

ULT Freezer Solutions



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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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Cryo Freezer



-150°C Cryo freezer, developed by Haier Biomedical, provides a safe, convenient and economical alternative long term storage method for customers. By providing a storage environment about 20°C colder than the water recrystallization temperature, the freezer is suitable for storage of a varieties of biological samples such as viruses, erythrocytes, leukocytes, cutis, skeleton, sperms, oceanic products, special test materials and even electronic products for testing. It can be installed in institutions including blood banks, hospitals, epidemic prevention services, research institutes, and research laboratories.

Temperature Control

- Microprocessor control: Large LED display features a clear cabinet temperature display at an easy viewing angle and allows an adjustable range of -126°C to -150°C

Refrigeration System

- Optimized single stage refrigeration system
- Hermetically sealed system
- Environmentally safe refrigerants
- Permanently lubricated fan systems

Other Features

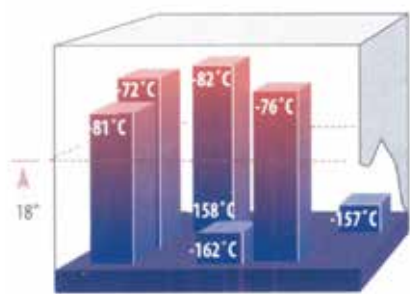
- Large LED display for easy viewing
- Ambient range of 10 °C to 30°C
- LN₂ back up system compatible
- Remote monitoring
- Smart condenser fans for energy saving



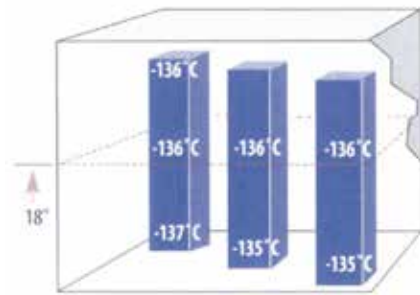
Safety Control System

- Alarm system: User programmable high and low temperature alarm set points, power failure, sensor error, extreme voltage, hot condenser, and extremely high ambient
- Alarm types: audible buzzer and visible flashing
- Protection functions: Settable pass codes for control panel, start-up delay, voltage compensation system
- Properly grounded

Liquid Nitrogen Preservation System in Cryo Freezer



LN₂ Freezer System(~196 °C)



Cryo Freezer(~140°C)

Specifications

Model		DW-150W200
Technical Data	Cabinet Type	Chest
	Climate Class	N
	Cooling Type	Direct Cooling
	Defrost Mode	Manual
	Refrigerant	HFC
	Sound Level (dB(A))	67
Performance	Cooling Performance (°C)	-150
	Temperature Range (°C)	-126 ~-150
Control	Controller	Microprocessor
	Display	LED
Electrical Data	Power Supply (V/Hz)	380/50
	Electrical Current (A)	11
Dimensions	Capacity (L/Cu.Ft)	200/7.1
	Net/Gross Weight (approx)	kg315/385
		lbs694.4/848.8
	Interior Dimension (W*D*H)	mm667*462*650
		in26.3*18.2*25.6
	Exterior Dimension (W*D*H)	mm1670*850*1060
		in65.7*33.5*41.7
	Packing Dimension (W*D*H)	mm1810*940*1240
		in71.3*37.0*48.8
Alarms	Container load (20'/40'/40'H)	6/13/13
	High/Low Temperature	Y
	Hot Condenser	Y
	Power Failure	Y
	High/Low Voltage	Y
	Sensor Error	Y
	Low Battery	Y
	High Ambient Temperature	Y
	Door Ajar	N/A
	Caster	Y
Accessories	Foot	Y
	Porthole	Y/1
	Shelves/Inner doors	-/2
	USB Interface	Optional
	Remote Alarm (Dry contacts)	Y
	5V Power Supply Port	N/A
	Temperature Recorder	Optional
	RS485 Port	Y
	CO ₂ Backup System	N/A
	LN ₂ Backup System	Optional
Others	Certification	N/A

Product appearance and specifications are subject to change without notice



TwinCool ULT Freezer

Scope of Application

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

Advanced Hardware System



Smart Full-size Touch Screen

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

A Dual independent refrigeration systems for maximum sample safety

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

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

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

C World-leading energy saving refrigeration technology

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

IoT Software System (Optional)



Simplified Sample Management Experience

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



Wireless Monitoring Connectivity

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

Friendly Design



Safe and secure

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



Low noise design, reducing the noise down to 53dB

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



Cloud data storage available

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



Optimized insulation

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

Specifications

	Model	DW-86L578ST	DW-86L578SAT	DW-86L728ST	DW-86L728SAT
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Climate Class	N	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC
	Sound Level (dB(A))	53	52	50	53
Performance	Cooling Performance (°C)	-86	-86	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	Touch Screen LCD	Touch Screen LCD	Touch Screen LCD	Touch Screen LCD
Electrical Data	Power Supply (V/Hz)	208~230/60	120/60	208~230/60	208~230/50
	Power (W)	1400	1800	1400	1800
	Electrical Current (A)	10	14	10	14
Dimensions	Capacity (L/Cu.Ft)	578/20.4	578/20.4	728/25.7	728/25.7
	Net/Gross Weight (approx)	kg	325/355	325/355	350/385
		lbs	716.5/782.6	716.5/782.6	771.6/848.8
	Interior Dimension (W*D*H)	mm	620*716*1310	620*716*1310	766*716*1310
		in	24.4*28.2*51.6	24.4*28.2*51.6	30.2*28.2*51.6
	Exterior Dimension (W*D*H)	mm	895*998*1980	895*998*1980	1046*998*1980
		in	35.4*39.3*78.0	35.4*39.3*78.0	41.2*39.3*78.0
	Packing Dimension (W*D*H)	mm	950*1055*2150	950*1055*2150	1100*1105*2150
		in	37.4*41.5*84.6	37.4*41.5*84.6	43.3*43.5*84.6
	Container Load (20'/40'/40'H)	12/24/24	12/24/24	10/20/20	10/20/20
Alarms	High/Low Temperature	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	High/Low Voltage	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	High Ambient Temperature	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2	Y/2
	Shelves/Inner Doors	3/4	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y
	Remote Alarm (Dry contacts)	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
	Temperature Recorder	Optional	Optional	Optional	Optional
	RS485 Port	Y	Y	Y	Y
	CO ₂ Backup System	Optional	Optional	Optional	Optional
Others	LN ₂ Backup System	Optiona	Optional	Optional	Optional
	Certification	CE/ENERGY STAR	UL/ENERGY STAR	UL/ENERGY STAR	CE/ENERGY STAR

Product appearance and specifications are subject to change without notice

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



DW-86L578S

Safer by Design

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

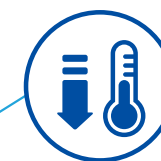
Intelligent TwinCool Refrigeration System

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



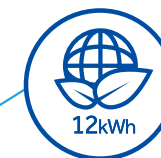
Maximum Sample Security

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



Fast Cabinet Pull Down

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



Maximum Energy Efficiency

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



World-leading Energy Saving Refrigeration Technology

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



Reduced Running Costs

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



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



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



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



Multi-layer Sealing Structure
Triple gaskets provide a tight seal between the inner doors and outer door, reducing heat gain and retaining the temperature better in the event of a power failure



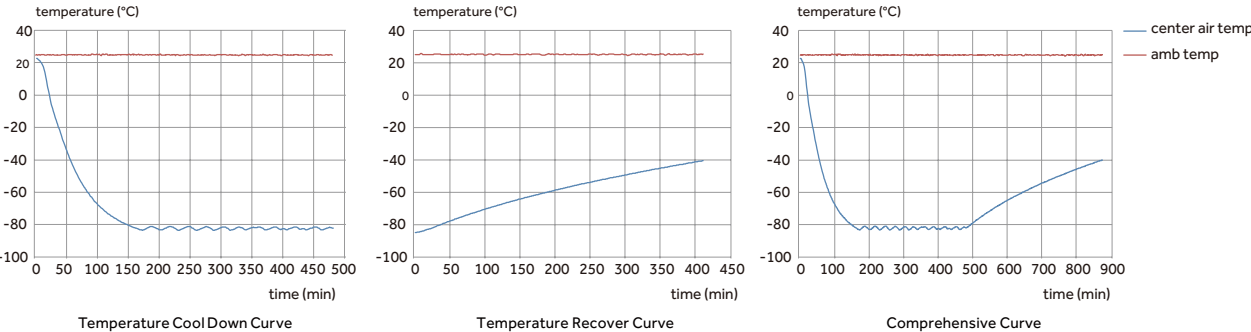
Improved Handle Design
Lockable handle safeguards your precious samples. A padlock can also be added for extra sample safety



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

DW-86L578S

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



Specifications

Model		DW-86L578S	DW-86L728S
Technical Data	Cabinet Type	Upright	Upright
	Climate Class	N	N
	Cooling Type	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual
	Refrigerant	HC	HC
	Sound Level (dB(A))	53	50
Performance	Cooling Performance (°C)	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor
	Display	LED	LED
Electrical Data	Power Supply (V/Hz)	208~230/50	208~230/50
	Power (W)	1400	1400
	Electrical Current (A)	10	10
Dimensions	Capacity (L/Cu.Ft)	578/20.4	728/25.7
	Net/Gross Weight (approx)	kg	325/355
		lbs	716.5/782.6
	Interior Dimension (W*D*H)	mm	620*716*1310
		in	24.4*28.2*51.6
	Exterior Dimension (W*D*H)	mm	895*998*1980
		in	35.2*39.3*78.0
	Packing Dimension (W*D*H)	mm	950*1055*2150
		in	37.4*41.5*84.6
Alarms	Container load (20'/40'/40'H)	12/24/24	10/20/20
	High/Low Temperature	Y	Y
	Hot Condenser	Y	Y
	Power Failure	Y	Y
	High/Low Voltage	N/A	N/A
	Sensor Error	Y	Y
	Low Battery	Y	Y
	High Ambient Temperature	Y	Y
	Door Ajar	Y	Y
Accessories	Caster	Y	Y
	Foot	Y	Y
	Porthole	Y/2	Y/2
	Shelves/Inner doors	3/4	3/4
	USB Interface	Y	Y
	Remote Alarm (Dry contacts)	Y	Y
	5V Power Supply Port	Y	Y
	Temperature Recorder	Optional	Optional
	RS485	Y	Y
	CO ₂ Backup System	Optional	Optional
	LN ₂ Backup System	Optional	Optional
Others	Certification	CE/ENERGY STAR	CE/ENERGY STAR

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



**Smart Frequency
Conversion
ULT Freezer**

Scope of Application

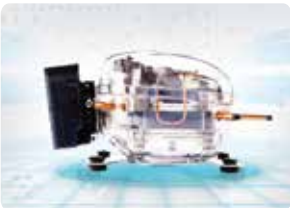
Applicable for products and samples which require strict storage conditions such as viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semen, biological products, electronics and special materials. Suitable for long term storage applications and compliant with typical storage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

Advanced Hardware System



Smart Full-size Touch Screen

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



HC & Variable Frequency Drive Refrigeration System for Additional Energy Saving

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

Optional IoT Software System



Simplified Sample Management Experience

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



Wireless Monitoring Connectivity

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

A Quicker product access, identification and retrieval

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

B 24-hour sample protection

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

C Cloud data storage available

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

Friendly Design



Safe and secure

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



Low noise design, reducing the noise down to 53dB

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



Super energy efficient with three environmentally friendly innovations

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



Optimized insulation

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

Specifications

Model		DW-86L579BPT	DW-86L729BPT	DW-86L829BPT	DW-86L959BPT
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Climate Class	N	N	N	N
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC
	Sound Level (dB(A))	43.5	43.5	43.5	47
Performance	Cooling Performance (°C)	-86	-86	-86	-86
	Temperature Range (°C)	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LCD Touch Screen	LCD Touch Screen	LCD Touch Screen	LCD Touch Screen
Electrical Data	Power Supply (V/Hz)	100~230/50/60	100~230/50/60	208~230/50/60	208~230/50/60
	Power (W)	1100	1100	1100	1300
	Electrical Current (A)	6	6	6	7
Dimensions	Capacity (L/Cu.Ft)	579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight (approx)	kg	325/355	350/385	380/415
		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	950*1055*2150	1100*1105*2150	1190*1045*2150
		in	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6
	Container load (20'/40'/40'H)	12/24/24	10/20/20	8/20/20	8/16/16
Alarms	High/Low Temperature	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	High/Low Voltage	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	High Ambient Temperature	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2	Y/2
	Shelves/Inner Doors	3/4	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y
	Remote Alarm (Dry contacts)	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
	Temperature Recorder	Optional	Optional	Optional	Optional
	RS485 Port	Y	Y	Y	Y
	CO ₂ Backup System	Optional	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional	Optional
Others	Certification	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR

BP suffix - Variable frequency inverter compressor

T suffix - Advanced with touchscreen

Product appearance and specifications are subject to change without notice

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



Smarter by Design

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



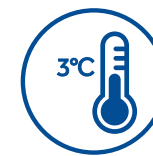
Intelligent frequency Conversion technology

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



Maximum energy efficiency

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



Precise temperature control

The innovative control algorithm balances the effects of temperature loss with the unique frequency conversion refrigeration system, ensuring the cabinet temperature stability of $\pm 3^{\circ}\text{C}$.



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).



Energy Saving Refrigeration

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



Pressure Equalisation Port

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



USB Interface

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



Multilayered Sealing Structure

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



Improved Handle Design

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

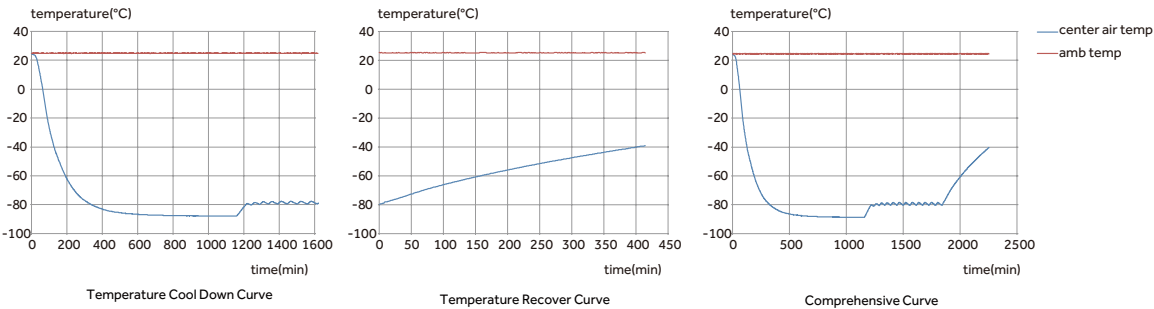


Multilevel Alarms

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

DW-86L829BP

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



Specifications

Model		DW-86L579BP	DW-86L729BP	DW-86L829BP	DW-86L959BP
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Climate Class	N	N	N	N
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC
Performance	Sound Level (dB(A))	43.5	43.5	43.5	47
	Cooling Performance (°C)	-86	-86	-86	-86
	Temp Range (°C)	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)	100~230/50/60	100~230/50/60	208~230/50/60	208~230/50/60
	Power (W)	1100	1100	1100	1300
	Electrical Current (A)	6	6	6	7
Dimensions	Capacity (L/Cu.Ft)	579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight (approx)	kg	325/355	350/385	380/415
		lbs	716.5/782.6	771.6/848.8	837.7/914.9
	Interior Dimensions (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 Dimensions (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	950*1055*2150	1100*1105*2150	1190*1045*2150
		in	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6
	Container Load (20'/40'/40'H)	12/24/24	10/20/20	8/20/20	8/16/16
Alarms	Remote Alarm (Dry contacts)	Y	Y	Y	Y
	High/Low Temp	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	High Ambient Temp	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2	Y/2
	Shelves/ Inner Doors	3/4	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
	Temp Recorder	Optional	Optional	Optional	Optional
	RS485 Port	Y	Y	Y	Y
	CO ₂ Backup System	Optional	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional	Optional
Other	Certification	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR

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

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



Advantages

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



Specifications

Model			DW-86L828W	DW-86L959W
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		N	N
	Cooling Type		Direct cooling	Direct cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level (dB(A))		43.5	47
Performance	Cooling Performance (°C)		-86	-86
	Temperature Range (°C)		-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor
	Display		LCD Touch Screen	LCD Touch Screen
Electrical Data	Power Supply (V/Hz)		208~230/50/60	208~230/50/60
	Power (W)		1100	1300
	Electrical Current (A)		6	7
Dimensions	Capacity (L/Cu.Ft)		828/29.2	959/33.9
	Net/Gross Weight (approx)	kg	380/415	450/485
		lbs	837.7/914.9	992.1/1069.2
	Interior Dimension (W*D*H)	mm	870*716*1310	1016*716*1310
		in	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimension(W*D*H)	mm	1145*998*1980	1296*998*1980
		in	45.1*39.3*78.0	51.0*39.3*78.0
	Packing Dimension (W*D*H)	mm	1190*1045*2150	1365*1105*2150
		in	46.9*41.1*84.6	53.7*43.5*84.6
	Container Load (20'/40'/40'H)		8/20/20	8/16/16
Alarms	High/Low Temperature		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	High/Low Voltage		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y/2	Y/2
	Shelves/Inner doors		3/4	3/4
	USB Interface		Y	Y
	Remote Alarm (Dry contacts)		Y	Y
	5V Power Supply Port		Y	Y
	Temperature Recorder		Optional	Optional
	Rs485 Port		Y	Y
	CO ₂ Backup System		Optional	Optional
	LN ₂ Backup System		Optional	Optional
Others	Certification		CE	CE

Product appearance and specifications are subject to change without notice

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



DW-86L829

DW-86L579

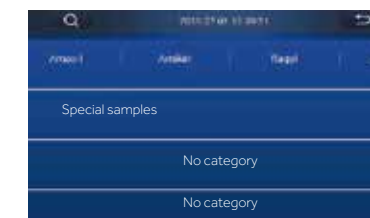


Large Intelligent LCD Screen Visual Management

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

Inventory Management System

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



Single version (standard)



Professional version (optional)

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

The freezer comes with the single version as standard.

Equipped with Multiple Interfaces

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



Multiple Options for Safe Management and Control Systems

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

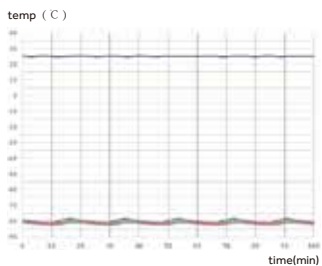
Optional IoT System Realizes Real-time Monitoring

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



Safe and Secure with Multiple Alarms

Multiple alarm functions include high temperature alarm, low temperature alarm, sensor failure alarm, power failure alarm, low battery alarm, door ajar alarm and high ambient temperature alarm.



Precise Temperature Control Ensures Safe Storage

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

Ergonomic Design



Narrow Door Design

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



New Handle Design

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



Pressure Equalization Port

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



Porthole

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



Filter Design

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



Detachable Inner Door Design

Tool-free detachable inner door, realizing easy and quick defrost

Specifications

Model		DW-86L419	DW-86L579	DW-86L729	DW-86L829
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Climate Class	N	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC
	Sound Level (dB(A))	47	47	52	52
Performance	Cooling Performance (°C)	-86	-86	-86	-86
	Temp Range (°C)	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LCD	LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)	220~240/50	220~240/50	220~240/50	220~240/50
	Power (W)	800	1000	1700	1700
	Electrical Current (A)	5	5.5	9	10
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*980*1980	903*980*1960	1049*980*1980
		in	32.7*38.6*78.0	35.6*38.6*77.2	41.3*38.6*78.0
	Packing Dimension (W*D*H)	mm	897*1078*2135	950*1055*2130	1100*1105*2150
		in	35.3*42.4*84.1	37.4*41.5*83.9	43.3*43.5*84.6
Alarms	Container Load (20'/40'/40'H)	12/26/26	12/24/24	10/20/20	10/20/20
	High/Low Temp	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	High Ambient Temp	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2	Y/2
	Shelves/ Inner Doors	3/2	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y
	Remote Alarm (Dry contacts)	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
	Temp Recorder	Optional	Optional	Optional	Optional
	RS485 Port	Standard	Standard	Standard	Standard
	CO ₂ Backup System	Optional	Optional	Optional	Optional
Other	LN ₂ Backup System	Optional	Optional	Optional	Optional
	Certification	CE	CE	CE	CE

Product appearance and specifications are subject to change without notice

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



Advantages

- World leading energy-efficient
- Hydrocarbon refrigeration system
- Slim cabinet design
- Reliable sample protection
- Malfunction alarms
- Excellent insulation performance



Insulation and System Design

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

Safe and Reliable Storage

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

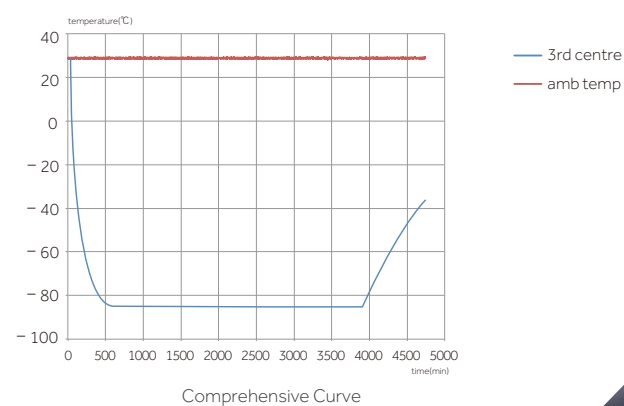
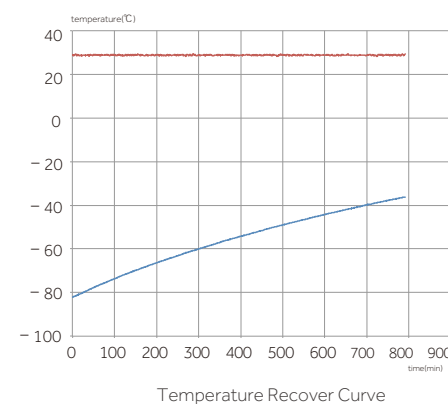
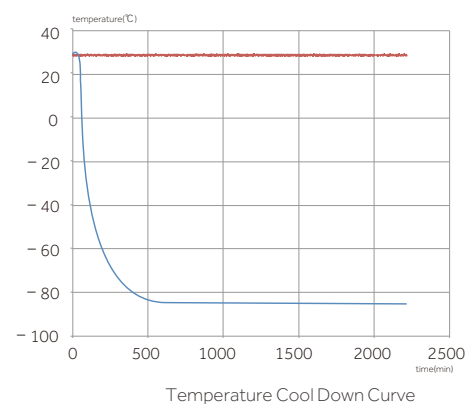
Alarms (Visual and Audible)

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

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



4 Individual Removable Foam Inner Doors

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

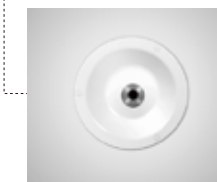


Excellent Doors Seals

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



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



Pressure Equalization Port

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



Circular- chart Recorder (Optional)

- Front-mounted.
- For independent temperature monitoring.

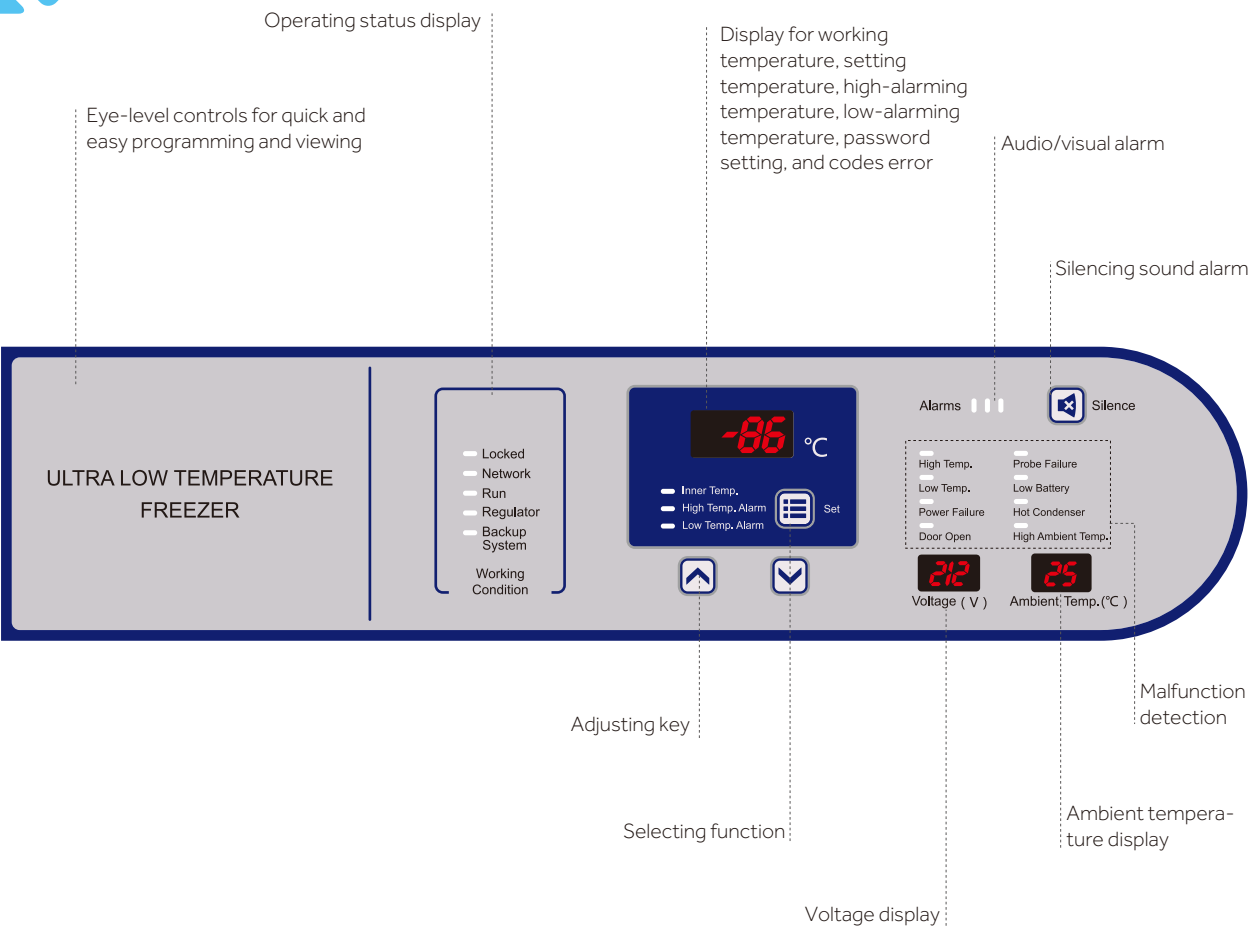


High Efficiency Refrigeration Components

- Hermetically sealed industrial grade compressors for ultra-low refrigeration application.
- Low sound level.
- High efficient oil separator.
- Unique hydrocarbon refrigeration system to provide maximum efficiency in extreme conditions.

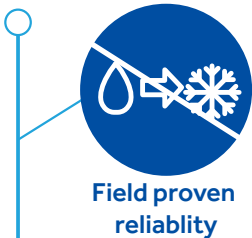


Two port holes for ease of temperature monitoring



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



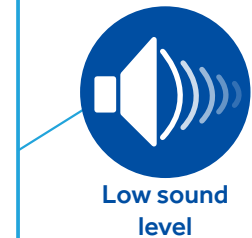
- Unique insulated inner door design for four separate storage compartments to minimize frost buildup inside the chamber
- Specialized control system design for a well-balanced operation of cascade refrigeration system
- Positive field proven reliability record



- 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



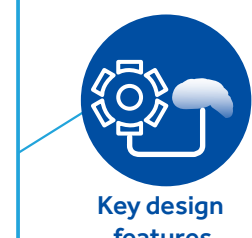
- Wide range operating voltage system from 185V to 260 V designed to allow units installed in areas with poor voltage condition
- Suitable for 10°C to 32°C ambient temperature
- Input voltage and ambient temperature shown simultaneously for ease of monitoring environmental conditions
- Robust door latch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



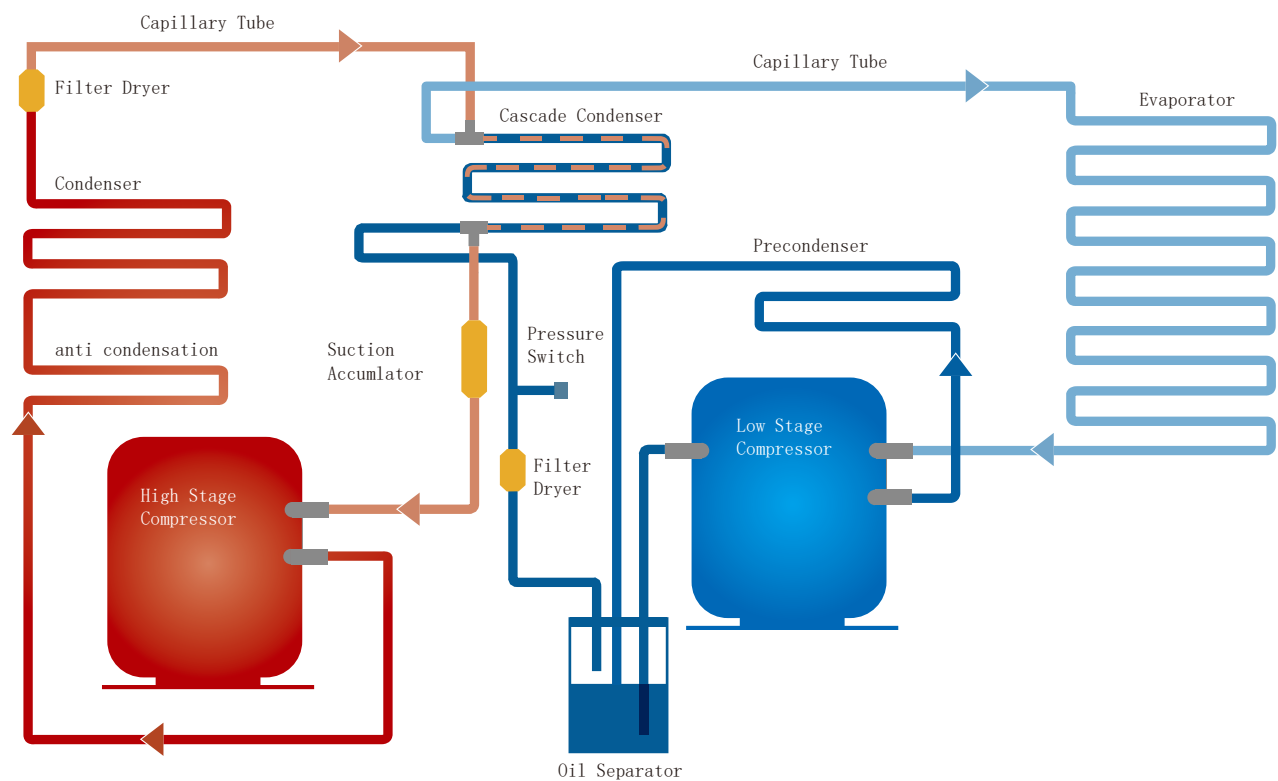
- Specialized refrigeration system design using whisper quiet fan and compressors
- Freezer chassis designed to absorb vibration and sound



- 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



- 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



	Filter dryer <ul style="list-style-type: none">• Filtration and drying device for water and debris
	Capillary tube for high stage <ul style="list-style-type: none">• Expansion device for high stage liquid refrigerant
	Capillary tube for low stage <ul style="list-style-type: none">• Expansion device for low stage refrigerant
	High stage condenser <ul style="list-style-type: none">• Extra-large air cooled condenser dissipates product heat content efficiently.
	Low stage evaporator <ul style="list-style-type: none">• Heat exchanger for expanded low stage refrigerant
	Ultra low noise compressor <ul style="list-style-type: none">• Compressor provides reliable performance with ultra low noise• Specially designed low stage evaporator yields excellent temperature uniformity and recovery after loading and door opening.• Both high and low stage compressors are industrial grade hermetically sealed compressor designed for low temperature application. Sound level is extremely low.
	Cascade condenser <ul style="list-style-type: none">• Heat exchanger between the high and low temperature stage in the system
	Temprite oil separator <ul style="list-style-type: none">• Temprite oil separator can effectively separate oil and water so as to improve the refrigeration performance

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



DW-86L100J



Energy Efficient, Safe and Reliable

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



Personal ULT Storage

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



Ergonomic design

Ergonomic handle design ensures easy one-hand door opening.



Low noise

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

VIP insulation and multilayered sealing design

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



Optional IoT Module

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

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



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

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

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.



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.



-86°C ULT Freezer

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



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				
	Climate Class	N			N			N			N			N				
	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				
	Sound level (dB(A))	50			50		51.5		46.8		49		50					
Performance	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	
	Power (W)	1000		1000	1000		1000		1100		680		680		550		1000	
	Electrical Current (A)	10		18	10		10		10		3		6.5		4		7.5	
Dimensions	Capacity (L/Cu.Ft)	728/25.7			828/29.2			100/3.5			100/3.5			420/14.8				
	Net/Gross Weight (approx)	kg	345/385			380/410			108/132			138/160			310/357			
		lbs	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			
		in	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			1145*980*1980			770*660*810			769*825*1120			2130*870*1020			
		in	41.3*38.6*78.0			45.1*38.6*78.0			30*26*32			30.3*32.5*44.1			83.9*34.3*40.2			
	Packing Dimension (W*D*H)	mm	1090*1050*2150			1190*1045*2150			830*710*970			845*855*1250			2195*895*1130			
in		42.9*41.3*84.6			46.9*41.1*84.6			32*28*38.5			33.3*33.7*49.2			90.6*38.2*45.8				
Container load (20'/40'/40'H)		12/20/20			8/20/20			44/88/88			12/24/48			6/12/24				
Alarms	High/Low Temperature	Y			Y			Y			Y			Y				
	Hot Condenser	Y			Y			Y			Y			Y				
	Power Failure	Y			Y			Y			Y			Y				
	High/Low Voltage	N/A			N/A			Y			N/A			N/A				
	Sensor Error	Y			Y			Y			Y			Y				
	Low Battery	Y			Y			Y			Y			Y				
	High Ambient Temperature	Y			Y			Y			Y			Y				
Accessories	Door Ajar	Y			Y			Y			Y			Y				
	Caster	Y			Y			Y			Y			Y				
	Foot	Y			Y			Y			Y			Y				
	Porthole	Y/2			Y/2			Y/1			Y/1			Y/1				
	Shelves/Inner doors	3/4			3/4			1/2			-/1			-/3				
	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 Recorder	Optional			Optional			/			Optional			Optional				
	Rs232/485 Interface	Optional			Optional			-/Y			Optional			Optional				
	CO ₂ Backup System	Optional			Optional			Optional			Optional			Optional				
	LN ₂ Backup System	Optional			Optional			Optional			Optional			Optional				
Others	Certification	CE,ENERGY STAR	UL		CE,ENERGY STAR		UL		CE		UL		CE		CE		UL	

Product appearance and specifications are subject to change without notice

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-IC
Technical Data	Cabinet Type	Horizontal
	Climate Class	N
	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
	Electrical Current (A)	0.25
	Net/Gross Weight (approx)	11.2/14 24.7/30.86
Dimensions	Exterior Dimensions (W*D*H)	200*400*160 7.8*15.7*6.3
		370*530*330 14.6*20.9*13
	Packing Dimensions (W*D*H)	
Alarms	CO ₂ Margin Insufficient Alarm	Y
	Low Battery Alarm	Y
	Sensor Error Alarm	Y
	Main Power Off Alarm	Y
	Charge Indicator	Y
	CO ₂ Injection Test Button	Y
Accessories	Foot	4
Others	Certification	CE/UL

Product appearance and specifications are subject to change without notice

LN₂ backup cooling system is an independent refrigeration system for a ULT 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 main 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)	220-240/50 208-230/60 115/60
		20
		0.05
	Electrical Current (A)	
Dimensions	Net/Gross Weight (approx)	15/17 33.1/37.5
		360*305*445 14.2*12.0*17.5
	Exterior Dimensions (W*D*H)	
		417*357*698 16.4*14.1*27.5
Alarms	Low Battery Alarm	Y
	Sensor Error Alarm	Y
	Main Power Off Alarm	Y
	Charge Indicator	Y
Others	Certification	CE/UL

Product appearance and specifications are subject to change without notice



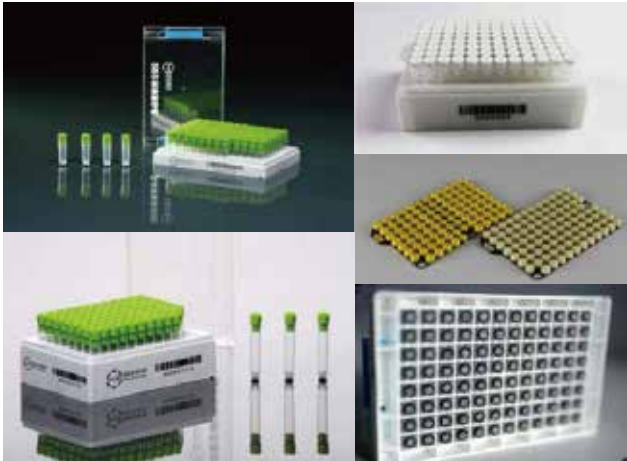
Consumables for ULT Freezer



SBS RACKED 2D CRYOGENIC VIAL

Introduction

Haier Biomedical SBS Racked 2D Cryogenic Vials are widely used in many labs, sample banks and biopharmaceutical companies. The vials have clear easily legible laser etched data matrix code on bottom which is compatible with automated storage for minimum manual intervention. Screw cap and push cap are available, screw cap is with single turn thread which can be operated easily, push cap is designed for the prevention of cap drop during unfreezing. SBS racked cryo vials are available of storage over vapor phase liquid nitrogen at temperature of -196°C. Haier biomedical SBS racked Cryogenic Vials are produced in 10000 grade clean room, they are DNase-free, RNase-free and Non-Pyrogenic.



Technical Specification

- Low temperature storage from -196°C to 121°C
- Sterilization Level: SAL10-6
- Non-Pyrogenic; free of endotoxins, ATP and mutagen

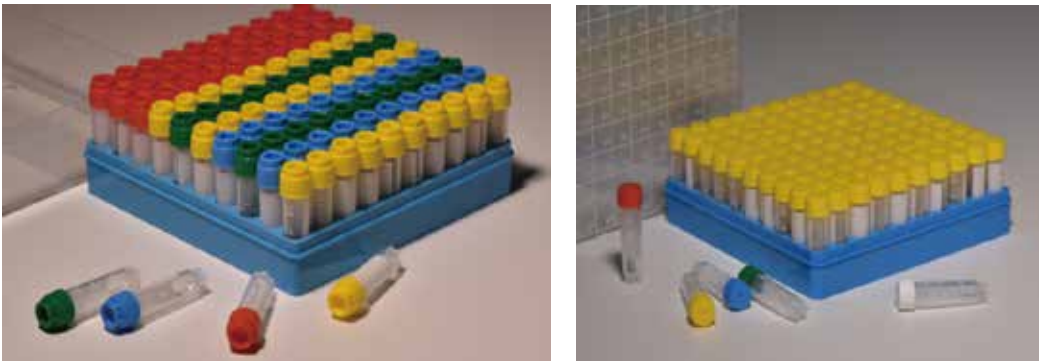
Product Feature

- 2D laser-etched code on bottom
- Chemically resistant, easy operation and tracking
- shaped bottom for maximum working volume
- Screw cap and push cap for choice
- Availabe in transparent, white, blue, orange and green cap
- Barcode on rack for tracking

Specifications

Type	Model	Volume	2D Barcode	Sterilization	Temperature Range	Unit
Internal Thread	T6101	0.75ml	Y	Gamma	-196~121°C	96 sets/box
	T6201	1.4ml	Y	Gamma	-196~121°C	96 sets/box
External Thread	T6301	1.0ml	Y	Gamma	-196~121°C	48 sets/box
	T6401	2.0ml	Y	Gamma	-196~121°C	48 sets/box
	T6121	0.8ml	Y	Gamma	-196~121°C	96 sets/box
	T6221	1.45ml	Y	Gamma	-196~121°C	96 sets/box

INNOVATIVE CRYOGENIC VIAL



Technical Specification

- Temperature storage range: -196°C to 121°C
- Sterilization Level: SAL10-6
- Non-Pyrogenic; free of endotoxins, ATP and mutagen
- DNase-free, RNase-free
- Laser-etchen 2D barcode

Product Feature

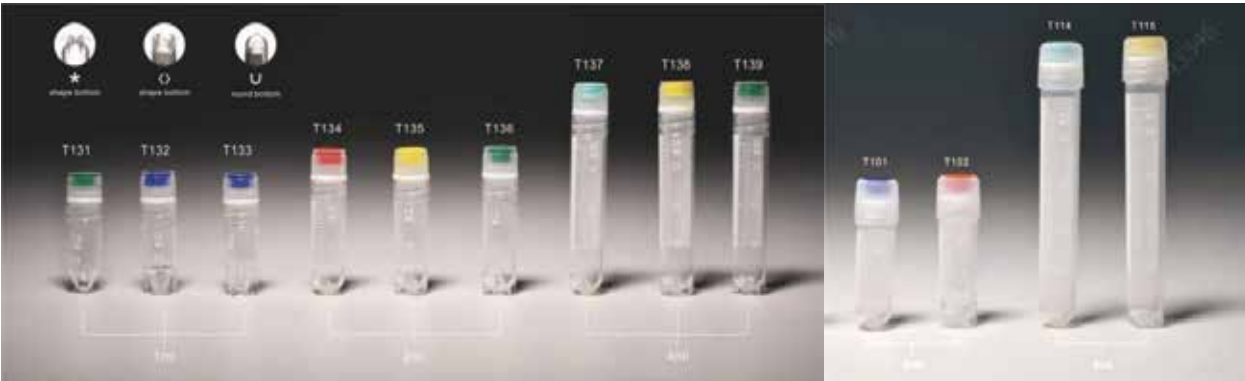
- Volume: 0.5ml, 1.5ml, small quantity of samples can be packed separately to avoid repeated freezing and thawing of samples and increase the packing quantity of samples
- Cap: external thread, plane or concave
- Bottom: self-standing and conical
- Cap color: orange, yellow, green, blue

Specifications

Model	Volume	Sterile	Description	Unit
T2053	0.5ml	Gamma	Non-2D,box pack	100 sets/box,12 boxes/case
T2054	0.5ml	Gamma	Non-2D,bag pack	100 sets/bag,1000 sets/case
T2203	1.5ml	Gamma	Non-2D,box pack	100 sets/box,12 boxes/case
T2204	1.5ml	Gamma	Non-2D,bag pack	100 sets/bag,1000 sets/case
T2051	0.5ml	Gamma	2D barcode on bottom,box pack	100 sets/box,12 boxes/case
T2052	0.5ml	Gamma	2D barcode on bottom,bag pack	100 sets/bag,1000 sets/case
T2201	1.5ml	Gamma	2D barcode on bottom,box pack	100 sets/box,12 boxes/case
T2202	1.5ml	Gamma	2D barcode on bottom,bag pack	100 sets/bag,1000 sets/case
T2051-1	0.5ml	Gamma	2D barcode on bottom,side on numbers,box pack	100 sets/box,12 boxes/case
T2052-1	0.5ml	Gamma	2D barcode on bottom,side on numbers,bag pack	100 sets/bag,1000 sets/case
T2201-1	1.5ml	Gamma	2D barcode on bottom,side on dimensional code and numbers,box pack	100 sets/box,12 boxes/case
T2202-1	1.5ml	Gamma	2D barcode on bottom,side on dimensional code and numbers,bag pack	100 sets/bag,1000 sets/case

*Please consult your local dealer for more specifications

CONVENTIONAL CRYOGENIC VIAL



Technical Specification

- Temperature storage range: -196°C to 121°C
- Sterilization Level: SAL10-6
- Non-Pyrogenic; free of endotoxins, ATP and mutagen
- DNase-free, RNase-free

Product Feature

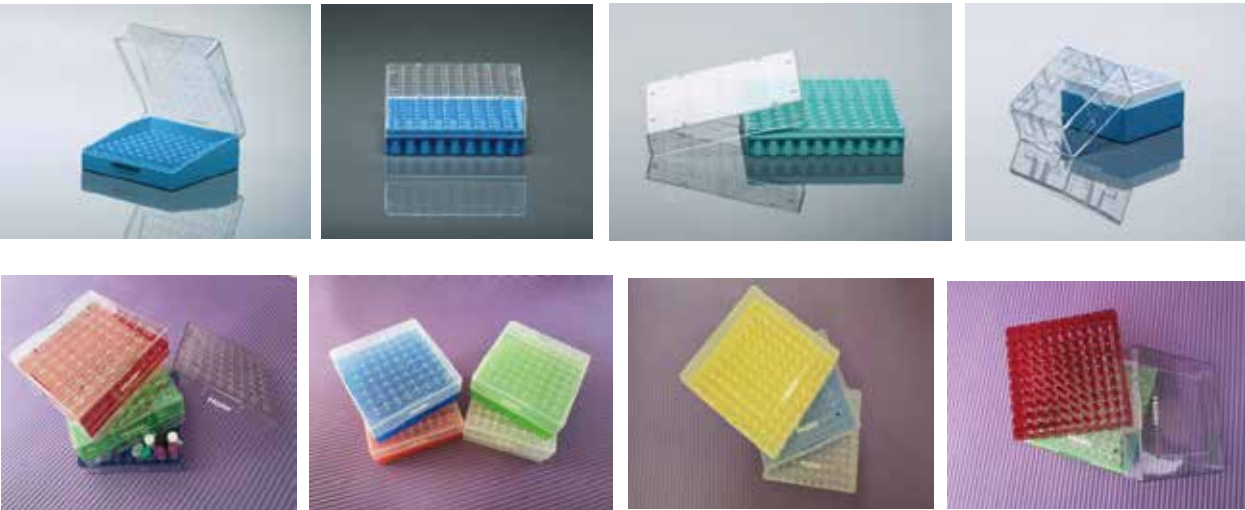
- Volume: 0.5ml, 1ml, 1.5, 2ml, 4ml, 5ml
- Cap: internal/external thread
- Bottom: skired or round
- Color coded cap inserts: red, blue, yellow, green, white

Specifications

Type	Model	Volume	Bottom	Style	Sterile	Temperature Range	Unit
External Thread	T118	0.5ml	U	Round	/	-90~121°C	100 sets/bag, 1000 sets/case
	T119	0.5ml	M	Self standing	/	-90~121°C	100 sets/bag, 1000 sets/case
	T105	1.8ml	U	Self standing	/	-90~121°C	50sets/bag, 1000 sets/case
	T102	2.0ml	()	Self standing	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
	T114	5.0ml	U	Round	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
	T115	5.0ml	()	Self standing	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
Internal Thread	T132	1.0ml	()	Self standing	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
	T135	2.0ml	()	Self standing	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
	T137	4.0ml	U	Round	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
	T138	4.0ml	()	Self standing	Gamma	-196~121°C	50 sets/bag, 1000 sets/case
Color code	T144	/	/	/	/	/	1000 sets/bag, available in six different colours

Laboratory Consumables

FREEZER BOXES



Technical Specification

- Sizes: 4*4 (16 well), 5*5 (25 well), 9*9 (81 well), 10*10 (100 well)
- Material: papery, high-transparent PP/PC
- Temperature storage range: -86°C and -196°C to 121°C

Product Feature

- Visible for checking without rack open
- Lid with printed grip and number for convenience of inventory management
- Specially designed gap and vents for quick refrigeration and liquid remove
- Standard sizes compatible with most freezer racks

Specifications

Model	Description	Dimension(mm)	Material	Temperature
T130 (ABS)	81well	133*133*53	PP	-86°C-121°C
HBB-200-PP (2015)	100well	133*133*53	PP	-86°C-121°C
HBB-281-PC (2015)	81/100well	133*133*53	PC	-196°C-121°C
T130	81well	133*133*53	PP,PC	-196°C-121°C
T142	100well	133*133*53	PP,PC	-196°C-121°C
T142-2	81/100well, flip	133*133*53	PC	-196°C-121°C

CENTRIFUGE TUBE



Product Feature

- Capacity selection: 0.5ml, 1.5ml, 2ml, 15ml, 50ml
- The bottom of the tube is designed with Cone-bottom and free-standing
- Maximum relative centrifugal force (RCF) 10000 xg
- Suitable temperature range: -80 ℃ to 120 ℃
- No DNase, RNase, no pyrogen, can prevent the sample from being contaminated
- A variety of packages including sealed bags, foam racks and plastic racks

Specifications

Type	Sterile	Package	Description	Package quantity
15ml centrifuge tube	Y	Zippered bag	Circular cone bottom	25 pcs/bag, 500 pcs/case
	Y	Plastic rack	Circular cone bottom	50 pcs/rack, 1000 pcs/case
50ml centrifuge tube	Y	Zippered bag	Circular cone bottom	25 pcs/bag, 500 pcs/case
	Y	Zippered bag	Self-stand bottom	25 pcs/bag, 500 pcs/case
0.5ml microcentrifuge tube	Y	Zippered bag	Cone-bottom	500 pcs/pack, 5000 pcs/case
1.5ml microcentrifuge tube	Y	Zippered bag	Cone-bottom	500 pcs/pack, 5000 pcs/case
2.0ml microcentrifuge tube	Y	Zippered bag	Round-bottom	500 pcs/pack, 5000 pcs/case

PIPET TIPS

The pipette tip uses USP grade VI polypropylene (PP) as the raw material. The excellent internal structure design is suitable for most brand pipettes, and can ensure that the pipette tip and pipette are well sealed. The surface of the tip is smooth, with low adsorption, high transparency and high accuracy. The product is sterilized, without DNA/RNase, without heat source, without endotoxin.



Product Feature

- USP class VI polystyrene (PP) raw materials
- 10μl, 200μl, 1000μl
- Two options with and without filter, transparent color
- DNase-free, RNase-free
- No heat source, no endotoxin
- Packed in bags or boxes



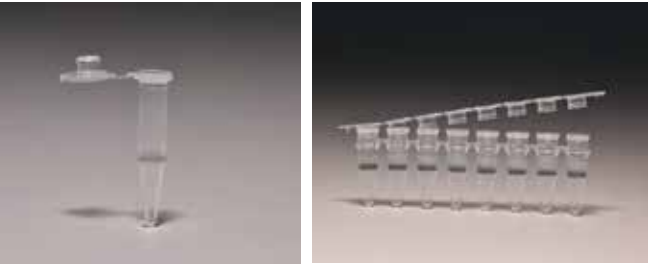
Specifications

Model	Description	Packing Specification	
		Package	Unit Qty
P900106	10μl transparent tip, in normal bag	1000 pcs/bag, 20 bags/case	20000
P900107	10μl transparent tip, boxed, sterile	96 pcs/box, 10 boxes/medium box, 5 medium boxes/case	4800
P900108	10μl transparent tip, with filter element, boxed, sterile	96 pcs/box, 10 boxes/medium box, 5 medium boxes/case	4800
P900109	10μl transparent tip, with filter element, in normal bag	1000 pcs/bag, 20 bags/case	20000
P902001	200μl yellow tip, in normal bag	1000 pcs/bag, 20 bags/case	20000
P902002	200μl yellow tip, boxed, sterile	96 pcs/box, 10 boxes/medium box, 5 medium boxes/case	4800
P902003	200μl yellow tip, with filter element, boxed, sterile	96 pcs/box, 10 boxes/medium box, 5 medium boxes/case	4800
P902004	200μl yellow tip, with filter element, in normal bag	1000 pcs/bag, 20 bags/case	20000
P910001	1000μl blue tip, in normal bag	1000 pcs/bag, 5 bags/case	5000
P910002	1000μl blue tip, boxed, sterile	96 pcs/box, 6 boxes/medium box, 5 medium boxes/case	2880
P910003	1000μl blue tip, with filter element, boxed, sterile	96 pcs/box, 6 boxes/medium box, 5 medium boxes/case	2880
P910004	1000μl blue tip, with filter element, in normal bag	1000 pcs/bag, 5 bags/case	5000

PCR TUBE

Product Feature

- USP grade VI polystyrene (PP) raw materials
- 0.1ml, 0.2ml two specifications
- No DNase, no RNase
- No heat source, no endotoxin
- Single tube, eight row tube, 96-well plate
three types are optional



Specifications

Model	Name	Description	Sterile	Packing Specification	
				Package	Unit Qty
T002-1	0.2 ml PCR tube	Cone-bottom	Y	1000 pcs/bag, 10 bags/box	10000
T016-1	0.2ml PCR 8 straight tubes	Cone-bottom	Y	125 sets/box, 10 boxes/box	1250
T096-1	0.1ml-96 well plate without hemline	Cone-bottom	Y	5 pcs/bag, 5 bags/medium box 6 medium box/case	150
T096-2	0.2ml-96 well plate without hemline	Cone-bottom	Y	5 pcs/bag, 5 bags/medium box 6 medium box/case	150
T096-3	0.1ml-96 well plate without hemline	Cone-bottom	Y	5 pcs/bag, 5 bags/medium box 6 medium box/case	150
T096-4	0.2ml-96 well plate without hemline	Cone-bottom	Y	5 pcs/bag, 5 bags/medium box 6 medium box/case	150

Freezer Racks

Our freezer racks fit various sizes of freezers and they are compatible with freezer boxes provided by other manufacturers. These freezer racks improve freezer space utilization and satisfy storage requirements of biobanks.

◆Side-access freezer rack features:

- Frame and interior grids are made with 304 stainless steel for durability and better appearance.
- No sharp edges to avoid risk of injury.
- Steel plate thickness: Combination of 0.5 and 1.0 mm.
- Side-access design makes it convenient and economic.
- Suitable for common low temperature freezers .
- Perfectly suitable for standard sized freezer boxes.
- The front side is printed with Haier’s stenciled seal.
- Provide personalized customization.



◆Sliding-drawer freezer rack features:

- Made with 304 stainless steel.
- Steel plate thickness: Combination of 0.5 and 1.0 mm.
- Sliding-drawer design for convenient operations.
- Low temperature rated plastic handles are standard on draw racks for ese and safety of operation.
- Labeling slots are standard on draws. The outward pouch design protects the slot from potential damage caused by low temperature.
- The front side is printed with Haier’s stenciled seal.
- Provide personalized customization.



Specifications

Product	Model	Rack Description	Rack Dimension (W*D*H)	ULT Freezer Models
2 inch stainless stell rack	DCJ-44-A (2014)	2 inch stainless steel rack 4*4 (2 inch box *16)	138*565*240 (mm) 5.4*22.9*9.4 (in)	DW-338J/490J
	DCJ-44-B (2014)	2 inch stainless steel drawer rack 4*4 (2 inch box *16)	140*565*240 (mm) 5.5*22.2*9.4 (in)	
	DCJ-54-A (2014)	2 inch stainless steel rack 5*4 (2 inch box *20)	138*565*293 (mm) 5.4*22.2*11.5 (in)	DW-388A/486E/ 490/628E
	DCJ-54-B (2014)	2 inch stainless steel drawer rack 5*4 (2 inch box *20)	140*565*293 (mm) 5.5*22.2*11.5 (in)	
	DCJ-55-A (2014)	2 inch stainless steel rack 5*5 (2 inch box *25)	138*685*293 (mm) 5.4*27.0*11.5 (in)	DW-86L388J/418S/418ST/578J/578-JA/578S/578ST/579/579BP/579BPT/728J/728JA/728S//728ST/729/729BP/729BPT/828J/828JA /828S/828ST/829/829BP/829BPT/828W// DW-86L959BP/959BPT/959W
	DCJ-55-B (2014)	2 inch stainless drawer rack 5*5 (2 inch box *25)	140*685*293 (mm) 5.5*27.0*11.5 (in)	
	DCJ-08-A (2014)	2 inch stainless steel drawer rack 8*1 (2 inch box *8)	140*140*480 (mm) 5.5*5.5**18.9 (in)	DW-86W100J
	DCJ-10-A (2014)	2 inch stainless steel rack 10*1 (2 inch box *10)	140*140*600 (mm) 5.5*5.5*23.6 (in)	DW-86W420J/DW-150W200/ DW-150W200J

Haier ULT Freezer + Consumables Solutions

Specifications

Freezer Model	Freezer Rack Model	Description	Freezer Rack Quantity	Freezer Box Quantity	Cryo Tube Quantity (2ml)
DW-86L338J/338JA	DCJ-54-A(2014) (Middle, 2 layers)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	6	120	12000
	DCJ-54-B(2014) (Middle, 2 layers)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	6	120	12000
	DCJ-44-A(2014) (Top and bottom layers)	2 inch stainless steel side-access freezer rack 4*4 (2 inch freezer box*16 units)	6	96	9600
	DCJ-44-B(2014) (Top and bottom layers)	2 inch stainless steel sliding-drawer freezer rack 4*4 (2 inch freezer box*16 units)	6	96	9600
DW-86L388J/418S /418ST/419	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	12	300	30000
	DCJ-55- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	12	300	30000
DW-86L486E	DCJ-54- A (2014)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	16	320	32000
	DCJ-54- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	16	320	32000
DW-86L490J/490JA	DCJ-54-A(2014) (Top 2 layers)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	8	160	16000
	DCJ-54-B(2014) (Top 2 layers)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	8	160	16000
	DCJ-44-A(2014) (Bottom 2 layers)	2 inch stainless steel side-access freezer rack 4*4 (2 inch freezer box*16 units)	8	128	12800
	DCJ-44-B(2014) (Bottom 2 layers)	2 inch stainless steel sliding-drawer freezer rack 4*4 (2 inch freezer box*16 units)	8	128	12800
DW-86L628E	DCJ-54-A (2014)	2 inch stainless steel side-access freezer rack 5*4 (2 inch freezer box*20 units)	20	400	40000
	DCJ-54-B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*4 (2 inch freezer box*20 units)	20	400	40000
DW-86L578J/578JA/ 578S/578ST/579/579BP /579BPT	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	16	400	40000
	DCJ-55- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	16	400	40000
DW-86L728J/728JA/ 728S/728ST/729/ 729BP/729BPT	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	20	500	50000
	DCJ-55- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	20	500	50000
DW-86L828J/828JA/ 828S/828ST/829/829BP /829BPT/828W	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	24	600	60000
	DCJ-55- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	24	600	60000
DW-86L959BP/959BPT /959W	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5 (2 inch freezer box*25 units)	28	700	70000
	DCJ-55- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*5 (2 inch freezer box*25 units)	28	700	70000
DW-86L100J	DCJ-53- A (2014)	2 inch stainless steel side-access freezer rack 5*3 (2 inch freezer box*15 units)	4	60	6000
	DCJ-53- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*3 (2 inch freezer box*15 units)	4	60	6000
DW-86W420J/420JA	DCJ-10- A (2014)	2 inch chest-type freezer rack (2 inch freezer box*10 units)	27	270	27000
DW-86W100J	DCJ-08 - A (2014)	2 inch chest-type freezer rack (2 inch freezer box*8 units)	9	72	72000
DW-150W200	DCJ-10- A (2014)	2 inch chest-type freezer rack (2 inch freezer box*10 units)	12	120	12000
DW-150W200J	DCJ-12-A	2 inch chest-type freezer rack (2 inch freezer box*12 units)	12	144	14400