		480*793*883 (without pump)
Packing Dimension (W*D*H)(mm)		665*900*1400 (include pump)
Temperature Curve Display		Yes
Vacuum Pump Maintenance Reminder		Yes
Screen		10.1 inch touch screen
Notepad		Yes
Account Management		Yes
USB		Yes
Penicillin Bottle		Optional
Vacuum Pump Oil		Optional
Oil Mist Filter		Optional
Certifications		CE


Freeze Dryer


Applicable to biological research, medical laboratories for drying of biotechnological and pharmaceutical products, e.g. tissues and tissue extracts, bacteria, vaccines, and sera. The product is also suitable to food research, chemical industry and other related scenarios for efficient lyophilization of samples.





DG-65Z04-10AR


Product Advantages

- 

Automatic Parameter Storage
Intelligent storage of the freeze-drying parameters, without setting them separately each time
- 

IoT Real-time Management
Separate account, authority management, configuration record function, data traceability, real-time monitoring of equipment status
- 

Real Time Monitoring of Freeze-Drying Status
Check the sample freeze-drying curve at any time, and it can be adjusted immediately and in time if there are any risks
- 

The Refrigeration Efficiency is Greatly Improved
The evaporator is located in the freezing chamber, which directly cools the sample and improves the refrigeration efficiency, it can reach -60°C within 25 minutes
- 

Multiple Alarm Functions
Multiple alarms, including cold trap cooling overtime, vacuum pump oil replacement reminder, temperature sensor fault/cold trap temperature sensor fault, vacuum sensor fault, condenser sensor fault, ambient temperature sensor fault, abnormal refrigeration, motor overcurrent, condenser dirty blockage, vacuum alarm, heating lamp life less than 10% alarm

Ergonomic Design



Standard

Suitable for freeze-drying bulk samples



Manifolds

Suitable for freeze-drying samples in externally-attached flasks



Stoppering

Suitable for freeze-drying and stoppering samples in vials



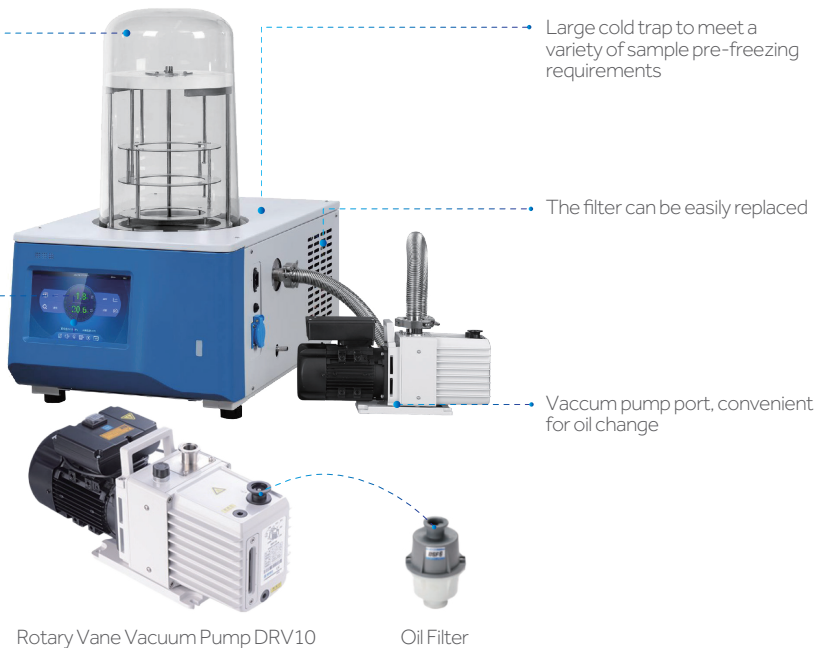
Stoppering with Manifolds

Suitable for freeze-drying and stoppering samples in vials and externally-attached flasks

Product Parts

The glass design cover ensures the working situation in the drying chamber is visible at a glance

10-inch touch screen, users can view operating status, and historical temperature data and alarm events



Large cold trap to meet a variety of sample pre-freezing requirements

The filter can be easily replaced

Vacuum pump port, convenient for oil change

Rotary Vane Vacuum Pump DRV10

Oil Filter

Specifications

Model		DRV10
Power Supply (V/Hz)		220/50
Pumping Speed (m³/h)		9.9
Ultimate Pressure	Gas Ballast Off (Pa)	5*10 ⁻¹
	Gas Ballast On (Pa)	5
Motor Power (kw)		0.4
Required Oil (L)		1.1
Air Inlet		KF25
Air Outlet		KF25
Sound Level (db)		65
Weight (kg)		25

Model		DG-65Z04-10AR
Ice Condenser Temperature (°C)		-65
Condensation Efficiency (kg/h)		4/24
Sound Level (dB(A))		≤60
Weight (kg)		80 (equipment)+25 (pump)
Ultimate Vacuum (Pa/mbar)		5/5*10 ⁻²
Maximum Condensation (kg)		4
Power (w)		950
Power Supply (V/Hz)		220/50
Freeze Cabinet Capacity (L)		13
Area (m²)		0.1
Shelves		3 layers (extensive)
Material Tray Diameter (mm)		φ200
Maximum Spacing Between Material Trays (mm)		70
Exterior Dimension (W*D*H)(mm)		480*793*730 (without pump)
Packing Dimension (W*D*H)(mm)		665*900*920 (include pump)
Temperature Curve Display		Yes
Vacuum Pump Maintenance Reminder		Yes
Screen		10.1 inch touch screen
Notepad		Yes
Account Management		Yes
USB		Yes
IoT		Yes
Penicillin Bottle		Optional
Certifications		CE


Pilot Freeze Dryer


The pilot freeze dryer is a smaller-scale freeze-drying system used in research, product development, and small-scale production processes.





HDG-85Z10-50

Product Advantages

-  **Precise Temperature Control**

 - The ±0.5°C shelf temperature accuracy allows precise adjustments tailored to your sample's needs and freeze-drying conditions.
 - Benefit from ±1°C cabinet temperature accuracy, ensuring consistent freeze-drying quality across your samples.
-  **Efficient Refrigeration Technology**


 - Experience rapid cold trap pull down from +20°C to -45°C in just 30 minutes, with the ability to reach ultimate temperatures of -85°C.
 - Achieve simultaneous cabinet and cold trap cooling, reducing wait times and enhancing efficiency.
-  **PLC Control, User-Friendly Control Interface**


 - Utilize editable automatic programs and multi-temperature segment control, meeting fine process requirements effortlessly.
 - Navigate easily through operations with the touchscreen interface, which can connect to a PC, enabling multi-user applications.
-  **Comprehensive Documentation**


Ensure compliance with FDA 21 CFR part 11, featuring e-signature capabilities for robust documentation.

Product Features

- 

Suitable for Small Batch Production & Pilot Run
Shelf total size: 0.54m²
Capacity: Circa. 3.690 Penicillin bottles Φ12mm
Circa. 2.046 Penicillin bottles Φ16mm
Circa. 1.056 Penicillin bottles Φ22mm
- 

Custom Design Options
0.2m²/ 0.4m² / 1m² can be customized according to customer demand.
Optional eutectic point test, drying end point judgment, can be connected to the sterilizer and gas backfill system, semi-customized to meet a variety of needs of users.
- 

Automatic Stoppering Function
Experience automatic stoppering functionality, facilitated by a customized hydraulic system. ideal for small batch production needs.
- 

Sample Safety
Rest assured. with emergency protection functions and IoT monitoring, ensure the safety of your valuable samples.

Product Performances

Model	HDG-85Z10-50
Shelf Size	0.54m ²
	Penicillin Φ12mm: Circa. 3690pcs
	Penicillin Φ16mm: Circa. 2046pcs
	Penicillin Φ22mm: Circa. 1056pcs
Cold Trap Temperature (°C)	-85
Cold Trap Cooling Speed	From +20°C to -45°C in 30min
Ice Condenser Capacity (kg)	10
Shelf Temperature Uniformity (°C)	±0.5°C On same shelf
	±1°C For all shelves
Ultimate Vacuum (mbar)	0.005
Shelf Dimension (mm)	300*450
Shelf Quantity	4+1
Shelf Distance (mm)	80
Shelf Temperature (°C)	-60°C-60°C
Power (W)	5000
Exterior Dimension (W*D*H)(mm)	1550*890*1950
Weight (kg)	800
Power Supply (V/Hz)	220/50
Control System	PLC control (Touchscreen as standard, can connect with PC)
Vacuum Control	Leak control valve
Freeze Drying Curve & Records	Yes
Automated Program	Yes (Manually)
Penicillin Lid Press	Yes (Hydraulic)
N2 Back Fill System	Optional
Automatic Drainage	Yes
Frost Function	Heated water frost
IoT Monitoring	No
Sample Emergency Protection	Constantly cooling the sample when vacuum exceeds limit
FDA 21 CFR Part 11	Compliance
Drying End Point Judgment	Optional
Eutectic Point test	Optional
Sterilization	Optional for H ₂ O ₂ sterilizer
IQ/OQ Confirmation	Optional
Certifications	CE

Bench-Top

Floor-Standing




HDG-86Z03-12T


HDG-86Z04-12


HDG-86Z06-18


The laboratory freeze-dryer is designed for laboratory research and sample preparation, and there are five types of design that can meet different needs.


Product Features

- 

Offering different choices of ice condenser capacity: 3, 4, 6 kg per 24 hours
- 

Rapid cooling to temperatures as low as -90°C
- 

Environmentally-friendly HC refrigeration system
- 

Optimal process control for quick and reliable freeze-drying
- 

Real time display of sample temperature, vacuum curve, and cold trap temperature curve

Ergonomic Design



7" touchscreen display for intuitive operation



Vacuum relief valve/Drain valve





Clear acrylic chamber for easy viewing




Easy to clean anti-corrosion cold trap and shelves




USB port to download operational data


Multiple Freeze-Drying Chamber Options




Standard
Suitable for freeze-drying bulk samples




Stoppering
Suitable for freeze-drying and stoppering samples in vials



Manifolds
Suitable for freeze-drying samples in externally-attached flasks



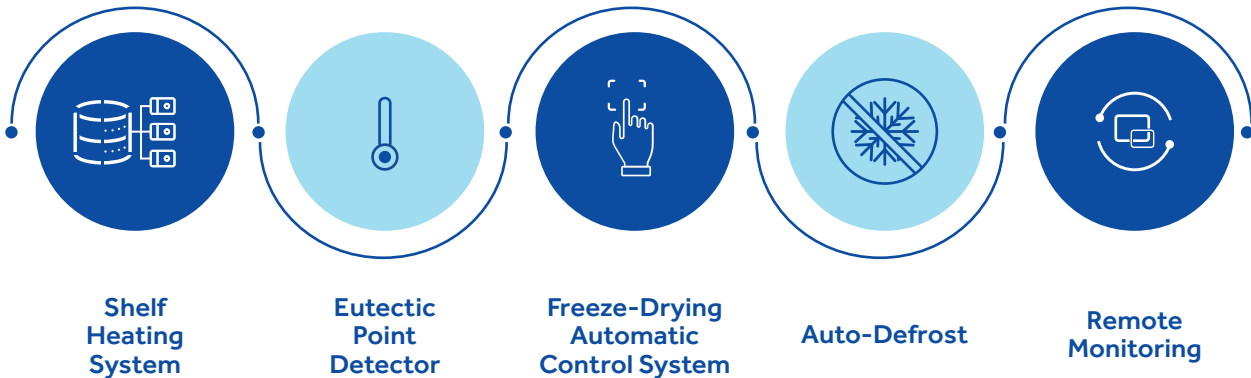
Stoppering with Manifolds
Suitable for freeze-drying and stoppering samples in vials and externally-attached flasks



T-Type
Suitable for freeze-drying samples in ampoule bottle and externally-attached flasks

Laboratory Freeze Dryer

Freeze-Drying Function Options



Specifications

Model	HDG-86Z03-12T	HDG-86Z04-12	HDG-86Z06-18
Type	Bench-Top	Floor-Standing	Floor-Standing
Area (m2)	0.12/0.09	0.12/0.09	0.18/0.09
Ice Condenser Temperature (°C)	-86	-86	-86
Ice Condenser Capacity (kg)	3	4	6
Condensation Efficiency (kg/24h)	3	4	6
Maximum Vacuum (Pa)	≤ 5	≤ 5	≤ 5
Shelf Diameter (mm)	φ200	φ200	φ240/φ240
Number of Shelves	4/3	4/3	4/3
Distance Between Shelves (mm)	70	70	70
Freeze Chamber Dimension (mm)	φ300*150	φ300*210	φ340*250
Power Supply (V/Hz)	220V/50Hz	220V/50Hz	220V/50Hz
Power (W)	950	980	1000
Exterior Dimension (W*D*H) (mm)	406*550*430	406*550*720	645*600*720
Weight (kg)	44	50	60



Consumables Solutions for ULT Freezer





Haier Biomedical offers a full line of freezer storage racks to help making efficient use of space in chest and upright freezers, deep freezers, and ultra-low temperature freezers. Normally, freezer racks may have horizontal access (for upright freezers) or vertical openings (for chest freezers). For optimal storage, client can choose racks designed to fit the particular freezer model or product.

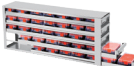



Product Features


- Manufactured using advanced capacitor energy storage resistance welding to product solid weld with smooth finish
- Various specifications for different storage requirements-frozen storage tube (box), SBS frozen storage tube (box), centrifugal tube, etc
- Handle is designed to reduce frost and ice build-up around handle
- Customised racking is available for different types of storage containers or models of freezer, contact us for more information

Drawer Freezer Rack	CAT.NO.	Model	Material	Adapte	Packing
	433001	(EXP)DCJ-55-B(SUS201)	SUS201	133*133*53mm box	1 pcs/ case
	433002	(EXP)DCJ-55-B(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433003	(EXP)DCJ-54-B(SUS201)	SUS201	133*133*53mm box	1 pcs/ case
	433004	(EXP)DCJ-54-B(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433005	(EXP)DCJ-53-B(SUS201)	SUS201	133*133*53mm box	1 pcs/ case
	433006	(EXP)DCJ-53-B(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433007	(EXP)DCJ-44-B(SUS201)	SUS201	133*133*53mm box	1 pcs/ case
	433008	(EXP)DCJ-44-B(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	434040	(EXP)DCJ-45-B(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	434041	(EXP)DCJ-33-B(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433009	(EXP)DCJ-35-B(3 inch/SUS304)	SUS304	133*133*94mm box	1 pcs/ case
	433010	(EXP)DCJ-34-B(3 inch/SUS304)	SUS304	133*133*94mm box	1 pcs/ case
	433011	(EXP)DCJ-75-B(SUS304)	SUS304	133*133*37mm box	1 pcs/ case

Side-access Freezer Rack	CAT.NO.	Model	Material	Adapte	Packing
	433012	(EXP)DCJ-55-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433013	(EXP)DCJ-54-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433037	(EXP)DCJ-53-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433014	(EXP)DCJ-35-A(3 inch/SUS304)	SUS304	133*133*94mm box	1 pcs/ case
	433015	(EXP)DCJ-34-A(3 inch/SUS304)	SUS304	133*133*94mm box	1 pcs/ case
	433016	(EXP)DCJ-44-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case

SBS Freezer Rack	CAT.NO.	Model	Material	Adapte	Packing
	433017	(EXP)DCJ-57-B(SUS304)	SUS304	86*128*50.8mm box	1 pcs/ case
	433018	(EXP)DCJ-77-B(SUS304)	SUS304	86*128*38.5mm box	1 pcs/ case
	433019	(EXP)DCJ-56-B(SUS304)	SUS304	86*128*50.8mm box	1 pcs/ case
	433020	(EXP)DCJ-57-B(SUS201)	SUS201	86*128*50.8mm box	1 pcs/ case
	433021	(EXP)DCJ-77-B(SUS201)	SUS201	86*128*38.5mm box	1 pcs/ case
	433022	(EXP)DCJ-56-B(SUS201)	SUS201	86*128*50.8mm box	1 pcs/ case

Vertical Freezer Rack	CAT.NO.	Model	Material	Adapte	Packing
	433023	(EXP)DCJ-6-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433025	(EXP)DCJ-8-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433026	(EXP)DCJ-10-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case
	433028	(EXP)DCJ-12-A(SUS304)	SUS304	133*133*53mm box	1 pcs/ case

Centrifuge Tube Freezer Rack	CAT.NO.	Model	Material	Adapte	Packing
	433029	(EXP)SDCJ-15ml	SUS304	15ml centrifuge tube	1 pcs/ case
	433030	(EXP)SDCJ-50ml	SUS304	50ml centrifuge tube	1 pcs/ case

Haier Biomedical can provide a range of high quality cryogenic storage tubes , which can withstand the extremes of cryogenic conditions while protecting the valuable samples. Meanwhile the Haier Biomedical cryogenic storage tubes have high compatibility with above freezer storage racks and ULT freezers, meeting the client's one-stop demands.



Product Features

- Rigorous cytotoxicology-testing ensures pyrogen, RNase, DNase and endotoxins levels are less than 0.005EU/mL
- Complying with ANSI/SLAS international standards, suitable for a variety of automated storage and processing equipment
Laser etching process and three-code information integration technology are adopted to ensure the security and redundancy to provide an extra layer of protection
- The snap design of the base is easy to use and prevents scratches after freezing
- Designed and manufactured to prevent leakage at -98kpa to meet the IATA dangerous goods PI650 standard



Cryogenic Tube

CAT.NO.	Volume (mL)	Material	Specification	Type	Sterile	Packing
413032	0.5	PP	SBS 12x8	box-packed	√	96 pcs/box, 80 boxes/ case
413033	0.75	PP	SBS 12x8	box-packed	√	96 pcs/box, 70 boxes/ case
413034	1.0	PP	SBS 12x8	box-packed	√	96 pcs/ box, 50 boxes/ case
413004	2.0	PP	SBS 6x8	box-packed	√	48 pcs/ box, 50 boxes/ case
413005	2.0	PP	10x10	box-packed	√	100 pcs/ box, 30 boxes/ case
413006	0.5	PP	/	bag-packed	√	220 pcs/ bag 60 bags/ case
413007	1.0	PP	/	bag-packed	√	150 pcs/ bag 40 bags/ case
413008	2.0	PP	/	bag-packed	√	70 pcs/ bag 50 bags/ case

* External cap , triple code, white code on black background

SBS Box

CAT.NO.	Adapte	Material	Specification	Packing
413009	0.5 ml SBS Tube	PC+ABS	SBS 8x12	80 boxes/ case
413010	0.75 ml SBS Tube	PC+ABS	SBS 8x12	70 boxes/ case
413011	1.0 ml SBS Tube	PC+ABS	SBS 8x12	50 boxes/ case
413012	2.0 ml SBS Tube	PC+ABS	SBS 6x8	50 boxes/ case
413013	2.0 ml SBS Tube	PC+ABS	10x10	30 boxes/ case

Cryo tubes can withstand ultra-low temperature refrigerator environment, no deformation under low temperature environment, tigh_x0002_tly closed tube mouth, low risk of contamination. The multi-colored caps are designed for easy sample differentiation.



● Temperature Range: -196 °C ~ 121 °C

Internal thread tube:

External thread tube:



Concave cap
(color code inset possible)



Automated cap



Flat cap

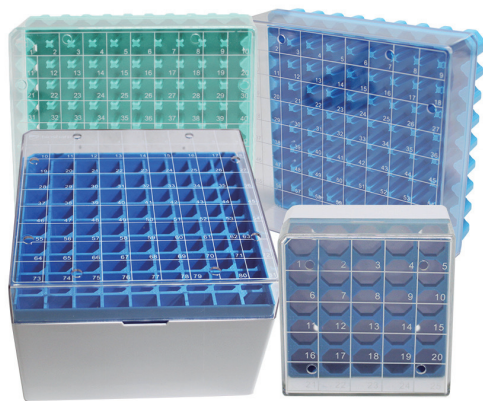


Concave cap
(color code inset possible)


External thread	CAT.NO.	Volume (mL)	Material	Cap	Sterile	Packing
	423010	0.5	PP	Flat cap	√	100pcs/bag, 10bags/case
	423016	0.5	PP	Flat cap	√	100pcs/ box, 12 boxes/ case
	423011	1.5	PP	Flat cap	√	100pcs/bag, 10bags/ case
	423017	1.5	PP	Flat cap	√	100pcs/ box, 12 boxes/ case
	423032	0.5	PP	Automated cap	√	100pcs/bag, 20bags/ case
	423038	0.5	PP	Automated cap	√	100pcs/ box, 30 boxes/ case
	423028	1.0	PP	Automated cap	√	100pcs/bag, 20bags/ case
	423026	1.0	PP	Automated cap	√	100pcs/ box, 30 boxes/ case
	423035	1.5	PP	Automated cap	√	100pcs/bag, 20bags/ case
	423041	1.5	PP	Automated cap	√	100pcs/ box, 30 boxes/ case
	423029	2.0	PP	Automated cap	√	100pcs/bag, 20bags/ case
	423027	2.0	PP	Automated cap	√	100pcs/ box, 30 boxes/ case
	423012	2.0	PP	Concave cap	√	100pcs/bag, 10bags/ case
	423013	5.0	PP	Concave cap	√	100pcs/bag, 10bags/ case


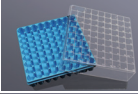
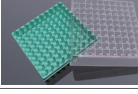

Internal thread	CAT.NO.	Volume (mL)	Material	Cap	Sterile	Packing
	423014	1.0	PP	Concave cap	√	100pcs/bag, 10bags/ case
	423015	2.0	PP	Concave cap	√	100pcs/bag, 10bags/ case

Cryogenic Box



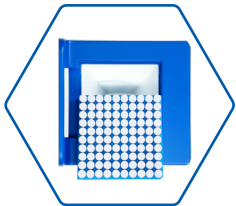
- Specifications: 25/81/100 wells
- Temperature Range: -196 °C ~ 121 °C

Paper Box	CAT.NO.	Type	Specifications	Adapte	Packing
	423001	9*9	133*133*53mm White	0.5-2.0ml	50 boxes/case
	423002	10*10	133*133*53mm White	0.5-2.0ml	50 boxes/case

PC Box	CAT.NO.	Type	Specifications	Adapte	Packing
	422005	5*5	73*73*53mm Clear box cover, Blue center plate, white base	0.5-2.0ml	50 boxes/case
	422012	9*9	133*133*53mm Clear box cover, Blue base	0.5-2.0ml	50 boxes/case
	422013	10*10	133*133*53mm Clear box cover, Green base	0.5-2.0ml	50 boxes/case
	422014	9*9	133*133*94mm Clear box cover, Blue center plate, White base	5.0ml	24 boxes/case

High Speed Batch Scanner

Haier Biomedical high speed batch scanner can be used to scan various specifications of boxed prefabricated code cryogenic tubes, 1S high-speed identification of sample information, to achieve efficient management of sample.



Intelligent induction tube box, automatic light filling, multi environment adaptation.

Tube bottom code and box code synchronous reading, three-dimensional construction data.



Detachable module design, compatible with SBS, square and other multi-specification cryogenic box.

Module anti-loss hook design, prevent module placement and loss trouble.



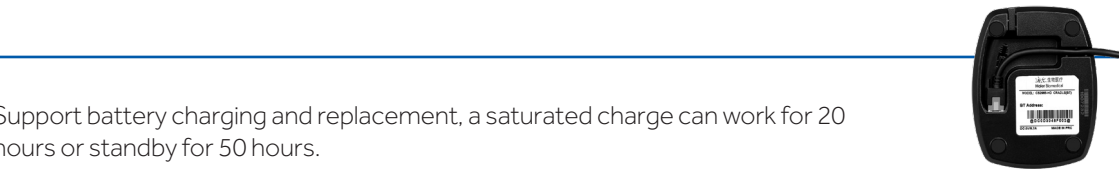
CAT.NO	Description	Quantity	Package
445005	Batch scanning, high-speed scanning, side code scanning, suitable SBS freezer box	1	1 set/case
445007	Batch high-speed scanning, top scanning model, suitable for 10*10/9*9 top labeled freezer box	1	1 set/case

Single Tube Scanner

Haier Biomedical single tube scanner is flexible and quick to scan the samples information.



Wireless communication distance up to 30 meters, easy to identify mobile scene information.



Support battery charging and replacement, a saturated charge can work for 20 hours or standby for 50 hours.

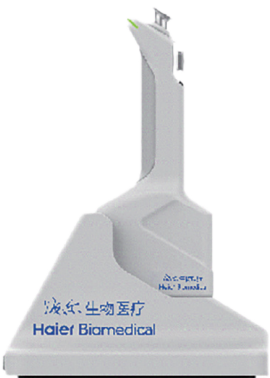


Excellent DPM code reading ability, suitable for all kinds of precision code recognition, fast and accurate.

CAT.NO	Description	Quantity	Package
445012	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
445013	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
445053	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

Batch Cover Opener

Haier Biomedical batch cover opener opens or closes the multi-channel cap improves the efficiency compared to manual operation and reduces the risk of contact with biochemical reagents and safety risks.



- Multi-channel synchronized cap opening, up to 8 channels at a time
- Push-key design for quick and easy cap removal
- Rack storage, convenient storage of opened batch caps

CAT.NO.	Description	Quantity	Package
445016	8-channel, hand-held, for SBS 96 boxed cryo-tubes;	1	1 set/case
445020	6-channel, hand-held, for SBS 48/24 boxed cryo-tubes;	1	1 set/case

Cryo Freezer

-86°C ULT Freezer



DW-150W209



DW-86L728BPSTR DW-86L100STL DW-86L730/830BPT DW-86L579BP/729BP DW-86L829BP/959BP DW-86L578BPST DW-86L728BPST DW-86L828BPST




DW-86L579BPT/729BPT DW-86L829BP/959BPT DW-86L828W DW-86L959W DW-86L419/579 DW-86L729/829 DW-86L338J DW-86L338JA DW-86L388J DW-86L490J DW-86L490JA DW-86L578J DW-86L578JA




DW-86L728J DW-86L828J DW-86L828JA DW-86L486E DW-86L628E DW-86L51J DW-86L100J DW-86W100J DW-86W420J DW-86W420JA

Mini ULT Freezer




DW-80WZ15

Controlled Rate Freezer




CJ-L19/L37/L54

Backup System




HBX-IC HBX-IIA

Freeze Dryer




DG-65Z04-10A DG-65Z04-10AR

Pilot Freeze Dryer




HDG-85Z10-50

Laboratory Freeze Dryer




HDG-86Z03-12T HDG-86Z04-12 HDG-86Z06-18


Freezer Storage Racks



Barcode Cryogenic Tubes and Storage Boxes



Universal Cryogenic Tubes and Storage Boxes



Cryogenic Storage Series



High Speed Batch Scanner



Single Tube Scanner



Batch Cover Opener

