Haier

Haier Biomedical

2018 General Catalogue

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Haier Group Profile

Established in 1984, Haier is the world's No. 1 major appliance brand. It has transformed from an enterprise that manufactures household appliances to a platform that incubates entrepreneurs for the whole society. In the Internet age, Haier aims to become a Networked Enterprise which overturns its self-contained enclosed system and fits into the Internet as a node that can connect various resources, with a view to building post-e-commerce ecosystems based on user value interaction for co-creation and winning together to add value for all stakeholders.

Through its exploration into the Internet Model, Haier Group has achieved steady growth. In 2017, Haier global turnover is about 241.9 billion yuan with a growth rate of 20%, and a total profit of 30.1 billion yuan with a 41% growth rate. By August 2017, Haier's platforms have attracted over 4,316 first-rate external resources, 12 billion yuan of VC fund, 1,333 VC institutions. Over 3,800 node microenterprises and nearly one million microstores on Haier's platforms are socializing their capital and human resources. More than 100 microenterprises boast an annual revenue of over 100 million yuan, and 52 have introduced VC, and 18 are valued at over 100 million yuan. Due to Haier's transformation through decentralization, disintermediation and removing the "insulated wall", the enrolled employees are 45% less than the peak number, but Haier's platforms have offered over 1.6 million jobs for the whole society.

Haier's model innovation has not only been acknowledged by authoritative experts, but also verified by practical tests. In 2011, Haier announced the acquisition of Sanyo's white goods business in Japan and Southeast Asia. In 2012, Haier completed the purchase of New Zealand's iconic home appliances company Fisher & Paykel Appliances (F&P). On January 15, 2016, Haier's globalization opened up a "historic page" - Haier signed a memorandum of strategic cooperation with GE to integrate GE's home appliances business, which set not only a new example for business cooperation between large Chinese and US enterprises, but also a new alliance model that rises above price-based trading. Now, Haier's global brands include Haier, Casarte, Goodaymart, AQUA, Fisher & Paykel and Leader etc., which brings the best user experience from different fields.

Haier Globalization Brands Strategy

Worldwide Network	Overseas	Global
Trading Company	24	66
R&D Center	8	10
Manufactory	54	108
Industry Park	12	24
Sales Network	37683	143330

Haier Biomedical

Founded in 1998, Haier Biomedical is based in China. We design, manufacture and market laboratory equipment for the global market. Our products are designed to enable scientific researchers across the globe to perform research projects and to produce pharmaceutical products. Our products include ultra-low temperature ULT freezers, blood banks, pharmacy refrigerators, ice-lined vaccine refrigerators, laboratory freezers, biosafety cabinets and other types of equipment for the laboratory and medical applications. Installations can be found in blood banks, hospitals, epidemic prevention services, universities, pharmaceutical manufacturers, and national laboratories. The successful growth of our business drove a continuous development of our manufacturing ability. Along with many state of the arts manufacturing equipment, we added a new factory in 2013 to meet the increasing demand of our customers.

Headquartered in Qingdao, China, our company is a part of Haier Group Company which is highly ranked as one of the key global manufacturers of durable goods. In addition to certification with ISO9001 quality system, ISO14001 environment protection system, and ISO13485:2003 quality system, the company has been awarded the People's Republic of China Medical Device Manufacturing Enterprise License, People's Republic of China Medical Device Registration Record, and Record of Medical Device For Medical Device Category A, B and C from the State Food and Drug Administration.

Our research and development team consists of highly qualified and selective professionals specialized in refrigeration technology, control technology, remote sensing, sample protection and handling, and networking technology.

Our business strategy and technological advancement have been very effective since the founding of the company. We now have shipped products to clients in over 100 countries.In Oct 2016, the Shenzhou XI manned spacecraft blasted off from the Jiuquan Satellite Launch Center. This time Haier Biomedical refrigerator still supports the space research and discovery for Chinese aerospace like the previous Shenzhou VIII, Shenzhou IX, Shenzhou X by given the 300,000-meters-high cold chain storage solution in the entire process.

Milestones & Awards

2017

In March,2017,Haier Biomedical successfully won the bid of 10566 units vaccine refrigerator from India government.
In September 2017, Haier Biomedical won a bid order of 3,000 solar-powered vaccine refrigerators from the Ethiopian government.

2016

In 2016, Haier Biomedical successfully won the 1515units vaccine refrigerator bid from the Philippines Department of Health;Haier Biomedical enjoyed a good reputation for the high quality.
In European market,Haier Biomedical won the 337units pharmacy refrigerator bid from Madrid Health Service in Spain.And in CIS (Commonwealth of Independence States) and Africa,Haier ULT freezer and blood bank refrigerator also successfully won the bid from the Department of Health.Haier Biomedical products gained more and more approvals from international healthy organizations.

2015

In 2015, more than 3500 vaccine refrigerators have been delivered to Middle East and Africa.
Haier Walk-in Cold Room has successfully won the bidding for a total of 98 projects including aid to Afghanistan from WHO, aiding to Philippines, Syria and Jordan from UNCIEF.
Depending on its specialization in and concentration on vaccine cold chain, it has earned confidence from the aid organizations in the world.

2014

Haier Biomedical inaugurated a new state-of–the art manufacturing facilities for high quality production of medical cold chain products.
The world most energy-saving ULT Freezer was launched by Haier Biomedical.
1000 units HTC-60H were delivered to Ethiopia.

2013

Haier successfully provided MOH tender of Uzbekistan Sudan, Tanzania, Uganda and Madagascar etc.,which is a new important milestone to develop the African market.

2012

Haier won MOH tender of blood bank refrigerators and -86°C ULT freezers in Russia market.

2011

Haier won the tender "Third National HIV/AIDS Control Project (NACP - III)" from India ministry of Health and successfully supplied and installed Blood Bank Refrigerators, -86°C ULT Freezers and -40°C Deep Freezers.

2010

Haier Medical successfully won the bid of 20,930 units vaccine refrigerator from UNOPS (United Nations Program India Purchasing Agency).

2009

World Health Organization (WHO) qualified Haier Medical as the supplier of ice-lined refrigerators and -25°C vaccine and ice pack freezer lines. The pre-qualified models include HBC-70, HBC-200, HBD-286, and HBD-116.

2008

Haier Blood Transportation Box – HXC-80, won the bid of UNOPS India/NACO/BT B/35/2008, from India National AIDS Control Organization.

2007

Haier won the government procurement tender for International Assistance Program to Cuba from China.

2006

Haier became the first China based company to be certified to ISO13485:2003.

2005

Haier -150°C cryogenic freezer launched into the market – Haier medical and laboratory freezers covered most of the temperature range required by market.

2004

Haier was awarded with an order from World Health Organization (WHO) and entered into the international market.

1998

The Deep Freezer(-40°C) came out, Haier entered into Medical and Laboratory Industry.

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Cryo Freezer & ULT Freezer

-150°C Cryo Freezer

-150°C Cryo freezer, developed by Haier Biomedical, provides a safer, more convenient and economical alternative long term storage method than LN2 refrigeration systems. By providing a storage environment about 20°C colder than the water recrystallization temperature, the freezer is suitable for storage of a variety of biological samples such as virus, erythrocytes, leukocytes, cutis, skeleton, sperm, 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

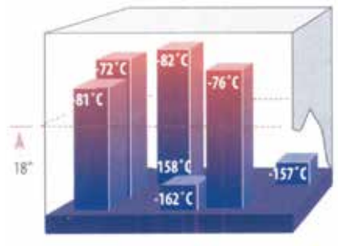
Other Features

- 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

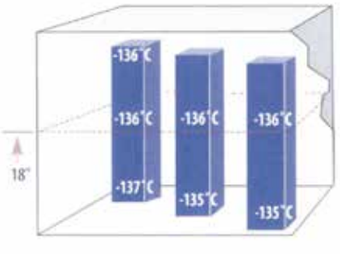
Safety Control System

- 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



LN_2 Freezer System(-196 °C)



Cryo Freezer(-140°C)

Model			DW-150W200
Technical Data	Cabinet Type		Chest
	Climate Class		N
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HFC
	Sound level((dB(A))		56
Performance	Cooling Performance(°C)		-150
	Temperature Range(°C)		-126--150
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply(V/Hz)		380/50
	Power(W)		2800
	Electrical Current(A)		11
Dimensions	Capacity(L/Cu.Ft)		200/7.0
	Net/Gross Weight(approx)	kg	315/385
		lbs	694.4/848.8
	Interior Dimension(W*D*H)	mm	667*462*650
		in	26.3*18.2*25.6
	Exterior Dimension(W*D*H)	mm	1670*850*1060
		in	65.7*33.5*41.7
	Packing Dimension(W*D*H)	mm	1810*940*1240
		in	71.3*37.0*48.8
	Container load (20'/40'/40'H)		6/13/13
Functions	High/Low Temperature		Y
	Hot Condenser		Y
	Power Failure		Y
	High/Low Voltage		Y
	Sensor Error		Y
	Low Battery		Y
	High Ambient Temperature		Y
Accessories	Caster		Y
	Foot		Y
	Porthole		Y/1
	Shelves/Inner doors		-/2
	Remote Alarm		Y
	Temperature Recorder		Optional
	RS232/485 Port		Optional
	LN_2 Backup System		Optional

Product appearance and specifications are subject to change without notice

TwinCool ULT Freezer

TwinCool ULT Freezer

The TwinCool ultra-low temperature ULT freezer by Haier Biomedical provides the highest level of protection for your valuable samples. The freezer consists of two independent cooling systems, each capable of maintaining -80°C temperature. The refrigeration systems provide the maximum safety to stored products.

DW-86L578S

TwinCool ULT Freezer

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

The pulldown process is fast! It usually takes about three hours to reach -80°C at 25°C ambient. This means the temperature recovery ability is strong to ensure the stored samples are not exposed to undesirable temperature.

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 operates with less than 50% energy to reduce the operating cost. The refrigerants do not contain fluorine or chlorine. Its GWP value of three is super friendly to the environment.

Reduced running costs

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

TwinCool ULT Freezer

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

Pressure Equalisation Port
Heated Pressure Equalization Port allows users to re-open the main door quickly after entering

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

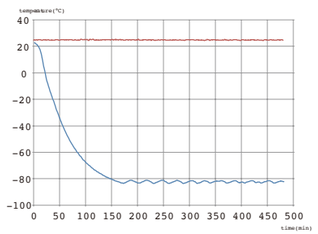
DW-86L578S

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

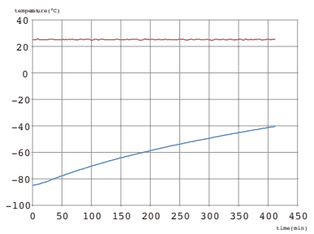
Improved Handle Design
Lockable handle safeguards your precious samples. A padlock can also be added for extra sample safety

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

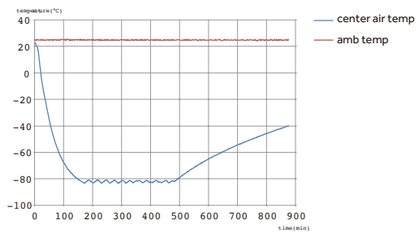
DW-86L578S | TYPICAL PERFORMANCE CHARACTERISTICS IN 25°C AMBIENT



Temperature Cool Down Curve



Temperature Recover Curve



Comprehensive Curve

TwinCool ULT Freezer

Product Specifications

Model			DW-86L578S
Technical Data	Cabinet Type		Upright
	Climate Class		N
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		53
Performance	Cooling Performance(°C)		-86
	Temp Range(°C)		-40～-86
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply(V/Hz)		208～230/50
	Power(W)		1400
	Electrical Current(A)		10
Dimensions	Capacity(L/Cu.Ft)		578/20.4
	Net/Gross Weight(approx)	(kg)	325/355
		(lbs)	717.1/783.3
	Interior Dimensions(W*D*H)	(mm)	620*716*1310
		(in)	24.4*28.2*51.6
	Exterior Dimensions(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
	Container Load(20'/40'/40'H)		12/24/24
Alarms	Remote Alarm		Y
	High/Low Temp		Y
	Hot Condenser		Y
	Power Failure		Y
	Sensor Error		Y
	Low Battery		Y
	High Ambient Temp		Y
	Door Ajar		Y
Accessories	Caster		Y
	Foot		Y
	Porthole		Y/2
	Shelves/ Inner Doors		3/4
	USB Interface		Y
	5V Power Supply Port		Y
	Temp Recorder		Optional
	RS232/485 Port		Optional
	CO_2 Backup System		Optional
	LN_2 Backup System		Optional
Other	Certification		CE

Product appearance and specifications are subject to change without notice

SmartFrequency Conversion ULT Freezer

Salvum Ultimate SmartFrequency Conversion ULT Freezer

Haier Biomedical's Smart frequency 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

Salvum Ultimate SmartFrequency Conversion ULT Freezer

Smarter by Design

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

Intelligent Frequency Conversion Technology

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

Maximum Energy Efficiency

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

Precise Temperature Control

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

Frequency Conversion Adaptive Technology

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

World-leading Energy Saving Refrigeration Technology

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

Minimal Sound Level Output

Adaptive control technology controls the fans and compressors to reduce the sound level to 43.5 dba.

Salvum Ultimate SmartFrequency Conversion ULT Freezer

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

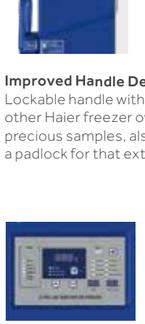
Pressure Equalisation Port
Heated port with spring assisted mechanism to prevent icing on the vent allows users to reopen the main door soon after entering

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

DW-86L829BP

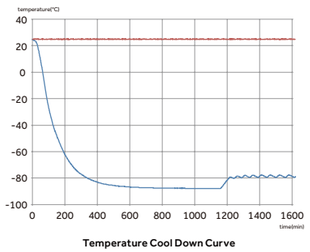
Multilayered Sealing Structure
Triple layer of gaskets split between main and inner doors decreases heat loss and guarantee excellent warm up times in the event of a power failure

Improved Handle Design
Lockable handle with unique key prevents other Haier freezer owners access to your precious samples, also comes with space for a padlock for that extra security

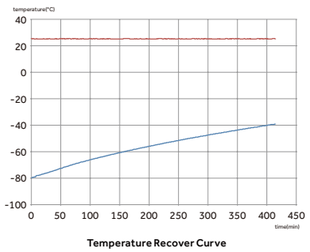


Multilevel Alarms
Alarming functions that include high and low temperature, sensor error, power failure, high ambient,clean filter and door ajar

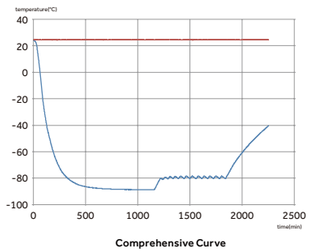
DW-86L829BP | TYPICAL PERFORMANCE CHARACTERISTICS IN 25°C AMBIENT



Temperature Cool Down Curve



Temperature Recover Curve



Comprehensive Curve

Salvum Ultimate SmartFrequency Conversion ULT Freezer

Product Specifications

Model			DW-86L829BP	DW-86L959BP
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
	Temp Range(°C)		-40～-86	-40～-86
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply(V/Hz)		208～230/50/60	208～230/50/60
	Power(W)		1100	1300
	Electrical Current(A)		6	6
Dimensions	Capacity(L/Cu.Ft)		829/29.2	959/33.9
	Net/Gross Weight(approx)	(kg)	380/415	450/485
		(lbs)	838.5/915.7	992.9/1070.2
	Interior Dimensions(W*D*H)	(mm)	870*716*1310	1016*716*1310
		(in)	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimensions(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	Remote Alarm		Y	Y
	High/Low Temp		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temp		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
	5V Power Supply Port		Y	Y
	Temp Recorder		Optional	Optional
	RS232/485 Port		Optional	Optional
	CO_2 Backup System		Optional	Optional
	LN_2 Backup System		Optional	Optional
Other	Certification		CE	CE

Product appearance and specifications are subject to change without notice

-86°C ULT Freezer

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.

Excellent Doors Seals

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

Microprocessor control panel and digital display

Pressure Equalization Port

- Heated port with spring-assisted mechanism to prevent icing on the vent.
- Allows re-accessing the freezer after initial door opening.

Circular- chart Recorder (Optional)

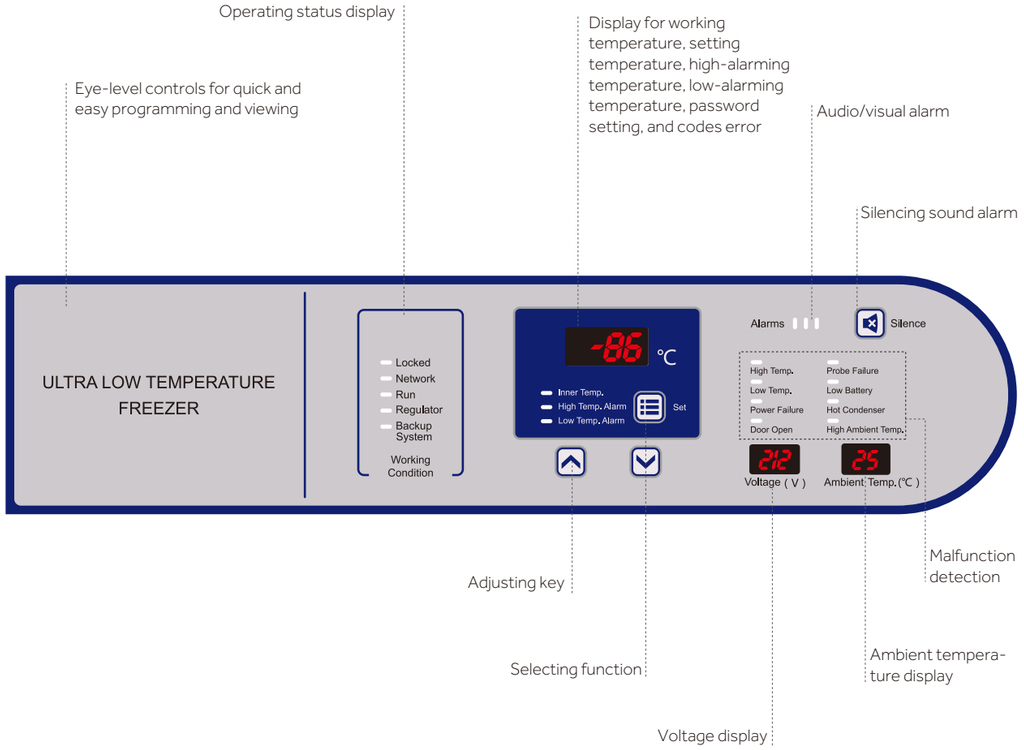
- Front-mounted.
- For independent temperature monitoring.

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

-86°C ULT Freezer



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

Performance and Features

Field proven reliablity

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

Safety

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

Installation & Application

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

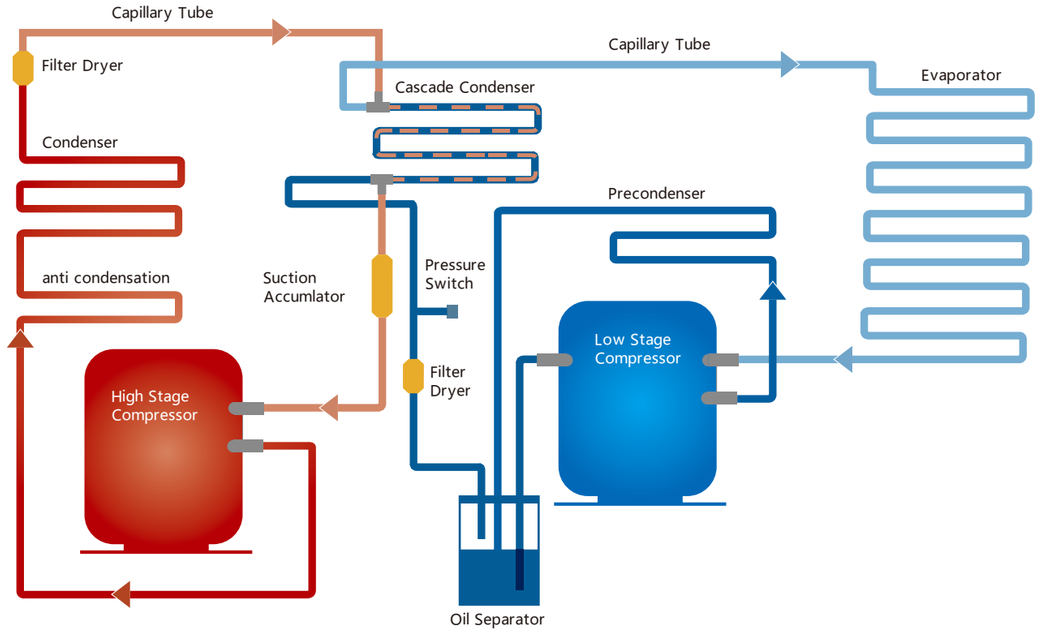
Energy saving

- 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

Heat Exchange Circulation System



Filter dryer
- Filtration and drying device for water and debris

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

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

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

Low stage evaporator
- Heat exchanger for expanded low stage refrigerant

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

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

Temprite oil separator
- Temprite oil separator can effectively separate oil and water so as to improve the refrigeration performance

CO_2 Backup System

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 CO_2 injection pipe is designed in combination of filter, to prevent the blockage of CO_2 back-up system

Safety

- Liquid CO_2 test button to ensure the backup system is working
- Low CO_2 alarm system alerts the user when liquid CO_2 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

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

Product appearance and specifications are subject to change without notice

LN_2 Backup System

An LN_2 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 LN_2 backup system can be automatically activated to inject LN_2 into the chamber to maintain the freezer temperature. The backup system operates on a rechargeable battery when there is a loss of main power.

Bright LED Display

Front-mounted Control Panel

Side Grille

LN_2 Backup System

Features

- Interlocked design to turn off the LN_2 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

Model		HBX-IIA	HBX-II
Technical Data	Cabinet Type	Horizontal	
	Cooling Type	Direct cooling	
	Refrigerant	LN_2	
Performance	Cooling performance(℃)	-135	
	Temperature Range(℃)	-90~-135	
Control	Controller	Thermostat	
	Display	LED	
Electrical Data	Power Supply（V/HZ）	220~240/50	208~230/60 115/60
	Power（W）	20	
	Electrical Current（A）	0.05	
Dimensions	Net/Gross Weight（approx）	15/17(kg)	
		33.1/37.5(lbs)	
	Exterior Dimensions（W*D*H）	360*305*445(mm)	
		14.2*12.0*17.5(in)	
	Packing Dimensions（W*D*H）	417*357*698(mm)	
		16.4*14.1*27.5(in)	
Functions	Low Battery Alarm	Y	
	Sensor Error Alarm	Y	
	Main Power Off Alarm	Y	
	Charge Indicator	Y	
Others	Certification	CE	UL

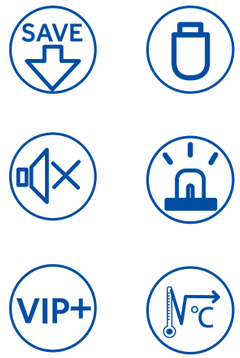
Product appearance and specifications are subject to change without notice

Salvum Ultimate ULT Freezer

This product line is designed and manufactured for long term storage of various biological products, including viruses, germs, erythrocytes, leucocytes and cutis. Applications can be found in blood banks, hospitals, epidemic prevention services, and research institutes, laboratories in electronic and chemical plants, biological engineering institutes and marine fishery companies.
Haier's next generation ULT freezer DW-86L728J is particularly designed for energy savings. It consumes the least amount of energy for the class of large ULT freezers. This new model 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 new freezer design makes energy savings possible for laboratories.

Advantages

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



Salvum Ultimate ULT Freezer

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

Alarms (visual and audible)

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

Safety

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

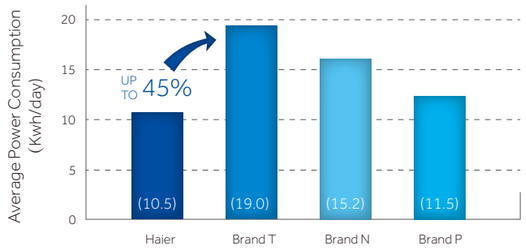
Global Most Energy Efficiency

Typical electric cost of a 700-liter ULT freezer

Model	Power Consumption (Kwh/Day)	Ambient Temperature	Electricity Charge (1year)	Electricity Charge (5year)	Electricity Charge (10year)
DW-86L728J	10.5*	25°C	€ 1,724.6	€ 8,623.1	€ 17,246.3
Brand P	11.5	22~26°C	€ 1,888.9	€ 9,444.4	€ 18,888.8
Brand N	15.2	23°C	€ 2,496.6	€ 12,483.0	€ 24,966.0
Brand T	19.0	25°C	€ 3,120.8	€ 15,603.8	€ 31,207.5

Notes:*Typical data - individual units may vary and power consumption will depend on loading and operating conditions. Freezer set-point -80°C, ambient temperature 25°C, unloaded, 220~240V 50Hz power supply

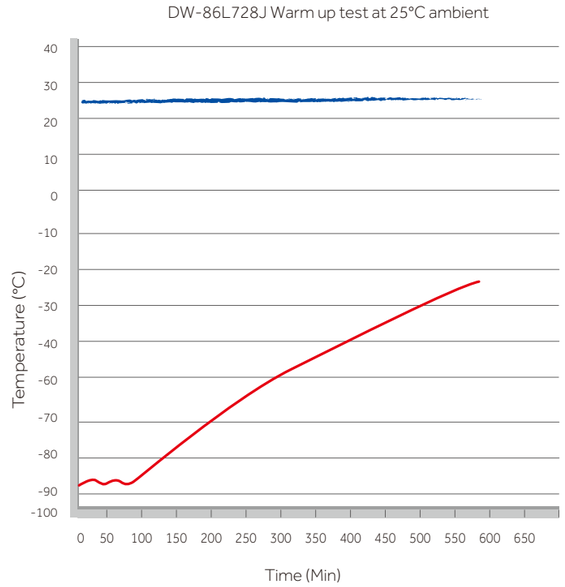
- The new Eco-friendly Haier ULT freezer is the most energy-efficient one in the world which is designed to help you save energy.

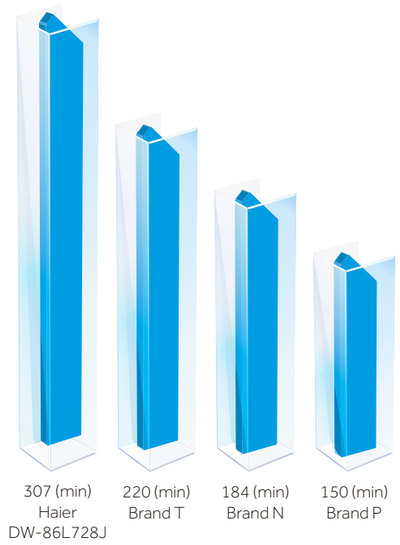


Salvum Ultimate ULT Freezer

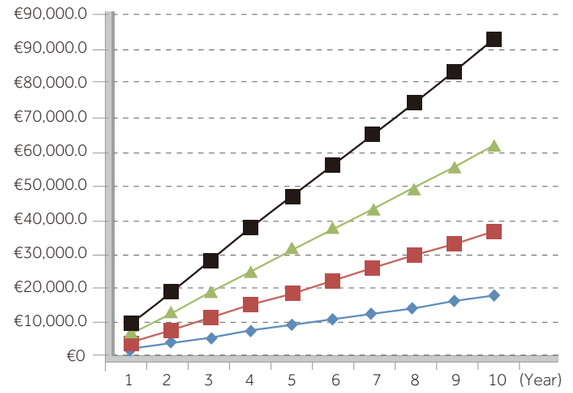
Extended Warm up Time During Power Failure

- 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





Haier DW-86L728J Electricity cost for ten years compared with other bands with similar capacity



*The calculation of electricity reference to the German average industrial electricity

Less Cost

- Compared with Brand P, Haier DW-86L728J will help you to save €1,642.5 electricity cost in 10 years
- Compared with Brand N, Haier DW-86L728J will help you to save €7,719.7 electricity cost 10 years
- Compared with Brand T, Haier DW-86L728J will help you to save €13,961.2 electricity cost 10 years

Brand T · Brand P · Brand N · Haier DW-86L728J

DW-86L959 is the largest ULT freezer in the global market with a touch screen control.

DW-86L959

USB Interface

Access Security Swiping Card(Optional)

The enhanced security card control
Can prevent unintentional opening ,
thus protect your sample records.

UNIQUE INVENTORY MANAGEMENT SYSTEM(IMS)

Layered display for sample storage, clear at a glance, easier to manage

Message and notepad function to transmit the information conveniently

Two operation modes

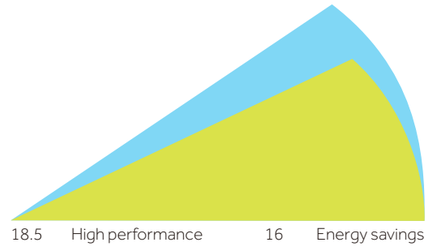
High performance mode should be selected when there is a high demand for temperature stability and uniformity. Energy savings mode is used for general storage where temperature requirement is not as strict. It allows the customer to save up to 13.5% on energy usage.

- **High-Performance Mode**

  Designed with GMP applications in mind.
  Outstanding temperature uniformity and peak variation from setpoint

- **Energy-Savings Mode**

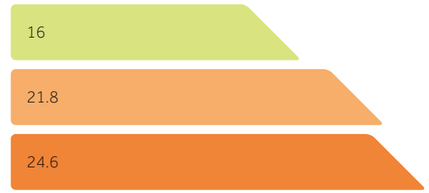
  Excellent temperature uniformity up to 13.5% energy savings over high-performance mode



Energy Efficient

Haier ULT's energy consumption is the lowest of major manufacturers.

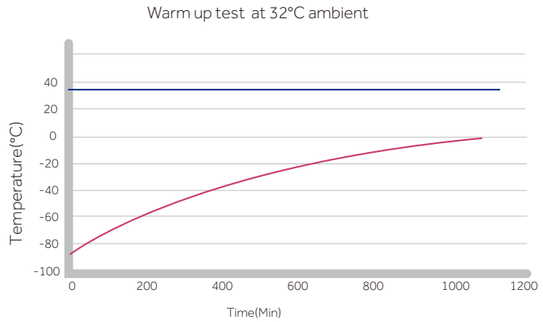
Haier DW-86L959 Brand T Brand P

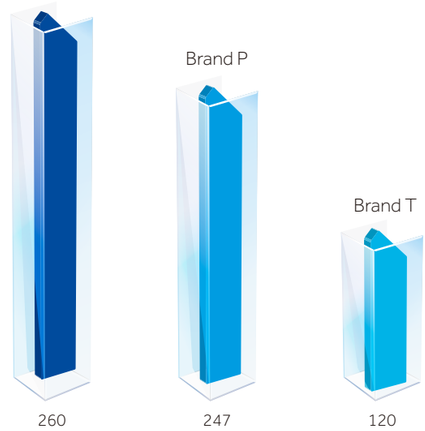


Average Power Consumption (KWh/day)

Temperature Retaining Ability

- Warmup time is the time a freezer takes to warm from -80°C to -50°C at 32°C ambient when there is a loss of power
- Haier ULT's warm up time is the longest among similar ULT models by major manufacturers





Water-Cooled ULT Freezer

Haier water-cooled ULT's 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

- 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

Water-Cooled ULT Freezer

Specification

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		HFC	HFC
	Sound level(dB(A))		49	49
Performance	Cooling Performance(°C)		-86	-86
	Temperature Range(°C)		-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor
	Display		LED	Touch Screen LCD
Electrical Data	Power Supply(V/HZ)		220～240/50	220～240/50
	Power(W)		1200	1300
	Electrical Current(A)		9	9
Dimensions	Capacity(L/Cu.Ft)		828/29.2	959/33.9
	Net/Gross Weight(approx)	kg	380/410	450/485
		lbs	837.7/903.9	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*980*1980	1296*998*1980
		in	45.1*38.6*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
Functions	High/Low Temperature		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	High/Low Voltage		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
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		Y	Y
	5V Power Supply Port		Y	Y
	Temperature Recorder		Optional	Optional
	Rs232/485 Port		Optional	Optional
	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

-86°C ULT Freezer

Specification

	Model	DW-86L338			DW-86L338J		DW-86L388A	DW-86L388J
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	HFC			HC		HFC	HC
	Sound level(dB(A))	50			47		50	49
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	LED			LED		LED	LED
Electrical Data	Power Supply(V/HZ)	220～240/50	208～230/60	115/60	220～240/50	208～230/60	220～240/50	220～240/50
	Power(W)	900	1000	1200	650	1000	1000	650
	Electrical Current(A)	7.5	8	18	5	7.5	8	5
Dimensions	Capacity(L/Cu.Ft)	338/11.9			338/11.9		388/13.7	388/13.7
	Net/Gross Weight (approx) kg	238/278			238/278		255/286	255/286
	Net/Gross Weight (approx) lbs	524.7/612.9			524.7/612.9		562.2/630.5	562.2/630.5
	Interior Dimension (W*D*H) mm	465*630*1165			465*630*1165		465*630*1310	465*716*1310
	Interior Dimension (W*D*H) in	18.3*24.8*45.9			18.3*24.8*45.9		18.3*24.8*51.6	18.3*28.2*51.6
	Exterior Dimension (W*D*H) mm	812*893*1846			812*893*1846		812*893*1980	812*980*1980
	Exterior Dimension (W*D*H) in	32.0*35.2*72.7			32.0*35.2*72.7		32.0*35.2*78.0	32.0*38.6*78.0
	Packing Dimension (W*D*H) mm	875*970*2010			875*970*2010		875*970*2135	875*1055*2135
	Packing Dimension (W*D*H) in	34.4*38.2*79.1			34.4*38.2*79.1		34.4*38.2*84.1	34.4*41.5*84.1
	Container load(20'/40'/40'H)	12/24/24			12/24/24		12/24/24	12/24/24
Functions	High/Low Temperature	Y			Y		Y	Y
	Hot Condenser	Y			Y		Y	Y
	Power Failure	Y			Y		Y	Y
	High/Low Voltage	Y			N/A		Y	N/A
	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/1			Y/2		Y/1	Y/2
	Shelves/Inner doors	3/2			3/2		3/2	3/2
	USB Interface	Y			Y		Y	Y
	Remote Alarm	Y			Y		Y	Y
	5V Power Supply Port	N/A			Y		N/A	Y
	Temperature Recorder	Optional			Optional		Optional	Optional
	Rs232/485 Por	Optional			Optional		Optional	Optional
	CO_2 Backup System	Optional			Optional		Optional	Optional
	LN2 Backup System	Optional			Optional		Optional	Optional
Others	Certification	CE	UL		CE	UL	CE	CE

-86°C ULT Freezer

	Model	DW-86L486E	DW-86L486			DW-86L490J		DW-86L578		DW-86L578J			DW-86L628E
Technical Data	Cabinet Type	Upright	Upright			Upright		Upright		Upright			Upright
	Climate Class	N	N			N		N		N			N
	Cooling Type	Direct cooling	Direct cooling			Direct cooling		Direct cooling		Direct cooling			Direct cooling
	Defrost Mode	Manual	Manual			Manual		Manual		Manual			Manual
	Refrigerant	HC	HFC			HC		HFC		HC			HC
	Sound level(dB(A))	49	49			50		50		49			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	220～240/50	208～230/60	115/60	220～240/50	208～230/60	208～230/60	115/60	220～240/50	208～230/60	115/60	220～240/50
	Power(W)	1000	1000	1000	1200	900	1000	1000	1000	750	1000	1000	1050
	Electrical Current(A)	10	9	5.5	18	8	8	9	18	6	9	18	11
Dimensions	Capacity(L/Cu.Ft)	486/17.1	486/17.1			490/17.3		578/20.4		578/20.4			628/22.2
	Net/Gross Weight (approx) kg	290/310	290/310			295/335		300/330		300/330			301/323
	Net/Gross Weight (approx) lbs	639.3/683.4	639.3/683.4			650.4/738.5		661.4/727.5		661.4/727.5			664.0/712.0
	Interior Dimension (W*D*H) mm	590*630*1310	590*630*1310			590*630*1310		620*716*1310		620*716*1310			760*630*1310
	Interior Dimension (W*D*H) in	23.3*24.8*51.6	23.3*24.8*51.6			23.2*24.8*51.6		24.4*28.2*51.6		24.4*28.2*51.6			29.9*24.8*51.6
	Exterior Dimension (W*D*H) mm	945*900*1980	945*900*1980			860*900*1980		895*980*1980		895*980*1960			1035*900*1980
	Exterior Dimension (W*D*H) in	37.2*35.4*78.0	37.2*35.4*78.0			33.9*35.4*78.0		35.2*38.6*78.0		35.4*38.6*77.2			40.7*35.4*78.0
	Packing Dimension (W*D*H) mm	995*995*2150	995*995*2150			925*985*2150		950*1055*2150		950*1055*2125			1080*965*2150
	Packing Dimension (W*D*H) in	39.2*39.2*84.6	39.2*39.2*84.6			36.4*38.8*84.6		37.4*41.5*84.6		37.4*41.5*83.7			42.5*38.0*84.6
	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	Y	Y			Y		Y		Y			Y
	Hot Condenser	Y	Y			Y		Y		Y			Y
	Power Failure	Y	Y			Y		Y		Y			Y
	High/Low Voltage	N/A	Y			N/A		Y		N/A			N/A
	Sensor Error	Y	Y			Y		Y		Y			Y
	Low Battery	Y	Y			Y		Y		Y			Y
	High Ambient Temperature	Y	Y			Y		Y		Y			Y
	Door Ajar	Y	Y			Y		Y		Y			Y
Accessories	Caster	Y	Y			Y		Y		Y			Y
	Foot	Y	Y			Y		Y		Y			Y
	Porthole	Y/2	Y/2			Y/2		Y/2		Y/2			Y/2
	Shelves/Inner doors	3/4	3/4			3/4		3/4		3/4			3/4
	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 Recorder	Optional	Optional			Optional		Optional		Optional			Optional
	Rs232/485 Por	Optional	Optional			Optional		Optional		Optional			Optional
	CO_2 Backup System	Optional	Optional			Optional		Optional		Optional			Optional
	LN2 Backup System	Optional	Optional			Optional		Optional		Optional			Optional
Others	Certification	CE	CE	UL		CE	UL	UL		CE	UL		CE

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

-86°C ULT Freezer

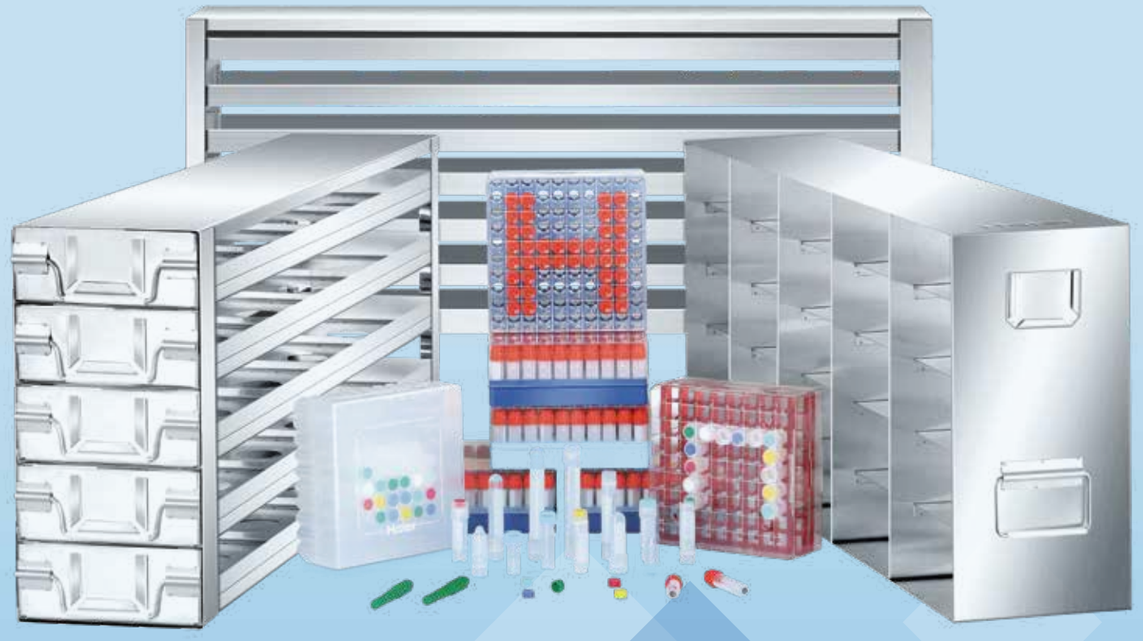
Model		DW-86L628		DW-86L728			DW-86L728J		DW-86L729	
Technical Data	Cabinet Type	Upright		Upright			Upright		Upright	
	Climate Class	N		N			N		N	
	Cooling Type	Direct cooling		Direct cooling			Direct cooling		Direct cooling	
	Defrost Mode	Manual		Manual			Manual		Manual	
	Refrigerant	HFC		HFC			HC		HFC	
	Sound level(dB(A))	49		50			50		49	
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	LED		LED			LED		Touch Screen LCD	
Electrical Data	Power Supply(V/HZ)	220～240/50	208～230/60	220～240/50	208～230/60	115/60	220～240/50	208～230/60	220～240/50	208～230/60
	Power(W)	1200	1200	1200	1200	1200	1000	1000	1200	1200
	Electrical Current(A)	7	9	9	9	18	10	10	8	9
Dimensions	Capacity(L/Cu.Ft)	628/22.2		728/25.7			728/25.7		729/25.7	
	Net/Gross Weight (approx) kg	301/323		345/385			345/385		350/385	
	Net/Gross Weight (approx) lbs	664.0/712.0		760.6/848.8			760.6/848.8		771.6/848.8	
	Interior Dimension (W*D*H) mm	760*630*1310		766*716*1310			766*716*1310		766*716*1310	
	Interior Dimension (W*D*H) in	29.9*24.8*51.6		30.2*28.2*51.6			30.2*28.2*51.6		30.2*28.2*51.6	
	Exterior Dimension (W*D*H) mm	1035*900*1980		1041*980*1980			1041*980*1980		1046*998*1980	
	Exterior Dimension (W*D*H) in	40.7*35.4*78.0		41.0*38.6*78.0			41.0*38.6*78.0		41.2*39.3*78.0	
	Packing Dimension (W*D*H) mm	1080*965*2150		1090*1050*2150			1090*1050*2150		1100*1105*2150	
	Packing Dimension (W*D*H) in	42.5*38.0*84.6		42.9*41.3*84.6			42.9*41.3*84.6		43.3*43.5*84.6	
	Container load(20'/40'/40'H)	12/24/24		12/20/20			12/20/20		10/20/20	
Functions	High/Low Temperature	Y		Y			Y		Y	
	Hot Condenser	Y		Y			Y		Y	
	Power Failure	Y		Y			Y		Y	
	High/Low Voltage	Y		Y			N/A		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	Y		Y			Y		Y	
	5V Power Supply Port	Y		Y			Y		Y	
	Temperature Recorder	Optional		Optional			Optional		Optional	
	Rs232/485 Interface	Optional		Optional			Optional		Optional	
	CO_2 Backup System	Optional		Optional			Optional		Optional	
	LN_2 Backup System	Optional		Optional			Optional		Optional	
Others	Certification	CE	UL	CE	UL		CE	UL	CE	UL

-86°C ULT Freezer

Model		DW-86L828		DW-86L828J	DW-86L959	DW-86W100		DW-86W100J	DW-86W420J	
Technical Data	Cabinet Type	Upright		Upright	Upright	Chest		Chest	Chest	
	Climate Class	N		N	N	N		N	N	
	Cooling Type	Direct cooling		Direct cooling	Direct cooling	Direct cooling		Direct cooling	Direct cooling	
	Defrost Mode	Manual		Manual	Manual	Manual		Manual	Manual	
	Refrigerant	HFC		HC	HFC	HFC		HC	HC	
	Sound level(dB(A))	49		50	49	49		49	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	Touch Screen LCD	LED		LED	LED	
Electrical Data	Power Supply(V/HZ)	220～240/50	208～230/60	220～240/50	220～240/50	220～240/50/60	115/60	220～240/50	220～240/50	208～230/60
	Power(W)	1200	1200	1000	1300	650	650	550	1000	1000
	Electrical Current(A)	9	9	10	9	7.5	12	4	7.5	7.5
Dimensions	Capacity(L/Cu.Ft)	828/29.2		828/29.2	959/33.9	100/3.5		100/3.5	420/14.8	
	Net/Gross Weight (approx) kg	380/410		380/410	450/485	138/160		138/160	310/357	
	Net/Gross Weight (approx) lbs	837.7/903.9		837.7/903.9	992.1/1069.2	304.2/352.7		304.2/352.7	683.4/787.0	
	Interior Dimension (W*D*H) mm	870*716*1310		870*716*1310	1016*716*1310	470*450*480		470*450*480	1367*462*652	
	Interior Dimension (W*D*H) in	34.3*28.2*51.6		34.3*28.2*51.6	40.0*28.2*51.6	18.5*17.7*18.9		18.5*17.7*18.9	53.8*18.2*25.7	
	Exterior Dimension (W*D*H) mm	1145*980*1980		1145*980*1980	1296*998*1980	769*825*1120		769*825*1120	2130*870*1020	
	Exterior Dimension (W*D*H) in	45.1*38.6*78.0		45.1*38.6*78.0	51.0*39.3*78.0	30.3*32.5*44.1		30.3*32.5*44.1	83.9*34.3*40.2	
	Packing Dimension (W*D*H) mm	1190*1045*2150		1190*1045*2150	1365*1105*2150	845*855*1250		845*855*1250	2195*895*1130	
	Packing Dimension (W*D*H) in	46.9*41.1*84.6		46.9*41.1*84.6	53.7*43.5*84.6	33.3*33.7*49.2		33.3*33.7*49.2	90.6*38.2*45.8	
	Container load(20'/40'/40'H)	8/20/20		8/20/20	8/16/16	12/24/48		12/24/48	6/12/24	
Functions	High/Low Temperature	Y		Y	Y	Y		Y	Y	
	Hot Condenser	Y		Y	Y	Y		Y	Y	
	Power Failure	Y		Y	Y	Y		Y	Y	
	High/Low Voltage	Y		N/A	Y	Y		N/A	N/A	
	Sensor Error	Y		Y	Y	Y		Y	Y	
	Low Battery	Y		Y	Y	Y		Y	Y	
	High Ambient Temperature	Y		Y	Y	Y		Y	Y	
	Door Ajar	Y		Y	Y	N/A		Y	Y	
Accessories	Caster	Y		Y	Y	Y		Y	Y	
	Foot	Y		Y	Y	Y		Y	Y	
	Porthole	Y/2		Y/2	Y/2	Y/1		Y/1	Y/1	
	Shelves/Inner doors	3/4		3/4	3/4	-/1		-/1	-/3	
	USB Interface	Y		Y	Y	N/A		Y	Y	
	Remote Alarm	Y		Y	Y	Y		Y	Y	
	5V Power Supply Port	Y		Y	Y	N/A		N/A	N/A	
	Temperature Recorder	Optional		Optional	Optional	Optional		Optional	Optional	
	Rs232/485 Interface	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	Certification	CE	UL	CE	CE	CE	UL	CE	CE	UL

Product appearance and specifications are subject to change without notice

Consumables for ULT Freezer



Laboratory Consumables

Innovative T Series Cryo Tubes

◆ **Material Features:**

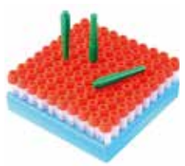
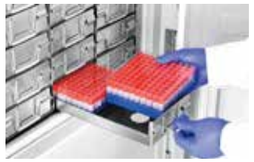
- Built with medical-grade PP plastic that can endure temperature from -196℃ to 121℃.
- Tube cap and body are made with PP plastic, which allows same amount of contraction at low temperature for better sealing.
- The smallest cryo tube is 0.5 ml. Samples can be stored in small volume to avoid repeated freezing and melting and increase sample's per-container load.
- 0.5-1.5 ml external-thread slim design can fit into a 10*10 freezer box.

◆ **Certifications:**

- Gamma Irradiation Sterilization: Sterility Assurance Level 10-6, assuring the highest sterilization level.
- 95 kpa high-voltage testing (0.95bar,14psi) to ensure sealing which is suitable to IATA standard.
- Stored genetic material is more stable with the absence of DNase and RNase.
- Produced in clean rooms without endotoxin or pyrogen.

◆ **Professional Accessories:**

- Numbered scale and label for easy recognition of sample size on tube body.
- Tube cap designed with inner hexagon and dedicated cap screws.
- Tube bottom has a stabilizing clip design for fastening to freezing box.
- Specially designed 10*10 PC freezer box for low temperature tolerance to liquid nitrogen condition.
- Freezer box has numbered grid locations for convenient retrieval of samples.
- Includes cap screws for two times usage and tools to retrieve sample tubes.
- Sterilized boxes and cryo tubes are cushioned with plastic in a shipping box that can withstand 200 kg of pressure to prevent breakage.

Model	Type	Volume	Sterile	Description
T2053	External Thread Tube and Box	0.5ml	Gamma Irradiation Sterilization	With scale and writing area, Temperature tolerance:-196℃~121℃, Comes with one 100-well PC freezer box, the box lid has grids, 1200 units/box
T2203	External Thread Tube and Box	1.5ml	Gamma Irradiation Sterilization	With scale and writing area, Temperature tolerance:-196℃~121℃, Comes with one 100-well PC freezer box, the box lid has grids, 1200 units/box

Conventional T Series Cryo Tubes

◆ **Product Features:**

- Medical-grade material, temperature range from -196℃ to 121℃.
- Large label for better notes.
- High transparency with scale for better observation of samples.
- Vertical-pattern designquick 1 1/4 turn to easily and tightly seal.
- Silica-gel square joint ring to assure sealing.
- DNase and RNase free.
- No endotoxin or pyrogen.
- Gamma irradiation sterilization.
- Endure centrifugal force up to 17000xg.
- Round or self-standing (star-shape or parenthesis-shape) tube bottom.
- Internal/External Thread: Sizes vary from 1.0ml to 5.0ml.
- Six different colors for color labeling (red, yellow, white, green, blue, light green)
- Packed with hermetic bags.
- Batch numbers are printed on the product package for tracking.
- Outer box can hold 200-lbs pressure to assure transportation safety.

Laboratory Consumables

Model	Type	Volume	Sterile	Description
T102	External Thread	2ml	Gamma Irradiation	With scale, writing area, self-standing bottom, Low temp. tolerance: -196℃, 1000 units/box
T135	Internal Thread	2ml	Gamma Irradiation	With scale, writing area, self-standing parenthesis-shape bottom, Low temp. tolerance: -196℃, 1000 units/box
T144	Color Label	——	——	Cryo Tube Cap Color Label: Six colors to choose, red, yellow, white, green, blue and light green, Embedded into the cap for differentiating, 1000 units/bag;

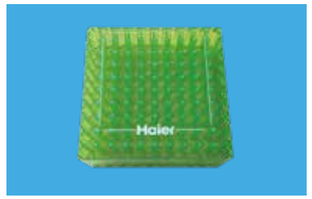
Freezer Boxes

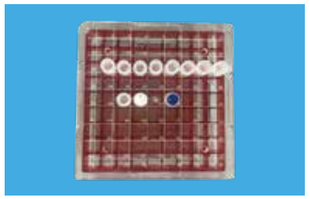
Various sizes of boxes are available for storing cryo tubes commonly required in Biobanks.

◆ **Product Features:**

- Medical-grade high-transparent PP/PC materials of high endurance.
- Temperature range of -86℃ and -196℃ to 121℃. The boxes are designed to handle liquid nitrogen temperature of -196℃ to sterilization temperature of 121℃ under pressure without losing their integrity.
- Transparent lid designed for the convenience of observing samples in the box.
- Grid and number codes are printed on the lid for storage management to avoid mistakes when storing and retrieving of samples.
- The box has pre-designed gap for fast cooling or liquid outflow of samples. This design also prevents frosting from forming.
- Special design of edges and angles to ensure proper lid closing.
- Standard dimension design suits all standard freezer racks.
- Fit in freezers perfectly to improve storage space utilization.

Model	Dimension (mm)	Description
T130 (81ABS)	133*133*53.5	Standard 2-inch 81-well freezer box, PP plastic, suitable for external-thread cryo tubes, numbered grid, Temperature Range: -90~121℃, 50 units/box
HBB- 200- PP (2015)	133*133*53.5	Standard 2-inch 100-well freezer box, PP plastic, numbered grid, Temperature range:-90~121℃, 50 units/box
HBB- 281- PC (2015)	133*133*53.5	Standard 2-inch 81/100-well freezer box, PC plastic, Temperature Range: -196~121℃, Numbered grid, Colors: Transparent, red and green. One color per box, 50 units/box





Laboratory Consumables

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.

Parameters

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*22.2*9.4(in)"	DW-86L338/338J/490/490J
	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-86L338/388A/486/490/628
	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/578/578J/728/ 728J/729/828/828J/959/ 829BP/959BP/578S
	DCJ-55-B(2014)	2 inch stainless steel 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 rack 8*1 (2 inch box *8)	"140*140*480(mm) 5.5*5.5*18.9(in)"	DW-86W100
	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-86W420/DW-150W200

Haier ULT Freezer + Consumables Solutions

Freezer Model	Freezer Rack Model	Description	Freezer Rack Quantity	Freezer Box Quantity	Cryo Tube Quantity (2ml)
DW-86L338/338J	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 ×20 units)	6	96	9600
DW- 86L388A	DCJ-54- A (2014)	2 inch stainless steel side-access freezer rack 5*4(2 inch freezer box ×20 units)	12	240	24000
	DCJ-54- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*4(2 inch freezer box ×20 units)	12	240	24000
DW- 86L388J	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*4(2 inch freezer box ×20 units)	12	300	30000
	DCJ-55- B (2014)	2 inch stainless steel sliding-drawer freezer rack 5*4(2 inch freezer box ×20 units)	12	300	30000
DW- 86L486	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- 86L490/490J	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- 86L578J/578/578S	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- 86L628	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- 86L728/728J/729	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- 86L828/828J/829BP	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- 86L959/959BP	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- 86W100	DCJ-08- A (2014)	2 inch chest-type freezer rack (2 inch freezer box ×8 units)	9	72	7200
DW- 86W420	DCJ-10- A (2014)	2 inch chest-type freezer rack (2 inch freezer box ×10 units)	27	270	27000
DW- 150W200	DCJ-10- A (2014)	2 inch chest-type freezer rack (2 inch freezer box ×10 units)	12	120	12000

-60°C Freezer

The series of freezers is designed for storage of tuna, Australian lobster, salmon, south American shrimps, Argentina red shrimp, top quality beef, kanpachi, octopus, yellow tail, bonito fish, grouper, and fugu rubripes. They are popular among professional oceanic fisherman, sea food distributors, specialty sea food stores and sushi restaurants.

Duel-seal design

Imported brand fan

Imported brand compressor

Digital temperature control display

-60°C deep freezing freezers quickly freeze sea food products such as tuna fish, Australian lobster, and top quality beef to retain their original taste, structure and freshness.

Super low sound operation: noise cancelling technology yields a sound level of less than 43 dba.

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

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

-60°C Freezer

Single compressor auto cascade refrigeration system provides high efficient cooling power. Insulation thickness is 100 mm for optimal protection of cold temperature and saving energy.

Creative dual seals design retains cold temperature more effectively, and eliminates condensation on gaskets.

Interior material is certified food grade 304 stainless steel, ensuring safe contact between food and interior liner.

Interior lock design ensures product safety. Lockable casters permit ease of installation and maneuvering.

Water proof digital control delivers precise temperature for storage. Display and control system are easy to use.

Specification

	Model		DW-60W138	DW-60W258	DW-60W388
Technical Data	Cabinet Type		Chest	Chest	Chest
	Climate Class		N	N	N
	Cooling Type		Direct cooling	Direct cooling	Direct cooling
	Refrigerant		R600a/R1150	R600a/R1150	R600a/R1150
	Sound Level((dB(A))		43	43	43
Performance	Cooling performance(℃)		-60	-60	-60
	Temperature Range(℃)		-30 ~ -60	-30 ~ -60	-30 ~ -60
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED
Electrical Data	Power Supply（V/HZ）		220 ~ 240/50	220 ~ 240/50	220 ~ 240/50
	Power（W）		370	410	420
	Electrical Current（A）		3	3	3.5
Dimension	Capacity(L/Cu.Ft)		138/4.9	258/9.1	388/13.7
	Net/Gross Weight（approx）	kg	62/75	88/108	105/130
		lbs	137/165	194/238	232/287
	Interior Dimension(W*D*H)	mm	580*445*620	1000*445*620	1450*445*620
		in	22.8*17.5*24.4	39.4*17.5*24.4	57.1*17.5*24.4
	Exterior Dimensions（W*D*H）	mm	790*770*950	1210*770*950	1655*770*950
		in	31.1*30.3*37.4	47.6*30.3*37.4	65.2*30.3*37.4
	Packing Dimensions（W*D*H）	mm	815*800*990	1255*800*990	1695*800*990
		in	32.1*31.5*39	49.4*31.5*39	66.7*31.5*39
	Container Load(20'/40'/40'H)		28/56/56	22/46/46	14/28/28
Alarms	High/Low Temp		Y	Y	Y
	Sensor Error		Y	Y	Y
Accessories	Caster		Y	Y	Y
	Porthole		Y	Y	Y
Others	Certification		CE	CE	CE

Product appearance and specifications are subject to change without notice

Biomedical Freezer

-40°C Biomedical Freezer(Double Doors Type)

The -40°C deep freezer offers a large capacity storage space with fast temperature performance. Integrated design of cold shelf and evaporator provides additional refrigeration efficiency. This product is designed to store vaccines, blood plasma, and many other biological materials. Installations can be found in research institutions and clinical sites in life science, electronic testing and medical markets.

DW-40L508

DW-40L348

Control panel

Drawer

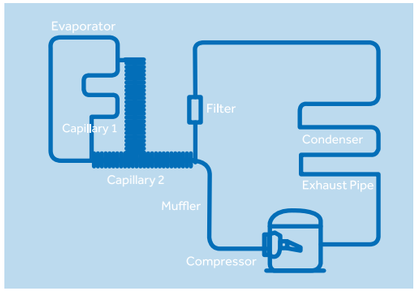
Shelf

-40°C Biomedical Freezer(Double Doors Type)

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

Reliability and Key Features

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



Safety

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

Ergonomic Design

- LED digital display for clear observation
- Double door design with independent locks reduces air leakage to ensure temperature stability and lower power consumption
- Tracks to label drawers for product identification

-40°C Biomedical Freezer (Upright)

DW-40L278

Key Features

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

Ergonomic Design

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

Safety

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

Reliable Performance | USB | Malfunction Alarms | Double Outer Door Seal

Padlock

Caster and feet

Removable double outer door seal

-40°C Biomedical Freezer (Chest)

Reliability and Key Features

- High efficiency low temperature compressor with known field reliability
- Chemically stable, CFC-free, commercially available and environmentally safe refrigerant
- Permanently lubricated cooling fan for safety and longevity , high density insulation foam for stable and long term storage temperature
- Optimized refrigeration system designed to maximize cooling effect and temperature uniformity
- Microprocessor control, digital display, adjustable temperature range: -20°C~-40°C
- LED digital display for clear observation
- Wide voltage tolerance design with applicable voltage range of 198~252 V/AC

Safety

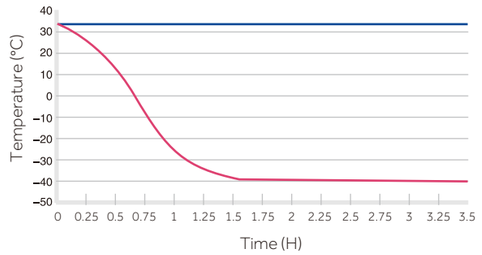
- Multiple malfunction alarms to detect high / low temperature, sensor error and power failure
- Two types of alarm indications: audible buzzing and visual flashing light

Ergonomic Design

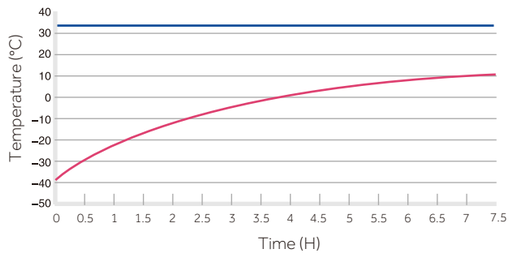
- Door lock for storage safety
- Standard ø25 access port for testing instrumentation except model DW-40W380
- Corrosion proof cabinet interior design
- Suitable for a variety of storage baskets

Inner

DW-40W380 Pull down test at 32°C ambient



DW-40W380 Warm up test at 32°C ambient



-40°C Biomedical Freezer

-40°C Biomedical Freezer

Specification

	Model	DW-40L92	DW-40L262		DW-40L278	DW-40L348	DW-40L508		DW-40W100		DW-40W255	DW-40W380
Technical Data	Cabinet Type	Upright	Upright		Upright	Upright, double door	Upright, double door		Chest		Chest	Chest
	Climate Class	4	4		4	4	4		4		4	4
	Cooling Type	Direct cooling	Direct cooling		Direct cooling	Direct cooling	Direct cooling		Direct cooling		Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual		Manual	Manual	Manual		Manual		Manual	Manual
	Refrigerant	CFC-Free	CFC-Free		HC	HC	HC	CFC-Free	CFC-Free		CFC-Free	CFC-Free
	Sound level(dB(A))	40	44		40	41	41	45	35		41	45
Performance	Cooling Performance(℃)	-40	-40		-40	-40	-40		-40		-40	-40
	Temperature Range(℃)	-20~-40	-20~-40		-20~ -40	-20~-40	-20~-40		-20~-40		-20~-40	-20~-40
Control	Controller	Microprocessor	Microprocessor		Microprocessor	Microprocessor	Microprocessor		Microprocessor		Microprocessor	Microprocessor
	Display	LED	LED		LED	LED	LED		LCD		LCD	LCD
Electrical Data	Power Supply(V/Hz)	220~240/50	220~240/50/60	115/60	220~240/50	220~240/50	220~240/50	208~230/60	220~240/50	115/60	220~240/50/60	220~240/50/60
	Power(W)	220	400	600	275	280	285	430	260	255	410	550
	Electrical Current(A)	2.1	4.8	7.5	2.9	2.9	2.9	2.9	2.5	5.0	2.5	3.4
Dimensions	Capacity(L/Cu.Ft)	92/3.3	262/9.3		278/9.8	348/12.3	490/17.3		100/3.5		255/9.0	380/13.4
	Net/Gross Weight (approx) kg	46/51	88/93		115/135	137/145	164/200		43/46		70/82	82/89
	Net/Gross Weight (approx) lbs	101.4/112.4	194.0/205.0		253.5/297.6	302.0/320.0	361.6/440.9		94.8/101.4		154.3/180.8	180.8/196.2
	Interior Dimension (W*D*H) mm	435*410*635	480*465*1430		520*435*1230	535*610*1228	685*610*1228		500*385*630		1036*426*625	1375*453*640
	Interior Dimension (W*D*H) in	17.1*16.1*25.0	18.9*18.3*56.3		20.5*17.1*48.4	21.1*24.0*48.3	27.0*24.0*48.3		19.7*15.2*24.8		40.8*16.8*24.6	54.1*17.8*25.2
	Exterior Dimension (W*D*H) mm	640*610*860	700*705*1665		770*710*1810	790*845*1860	940*845*1860		685*650*810		1243*724*838	1554*724*838
	Exterior Dimension (W*D*H) in	25.2*24.0*33.9	27.6*27.8*65.6		30.3*28.0*71.3	31.1*33.3*73.2	37.0*33.3*73.2		27.0*25.6*31.9		48.9*28.5*33.0	61.2*28.5*33.0
	Packing Dimension (W*D*H) mm	660*700*935	775*760*1880		832*757*1992	852*927*2044	997*927*2044		740*650*880		1320*755*905	1635*760*900
	Packing Dimension (W*D*H) in	26.0*27.6*36.8	30.5*29.9*74.0		32.8*29.8*78.4	33.5*36.5*80.5	39.3*36.5*80.5		29.1*25.6*34.6		52.0*29.7*35.6	64.4*29.9*35.4
	Container Load (20'/40'/40'H)	54/108/108	24/48/48		14/28/28	14/28/28	12/24/24		54/108/162		24/54/81	18/42/63
Functions	High/Low Temperature	Y	Y		Y	Y	Y		Y		Y	Y
	Remote Alarm	N/A	N/A		Y	Y	Y		N/A		N/A	N/A
	Power Failure	N/A	N/A		Y	Y	Y		Y		Y	Y
	Sensor Error	Y	Y		Y	Y	Y		Y		Y	Y
	Low Battery	N/A	N/A		Y	Y	Y		N/A		N/A	N/A
	High Ambient Temp	N/A	N/A		Y	Y	Y		N/A		N/A	N/A
	Door Ajar	/	/		Y	/	/		/		/	/
Accessories	Caster	Y	Y		Y	Y	Y		N/A		N/A	N/A
	Foot	Y	Y		Y	Y	Y		N/A		N/A	N/A
	Porthole	Y	Y		Y	Y	Y		Y		Y	N/A
	Drawers/Inner Doors	3/-	7/-		6/-	12/-	10/-		/		/	/
	USB Interface	N/A	N/A		Optional	Optional	Optional		N/A		N/A	N/A
	Temperature Recorder	N/A	N/A		Optional	Optional	Optional		N/A		N/A	N/A
Others	Certification	CE	CE		CE	CE	CE		CE		CE	CE

Product appearance and specifications are subject to change without notice

-30°C Biomedical Freezer (Upright)

This freezer is designed for storage of critical and temperature sensitive biological samples, laboratory products and medical products in institutions such as blood banks, hospitals, and research laboratories.

DW-30L420F

Key Features

- Forced air and frost-free design: -30°C storage temperature with automatic defrost cycles guided by time and temperature, ensure the maximum temperature stability and minimize energy use
- High-performance refrigeration system: achieve excellent temperature uniformity with intelligent operation control at -30°C
- Microprocessor control with digital display: 0.1°C control increment, adjustable range of -10°C to -30°C

Padlock | Backup battery protection | USB | Malfunction Alarms

Drawer(Optional)

Microprocessor control panel

Air distribution

-30°C Biomedical Freezer (Upright)

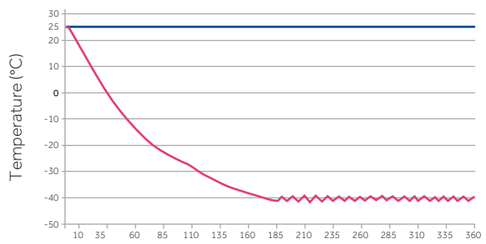
Safety

- Alarm system consists of alarms in audible, visual and remote contacts forms for high temperature, sensor error, power failure, door ajar, low battery, and high ambient temperature
- Backup battery for continuously monitoring and displaying the interior temperature over 48hs after power failure
- Standard USB port to download temperature data
- Lockable door with padlock for added sample security

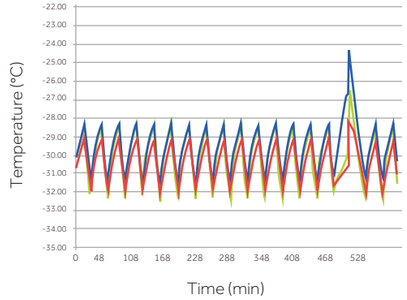
Ergonomic Design

- Self closing door with 90°stay-open feature, energy-conserving, maintains temperature uniformity to protect your valuable samples
- Interior brushed stainless steel liner and exterior coated steel plate, corrosion free
- 5 adjustable stainless steel shelves and optional drawer
- Casters and leveling leg, easy to move and lock

Pull down test at 25°C ambient



Temperature Uniformity



*Freezer set-point -30 °C， ambient temperature 25 °C

-30°C Biomedical Freezer

Haier -30 °C low temperature freezers: Hydrocarbon refrigerant, energy-saving, safe and reliable, smart control

DW-30L278

DW-30L508

Application

Blood banks, hospitals, disease control centers, research institutes, electronic, chemical and other industries, cryopreservation of plasma, biologics and other products, and cold tests for components and materials.

-30°C Biomedical Freezer

Advantages

- **High-efficiency and energy-saving compressor and system**
  Industrial grade energy-saving compressor and optimized cooling system reduce more than 55% power consumption to achieve -30 °C compared with older models.
- **Green and environmental friendly**
  Hydrocarbon refrigerant compressor, hydrocarbon refrigerant, completely green and environmental friendly refrigeration system; Built with isopentane foam polyurethane insulation, the series complies with European RoHS Directive, green and environmental protection friendly.
- **Superior temperature uniformity**
  Evaporator-shelf design produces a faster cooling process and a more uniform temperature distribution. The temperature uniformity at characteristic points is ±4°C.
- **Low Sound Level**
  Sound-reducing design with optimized system and structures reduces the sound level ,completely eliminating annoying high-pitched noise.

Key Features

Microprocessor control system:

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

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

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

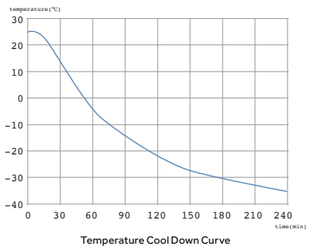
Porthole
Porthole design is standard for test

Recorder
Optional chart temperature recorder available

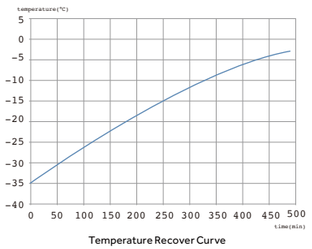
-30°C Biomedical Freezer

DW-30L508

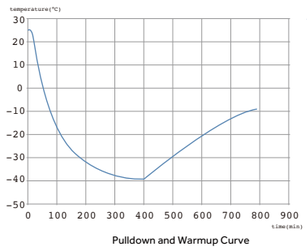
DW-30L508 | TYPICAL PERFORMANCE CHARACTERISTICS IN 25°C AMBIENT



Temperature Cool Down Curve



Temperature Recover Curve



Pulldown and Warmup Curve

-30°C Biomedical Freezer

Specification

	Model		DW-30L420F	DW-30L278	DW-30L508	
Technical Data	Cabinet Type		Upright	Upright	Upright, double door	
	Climate Class		4	4	4	
	Cooling Type		Forced air cooling	Direct cooling	Direct cooling	
	Defrost Mode		Automatic defrost	Manual	Manual	
	Refrigerant		HC	HC	HC	
	Sound level(dB(A))		46	40	41	43
Performance	Cooling Performance(℃)		-30	-30	-30	
	Temperature Range(℃)		-10~-30	-10~-30	-10~-30	
Control	Controller		Microprocessor	Microprocessor	Microprocessor	
	Display		LED	LCD	LCD	LED
Electrical Data	Power Supply(V/Hz)		220~240/50 | 208~230/60	220~240/50	220~240/50	115/60
	Power(W)		460/1000(Defrost)	330	530	600
	Electrical Current(A)		4.5/5.8(Defrost)	2	3	6.5
Dimensions	Capacity(L/Cu.Ft)		420/14.8	278/9.8	490/17.3	
	Net/Gross Weight (approx)	kg	195/225	115/135	164/200	
		lbs	429.9/496.0	253.7/297.9	361.6/440.9	
	Interior Dimension (W*D*H)	mm	685*610*1028	520*435*1230	685*610*1228	
		in	27.0*24.0*40.5	20.5*17.1*48.4	27.0*24.0*48.3	
	Exterior Dimension (W*D*H)	mm	950*890*1900	745*675*1810	915*810*1860	
		in	37.4*74.4*74.8	29.3*26.6*71.3	36.0*31.9*73.2	
	Packing Dimension (W*D*H)	mm	980*905*2040	805*725*1970	980*905*2040	
		in	38.6*36.0*80.3	31.7*28.5*77.6	38.6*35.6*80.3	
	Container Load(20'/40'/40'H)		12/24/24	14/28/28	12/24/24	
Alarms	High/Low Temperature		Y	Y	Y	Y
	Remote Alarm		Y	/	/	Y
	Power Failure		Y	Y	Y	/
	Sensor Error		Y	Y	Y	Y
	Low Battery		Y	/	/	/
	High Ambient Temperature		Y	/	/	/
	Door Ajar		Y	/	/	/
Accessories	Caster		Y	Y	Y	
	Foot		Y	Y	Y	
	Porthole		Y	Y	Y	
	Drawers/Inner Doors		-/3 | 6/-	6/-	10/-	
	Temperature Recorder		Optional	Optional	Optional	
	USB Interface		Y	/	/	
Others	Certification		CE	CE	CE	UL

-25°C Biomedical Freezer

Haier -25°C deep freezer offers a large capacity storage space.
Integrated design of cold shelf and evaporator provides additional refrigeration efficiency.
This product is designed to store vaccines, blood plasma, and many other biological materials. Installations can be found in research institutions and clinical sites in life science, electronic testing and medical markets.

DW-25L262

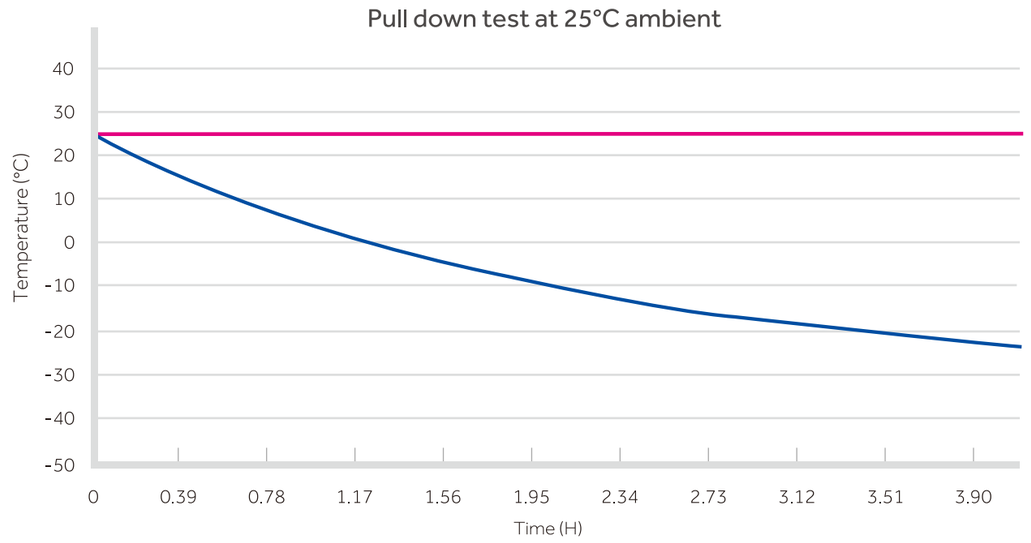
Reliability and Key Features

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

Safety

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

-25°C Biomedical Freezer



	Model		DW-25L92		DW-25L262	
Technical Data	Cabinet Type		Upright		Upright	
	Climate Class		4		4	
	Cooling Type		Direct Cooling		Direct Cooling	
	Defrost Mode		Manual		Manual	
	Refrigerant		HC		HC	
	Sound level((dB(A))		27	28	34	35
Performance	Cooling Performance(°C)		-25		-25	
	Temperature Range(°C)		-10~-25		-10~-25	
Control	Controller		Microprocessor		Microprocessor	
	Display		LED		LED	
Electrical Data	Power Supply(V/Hz)		220~240/50	115/60	220~240/50	115/60
	Power (W)		77	125	90	135
	Electrical Current(A)		0.35	1.8	0.7	2.0
Dimensions	Capacity(L/Cu.Ft)		92/3.2		262/9.3	
	Net/Gross Weight(appox)	kg	46/51		88/93	
		lbs	101.4/112.4	101.4/112.4	194.0/205.0	
	Interior Dimensions(W×D×H)	mm	435*410*635	435*410*635	480*465*1430	
		in	17.1*16.1*25.0	17.1*16.1*25.0	18.9*18.3*56.3	
	Exterior Dimensions(W×D×H)	mm	640*610*860	597*635*835	700*705*1665	
		in	25.2*24.0*33.9	23.5*25.0*32.9	27.6*27.8*65.6	
	Packing Dimensions(W×D×H)	mm	660*700*935	680*690*910	775*760*1880	
		in	26.0*27.6*36.8	26.8*27.2*35.8	30.5*29.9*74.0	
	Container Load(20'/40'/40'H)		50/108/108		24/48/48	
Functions	High/Low Temp		Y	Y	Y	
	Sensor Error		Y	Y	Y	
	Door Ajar		/	Y	/	
	Remote Alarm		/	Y	/	
Accessories	Drawers		3		7	
Others	Certification		CE	UL	CE	UL

Product appearance and specifications are subject to change without notice

Spark Free Freezer/ Refrigerator

-30°C Spark Free Freezer

Typical installation

It can be used in explosives sealed preservation at low temperatures for laboratories of scientific research institutes, biological and chemical industries etc., as well as storing non-explosive biological products and materials.

DW-30L278SF

-30°C Spark Free Freezer

DW-25L92FL

DW-30L278SF/FL

Product Advantages

Internal anti-explosion

The SF series is composed of a non-anti-static liner, door lining and drawers; the FL series is composed of an anti-static liner, door lining and drawers. The metal components are subjected to reliable grounding and the internal part is explosion-proof. It has obtained the Chinese national explosion-proof certificate and passed ATEX Ⅱ C-T6 EU explosion-proof certification

Hydrocarbon energy-saving

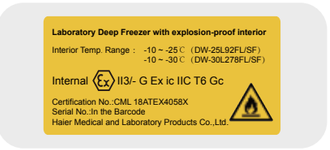
- A hydrocarbon compressor and hydrocarbon refrigerant are used. It is truly a completely green eco-friendly refrigeration system
- The full series is provided with a cyclo-isopentane foaming polyurethane insulation layer and is manu factured with materials that comply with the European ROHS directive, to ensure a green design and environmental protection
- Imported hydrocarbon energy-saving and high-efficiency compressor, optimized refrigeration system, more energy-saving.

Good uniformity

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

Low noise

The system and structural noise reduction design are optimized for a lower noise level (less than 40dB) and the complete elimination of harsh high-frequency noise.



-30°C Spark Free Freezer

Key Features

Microprocessor-controlled system

· Microprocessor electronic thermostat, LCD temperature display to an accuracy of 0.1°C; temperature inside the freezer: -10~-30°C, adjustable;
· A variety of alarm functions are available, including a high temperature alarm, low tem perature alarm, sensor failure alarm and power failure alarm;
· Audible and visual alarm;
· Continuous alarm for more than 24 hours after power failure.

Good thermal insulation

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

Safety lock

Dual-lock design of lock catch + key lock. An external lock can be added to the lock catch to ensure double safety.

Warning sticker

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

Drawers

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

Castor

Castor +foot design,easy to move.

-30°C Spark Free Freezer

Product Specifications

	Model		DW-25L92SF	DW-30L278SF	DW-25L92FL	DW-30L278FL
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright
	Climate Class		4	4	4	4
	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))		27	40	27	40
Performance	Cooling performance(°C)		-25	-30	-25	-30
	Temperature Range (°C)		-10~-25	-10~-30	-10~-25	-10~-30
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LCD	LED	LCD
Electrical Data	Power Supply(V/Hz)		220~240/50	220~240/50	220~240/50	220~240/50
	Power(W)		160	330	160	330
	Electrical Current(A)		0.75	2.0	0.75	2.0
Dimensions	Capacity(L/Cu.Ft)		92/3.3	278/9.8	92/3.3	278/9.8
	Net/Gross Weight(approx)	kg	46/51	115/135	46/51	115/135
		lbs	101/113	254/298	101/113	254/298
	Interior Dimensions(W*D*H)	mm	435*410*635	520*435*1230	435*410*635	520*435*1230
		in	17.1*16.1*25	20.5*17.1*48.4	17.1*16.1*25	20.5*17.1*48.4
	Exterior Dimensions(W*D*H)	mm	597*635*835	745*675*1810	597*635*835	745*675*1810
		in	23.5*25*32.9	29.3*26.6*71.3	23.5*25*32.9	29.3*26.6*71.3
	Packing Dimensions(W*D*H)	mm	680*690*910	805*725*1970	680*690*910	805*725*1970
		in	26.8*27.2*35.8	31.7*28.5*77.6	26.8*27.2*35.8	31.7*28.5*77.6
	Container load (20'/40'/40'H)		48/102/102	23/46/46	48/102/102	23/46/46
Functions	High/Low Temperature		Y	Y	Y	Y
	Remote Alarm		Y	/	Y	/
	Power Failure		/	Y	/	Y
	Sensor Error		Y	Y	Y	Y
	Door Ajar		Y	/	Y	/
Accessories	Caster		Y	Y	Y	Y
	Foot		Y	Y	Y	Y
	Drawers/Inner Doors		3/-	6/-	/	6/-
Others	Certification		CE ATEX	CE ATEX	CE ATEX	CE ATEX
	Interior Material/Colour		PS Plate/white	PS Plate/white	Antistatic PS Plate/black	Antistatic PS Plate/black

Product appearance and specifications are subject to change without notice

Spark Free Refrigerator

Typical installation

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

Product Advantages

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

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

3-16°C Setting Temperature Range

Smart temperature control system limits the temperature variance within 3°C for the range of 0°C to 19°C providing a more uniform temperature in the chamber.

One-touch search for historic data

Historic temperature data is saved and can be checked with one key stroke.

High Efficiency HC Cooling Technology

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

Spark Free Refrigerator

Ergonomic Design

High strength glass shelves

Tempered glass shelves holds 40 kg of products per shelve.

Low noise

Noise cancelling technology reduces the sound level to less than 40dB(A), creating a much improved work environment.

Dual locks design with multiple alarm systems

A mortise lock is standard on the door. A padlock can be accommodated as well. Standard alarms include high and low temperature, door opening, and sensor errors.

Cabinet Structure

Glass Shelve

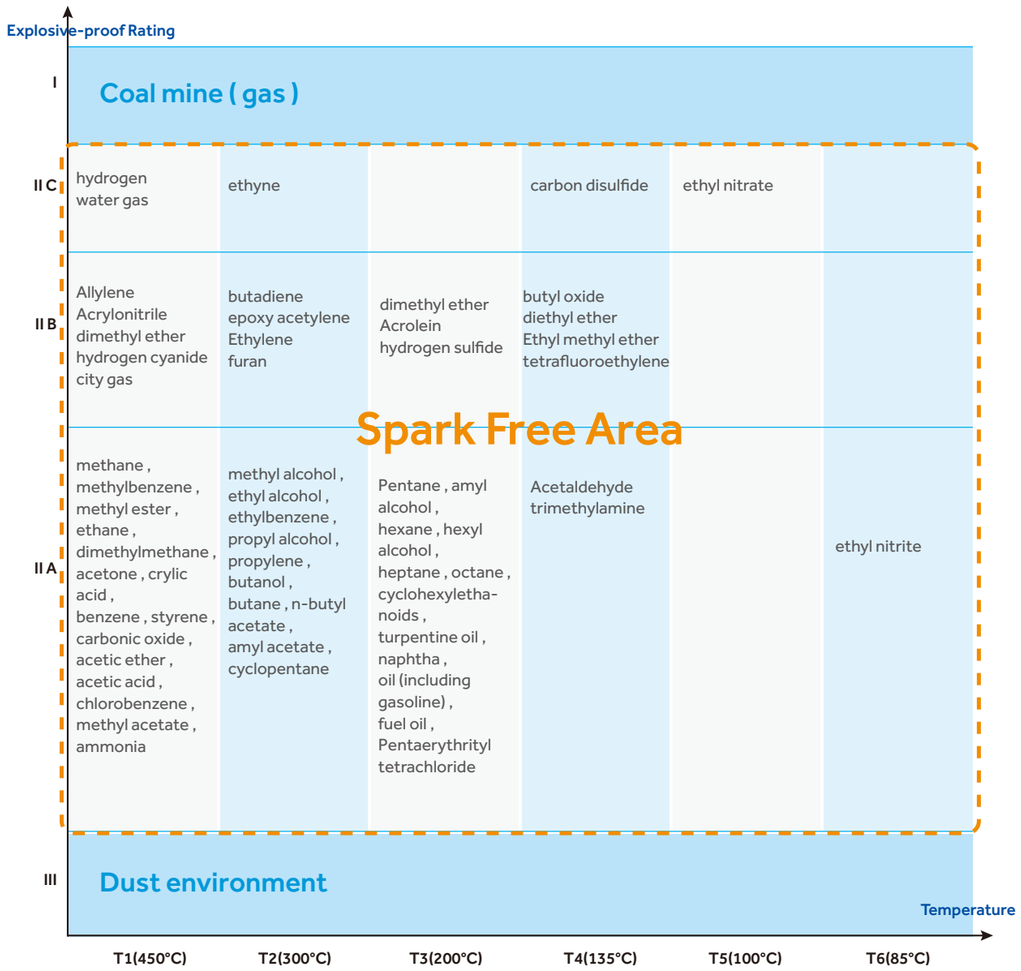
ATEX Certification Label

Explosion Proof Cabinet/Fan

Spark Free Refrigerator

Application range

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



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

Product Specifications

Model			HLR-118SF	HLR-310SF	HLR-118FL	HLR-310FL
Parameters						
Technical Data	Type		Under-Counter	Upright	Under-Counter	Upright
	Climate Class		N	N	N	N
	Cooling Type		Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
	Defrost Mode		Auto	Auto	Auto	Auto
	Refrigerant		R134a	R600a	R134a	R600a
	Sound level((dB(A))		30	40	30	40
Performance	Temperature Range(°C)		3~16°C adjustable	3~16°C adjustable	3~16°C adjustable	3~16°C adjustable
	Ambient Temperature(°C)		16~32	16~32	16~32	16~32
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED	LED
Electrical Data	Power Supply(V/HZ)		220~240/50	220~240/50	220~240/50	220~240/50
	Power(W)		140	210	140	210
	Electrical Current(A)		1.03	1.26	1.03	1.26
Dimension	Capacity(L/Cu.Ft)		118/4.2	310/10.9	118/4.2	310/10.9
	Net/Gross Weight(approx)	(kg)	44/49	72/83	44/49	72/83
		(lbs)	97/108	158.7/183	97/108	158.7/183
	Interior Dimension(W*D*H)	(mm)	515×415×630	560×500×1290	515×415×630	560×500×1290
		(in)	20.3×16.3×24.8	22.0×19.7×50.8	20.3×16.3×24.8	22.0×19.7×50.8
	Exterior Dimension(W*D*H)	(mm)	597×635×835	605×598×1840	597×635×835	605×598×1840
		(in)	23.5×25×32.9	23.8×23.6×73.6	23.5×25×32.9	23.8×23.6×73.6
	Packing Dimension(W*D*H)	(mm)	608×690×910	660×670×2020	608×690×910	660×670×2020
		(in)	26.8×27.2×35.8	26×26.4×79.5	26.8×27.2×35.8	26×26.4×79.5
	Container Load(20'/40'/40'H)		48/102/102	27/57/57	48/102/102	27/57/57
Functions	High/Low Temperature		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
Accessories	Caster		2	2	4	4
	Foot		2	2	2	2
	Shelves/Baskets		2/1	4/0	2/1	4/0
	Water tray		1	1	1	1
	Padlock Adapter Kit/Quantity		/	1	/	1
	Built-in Key Door Lock/Quantity		2	2	2	2
Others	Certification		CE ATEX	CE ATEX	CE ATEX	CE ATEX
	Interior Material/Colour		PS Plate/white	PS Plate/white	Antistatic PS Plate/black	Antistatic PS Plate/black

Laboratory Refrigerator

Laboratory Refrigerator

Typical installation

Laboratory refrigerators are used to store chemical and experiment reagents and consumables for institutional laboratories, research facilities, etc.

Product Advantages

Precise control of wide temperature range between 0°C and 19°C without freezing

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

High Efficiency HC Cooling Technology

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

Ergonomic Design

One-touch search for historic data

Historic temperature data is saved and can be checked with one key stroke.

High strength glass shelves

Tempered glass shelves holds 40 kg of products per shelve.

Low noise

Noise cancelling technology reduces the sound level to less than 40 dba, creating a much improved work environment.

Dual locks design with multiple alarm systems

A mortise lock is standard on the door. A padlock can be accommodated as well. Standard alarms include high and low temperature, door opening, and sensor errors.

Automatic door closing function

Cabinet Structure

Glass Shelve

Fan/Interior Light

Display Board

Laboratory Refrigerator

Product Specifications

Model			HLR-198F	HLR-310F
Parameters				
Technical Data	Type		Upright	Upright
	Climate Class		N	N
	Cooling Type		Forced air cooling	Forced air cooling
	Defrost Mode		Auto	Auto
	Refrigerant		R600a	R600a
	Sound level((dB(A))		37	40
Performance	Setting Temperature Range(°C)		3~16°C adjustable	3~16°C adjustable
	Ambient Temperature(°C)		16~32°C	16~32°C
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply(V/HZ)		220/50	220/50
	Power(W)		135	225
	Electrical Current(A)		0.93	1.5
Dimension	Capacity(L/Cu.Ft)		198/7.0	310/10.9
	Net/Gross Weight(approx)	(kg)	57/66	72/83
		(lbs)	97/108	158.7/183
	Interior Dimension(W*D*H)	(mm)	455×445×900	560×500×1290
		(in)	18.0×17.5×35.5	22.0×19.7×50.8
	Exterior Dimension(W*D*H)	(mm)	535×570×1530	605×598×1840
		(in)	21.1×22.5×60.3	23.8×23.6×73.6
	Packing Dimension(W*D*H)	(mm)	595×640×1660	660×670×1920
		(in)	23.4*25.2*65.4	26.0*26.4*75.6
	Container Load(20'/40'/40'H)		48/102/102	27/57/57
Functions	High/Low Temperature		Y	Y
	Sensor Error		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		4	4
	Foot		2	2
	Porthole		Y	Y
	Shelves		4	4
Other	Certification		CE	CE

Pharmacy Refrigerator

Pharmacy Refrigerator

The Haier pharmacy refrigerators are suitable for installation in drug stores, pharmaceutical companies, hospitals, epidemic prevention centers, and clinics.

Microprocessor control panel and digital display

Permanently lubricated condenser fan motor

Locks

Hermetically sealed compressor

Access port

Door handles

Dual-pane glass door design, convenient and aesthetic

Leveling leg and caster

HYC-1378

Pharmacy Refrigerator

Reliability and Key Features

- High efficiency specialty compressor with known field reliability
- Permanently lubricated cooling fan for safety and longevity
- Forced-air cooling with optimized air distribution system designed to achieve maximum temperature uniformity and stability
- Optimized refrigeration system design for more effective cooling and speedy recovery
- Temperature variation within ± 3°C
- Chamber temperature range 2°C~8°C
- Microprocessor control, digital display, and temperature adjustment with an increment of 0.1°C
- Large digital display screen
- Wide voltage tolerance suitable for unstable voltage supply
- Designed for ambient temperature 10~32°C with humidity below 85%

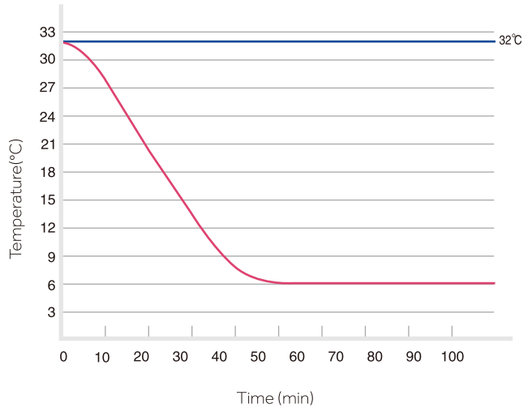
Safety

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

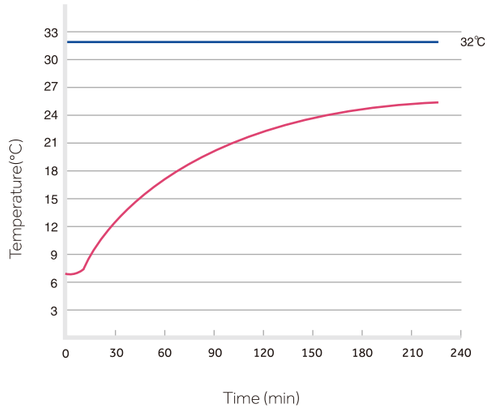
Ergonomic Design

- Optimized space utilization design with multi-level and adjustable shelf height to accommodate storage requirement of pharmaceutical products of various kinds
- Safety lock to prevent unauthorized access
- Caster design and leveling legs
- Interior light

Pull down test at 32°C ambient



Warm up test at 32°C ambient



Pharmacy Refrigerator

Newly improved Haier pharmacy refrigerators offer a better temperature profile and more user-friendly control features.

HYC-390

Pharmacy Refrigerator

Technical Advantages

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

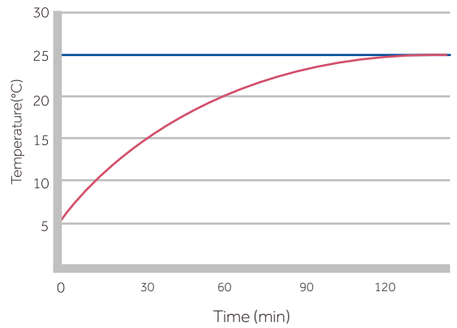
Ergonomic Design

- The temperature data of the newly improved storage management system is downloadable from the USB port
- Traceability of temperature data is easily maintained
- Heated double-pane glass door allows a clear display of stored products without condensation at 32°C and 85% relative humidity condition
- LED interior light saves energy and provides bright lighting for viewing
- Shelves with label holders meet demands of product archiving and retrieving

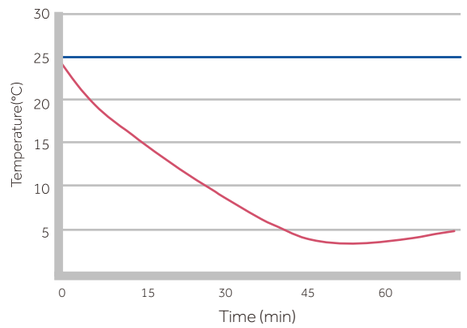
Safety

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

HYC-390 Warm up test at 25°C ambient



HYC-390 Pull down test at 25°C ambient



Under-Counter Pharmacy Refrigerator

Easy installation, constant temperature control

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

Under-Counter Pharmacy Refrigerator

HYC-118

HYC-118A

Reliability and Key Features

- High efficiency specialty compressor with known field reliability
- Permanently lubricated cooling fan for safety and longevity
- Forced-air cooling with optimized air distribution system designed to achieve maximum temperature uniformity and stability
- Optimized refrigeration system design for more effective cooling and speedy recovery
- Temperature variation within ±3°C
- Chamber temperature range 2°C ~8°C
- Microprocessor control, digital display, and temperature adjustment with an increment of 1 °C
- Designed for ambient temperature 10~32°C with humidity below 60%

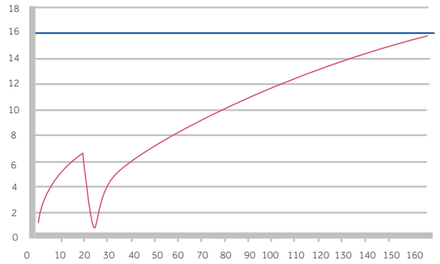
Safety

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

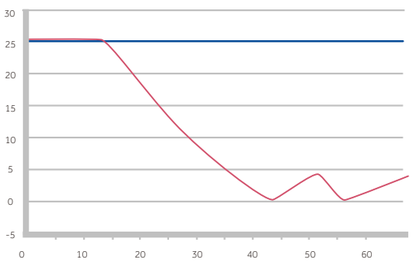
Ergonomic Design

- Interior LED light
- Safety lock to prevent unauthorized access

HYC-118 Warm up test at 25°C ambient



HYC-118 Pull down test at 25°C ambient



Pharmacy Refrigerator

Specification

	Model	HYC-68	HYC-68A	HYC-118	HYC-118A	HYC-260	HYC-360	HYC-290（basic）
Technical Data	Cabinet Type	Upright, solid door	Upright, glass door	Upright, solid door	Upright, glass door	Upright, single door	Upright, single door	Upright, single door
	Climate Class	N	N	N	N	N	N	N
	Cooling Type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
	Defrost Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto
	Refrigerant	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free
	Sound level(dB(A))	35	35	32	32	43	43	43
Performance	Temperature Range(℃)	2-8	2-8	2-8	2-8	2-8	2-8	2-8
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED	Fluorescent Light	Fluorescent Light	LED
Electrical Data	Power Supply(V/Hz)	220-240/50 / 115/60	220-240/50 / 115/60	220-240/50 / 115/60	220-240/50 / 115/60	220-240/50 / 208-230/60	220-240/50 / 208-230/60 / 115/60	208-230/50/60
	Power(W)	84 / 68	84 / 68	135 / 75	165 / 140	300 / 300	315 / 315 / 340	340
	Electrical Current(A)	0.65 / 1.1	0.65 / 1.1	1.03 / 1.11	1.16 / 1.46	2.1 / 2.1	2.2 / 2.2 / 4.5	2.2
Dimensions	Capacity(L/Cu.Ft)	68/2.4	68/2.4	118/4.2	118/4.2	260/9.2	360/12.7	290/10.2
	Net/Gross Weight(approx) kg	38/40	38/40	41/46	46/51	88/100	99/114	105/127
	Net/Gross Weight(approx) lbs	83.8/88.2	83.8/88.2	90.5/101.5	101.5/112.5	194.0/220.5	218.3/251.3	231.6/280.1
	Interior Dimensions (W*D*H) mm	415*385*505	415*385*505	515*415*630	515*415*630	550*460*1065	550*460*1340	530*555*1080
	Interior Dimensions (W*D*H) in	16.3*15.2*19.9	16.3*15.2*19.9	20.3*16.3*24.8	20.3*16.3*24.8	21.7*18.1*41.9	21.7*18.1*52.8	20.9*21.9*42.5
	Exterior Dimensions (W*D*H) mm	495*580*660	495*580*660	597*635*835	597*635*835	620*655*1720	620*655*1955	665*710*1665
	Exterior Dimensions (W*D*H) in	19.5*22.8*26.0	19.5*22.8*26.0	23.5*25.0*32.9	23.5*25.0*32.9	24.4*25.8*67.7	24.4*25.8*77.0	26.2*28.0*65.6
	PackingDimensions (W*D*H) mm	540*640*710	540*640*710	680*690*910	680*690*910	695*720*1795	695*720*2080	690*790*1810
	PackingDimensions (W*D*H) in	21.3*25.2*28.0	21.3*25.2*28.0	26.8*27.2*35.8	26.8*27.2*35.8	27.6*28.1*71.3	27.6*28.1*81.9	27.1*31.0*71.1
	Container load (20'/40'/40'H)	108/228/228	108/228/228	48/102/102	48/102/102	24/48/48	24/48/48	21/42/42
Functions	High/Low Temperature	Y	Y	Y	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y	N/A	N/A	Y
	Power Failure	Y	Y	Y	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y	Y	Y	Y
Accessories	Caster	N/A	N/A	Y	Y	Y	Y	Y
	Foot	Y	Y	Y	Y	Y	Y	Y
	Porthole	Y	Y	Y	Y	Y	Y	Y
	Shelves/Drawers	2/1	2/1	3/1	3/1	4/-	5/-	5/-
	USB Interface	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Temperature Recorder	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Others	Certification	CE,UL	CE,UL	CE,UL	CE,UL	CE	CE	CE

Pharmacy Refrigerator

	Model	HYC-390（basic）	HYC-290	HYC-390	HYC-390F	HYC-610	HYC-940	HYC-940F	HYC-1378
Technical Data	Cabinet Type	Upright, single door	Upright, single door	Upright, single door	Upright, single door	Upright, single door	Upright, double glass door	Upright, double solid door	Upright, double door
	Climate Class	N	N	N	N	ST	N	N	N
	Cooling Type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
	Defrost Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
	Refrigerant	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free
	Sound level(dB(A))	43	43	43	43	43	45	45	45 / 45 / 48
Performance	Temperature Range(℃)	2-8	2-8	2-8	2-8	2-8	2-8	2-8	2-8
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED	LED	LED	LED	LED
Electrical Data	Power Supply(V/Hz)	208-230/50/60	220-240/50/60 / 115/60	220-240/50/60 / 115/60	220-240/50/60	220-240 /50 / 208-230 /60 / 115/60	220-240 /50 / 208-230 /60 / 115/60	220-240/50	220-240 /50 / 208-230 /60 / 115/60
	Power(W)	380	340 / 460	380 / 500	300	550 / 550 / 560	850 / 770 / 850	600	800 / 800 / 950
	Electrical Current(A)	2.4	2.2 / 5.0	2.4 / 5.5	2.4	3.5 / 3.5 / 7.5	4.5 / 4.5 / 11	3	4.2 / 4.2 / 11
Dimensions	Capacity(L/Cu.Ft)	390/13.8	290/10.2	390/13.8	390/13.8	610/21.6	890/31.4	890/31.4	1378/48.7
	Net/Gross Weight(approx) kg	116/139	105/127	116/139	106/129	204/227	227/279	207/259	310/360
	Net/Gross Weight(approx) lbs	255.8/306.6	231.6/280.1	255.8/306.6	233.8/284.5	449.7/500.4	500.4/615.1	456.4/571.1	683.4/793.7
	Interior Dimensions (W*D*H) mm	530*555*1380	530*555*1080	530*555*1380	530*555*1380	680*640*1400	1030*590*1425	1030*590*1425	1320*700*1500
	Interior Dimensions (W*D*H) in	20.9*21.9*54.3	20.9*21.9*42.5	20.9*21.9*54.3	20.9*21.9*54.3	26.8*25.2*55.1	40.6*23.2*56.1	40.6*23.2*56.1	52.0*27.6*59.1
	Exterior Dimensions (W*D*H) mm	665*710*1965	665*710*1665	665*710*1965	665*710*1965	780*840*1945	1130*755*1980	1130*755*1980	1440*925*1980
	Exterior Dimensions (W*D*H) in	26.2*28.0*77.4	26.2*28.0*65.6	26.2*28.0*77.4	26.2*28.0*77.4	30.7*33.1*76.6	44.5*29.7*78.0	44.5*29.7*78.0	56.7*36.4*78.0
	PackingDimensions (W*D*H) mm	690*790*2110	690*790*1810	690*790*2110	690*790*2110	865*945*2090	1250*850*2130	1250*850*2130	1570*1010*2120
	PackingDimensions (W*D*H) in	27.1*31.0*82.9	27.1*31.0*71.1	27.1*31.0*82.9	27.1*31.0*82.9	34.1*37.2*82.3	49.2*33.5*83.9	49.2*33.5*83.9	61.8*39.8*83.5
	Container load (20'/40'/40'H)	21/42/42	21/42/42	21/42/42	21/42/42	12/26/26	8/18/18	8/18/18	6/12/12
Functions	High/Low Temperature	Y	Y	Y	Y	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y	Y	Y	Y	Y
	Foot	Y	Y	Y	Y	Y	Y	Y	Y
	Porthole	Y	Y	Y	Y	Y	Y	Y	Y
	Shelves/Drawers	7/-	5/-	7/-	7/-	6/-	12/-	12/-	12/-
	USB Interface	N/A	Y	Y	Y	Optional	N/A	N/A	Y
	Temperature Recorder	N/A	N/A	N/A	N/A	Optional	N/A	N/A	N/A
Others	Certification	CE	CE	CE	CE	CE / UL	CE / UL	CE	CE / UL

Product appearance and specifications are subject to change without notice

Combined Refrigerator and Freezer

HYCD-282

HYCD-282A

Combined Refrigerator and Freezer

Refrigerator and Freezer Combination Unit

Excellent Performance

- Refrigerator compartment temperature range: 2°C to 8°C
- Adjustable freezer compartment temperature range: -20°C to -40°C

Separately Controlled Refrigerator and Freezer Combination Unit

- USB port for data download
- Capable of recording temperature data for up to one month automatically
- Independent display for refrigerator section and freezer section
- Optional remote alarm and monitor via Internet
- Drawers with divided compartments
- Shelves with divided sections
- Multiple alarms to detect malfunctions
- Multi-malfunction alarms, precautionary alarm

Specification

Model			HYCD-282	HYCD-282A	
Technical Data	Cabinet Type		Upright	Upright	
	Climate Class		4	4	
	Cooling Type		Refrigertor:Forced air cooling Freezer: Direct cooling	Refrigertor:Forced air cooling Freezer: Direct cooling	
	Defrost Mode		Refrigerator： Auto Freezer: Manual	Refrigerator： Auto Freezer: Manual	
	Refrigerant		CFC-Free	CFC-Free	
	Sound level(dB(A))		43	43	
Performance	Cooling performance(°C)		Freezer:-40	Freezer:-40	
	Temperature Range (°C)		2~8/-20~-40	2~8/-20~-40	
Control	Controller		Microprocessor	Microprocessor	
	Display		LED	LED	
Electrical Data	Power Supply(V/Hz)		220~240/50	220~240/50	208~230/60
	Power(W)		400	400	400
	Electrical Current(A)		2.8	2.8	2.8
Dimensions	Capacity(L/Cu.Ft)		Refrigerator:185/6.5 Freezer: 97/3.4	Refrigerator:185/6.5 Freezer: 97/3.4	
	Net/Gross Weight(approx)	kg	145/160	145/160	
		lbs	320.0/352.7	320.0/352.7	
	Interior Dimensions(W*D*H)	mm	Refrigerator: 605*510*720 Freezer: 515*465*440	Refrigerator:605*510*720 Freezer: 515*465*440	
		in	Refrigerator: 23.8*20.0*28.3 Freezer: 20.3*18.3*17.3	Refrigerator: 23.8*20.0*28.3 Freezer: 20.3*18.3*17.3	
	Exterior Dimensions(W*D*H)	mm	736*660*1810	736*660*1810	
		in	29.0*26.0*71.3	29.0*26.0*71.3	
	Packing Dimensions(W*D*H)	mm	775*720*1930	775*720*1930	
		in	30.5*28.3*76	30.5*28.3*76	
	Container load (20'/40'/40'H)		21/45/45	21/45/45	
Functions	High/Low Temperature		Y	Y	
	Remote Alarm		Y	Y	
	Power Failure		Y	Y	
	Sensor Error		Y	Y	
	Low Battery		Y	Y	
	High Ambient Temp		Y	Y	
Accessories	Caster		Y	Y	
	Foot		Y	Y	
	Porthole		Y	Y	
	Shelves/Drawers		Refrigerator： 3/1 Freezer： 0/2	Refrigerator： 3/1 Freezer： 0/2	
	USB Interface		Y	Y	
Others	Certification		CE	CE	/

Product appearance and specifications are subject to change without notice

Blood Bank Refrigerator

Blood Bank Refrigerator

Haier blood bank refrigerator is specially designed to store whole blood and blood derivatives. These refrigerators can also be used to store pharmacy and biological materials in hospitals and laboratories.

HXC-358B

Blood Bank Refrigerator

Haier Blood Bank Refrigerators (BBR) are designed and built to meet the following requirements:

- AABB (American Association of Blood Banks)
- DIN 58371 (Germany, "Blutkonserven-Kühlgeräte"/Blood Refrigerators)
- BIS 4376-1: 1991 (UK, "Electrically operated blood storage refrigerators

Reliability

- Microprocessor controlled forced-air cooling system with heat compensation system
- Digital temperature display for upper and lower sections in chamber with 0.1 °C resolution

Key Features

- Consistent cabinet temperature 2-6°C
- High-tech integrated sensors to display and control temperature
- Standard temperature recorder (Optional for HXC-158)
- Auto-defrost to remove moisture on cooling surface
- Large digital display for ease of observation
- Basket or drawer styles for managing stored products

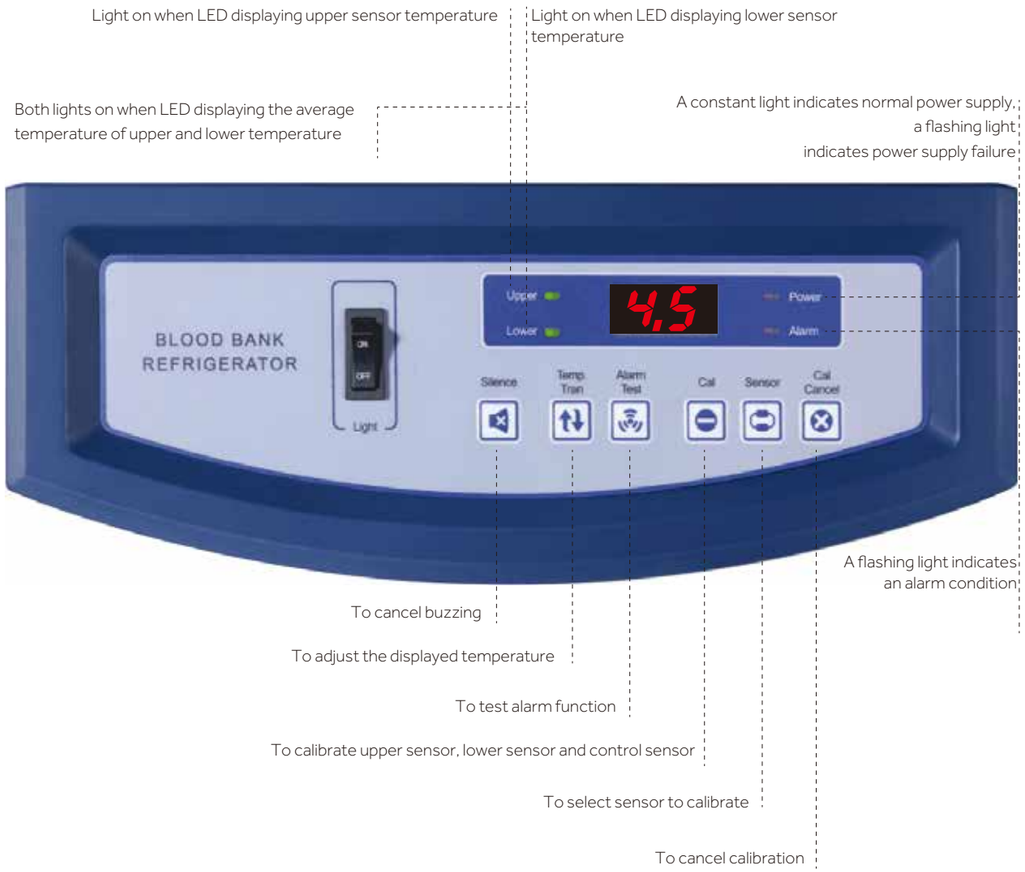
Safety

- Dual displays of operational parameter (temperature recorder display)
- Built-in backup battery to display temperature and to operate audible and visual alarm systems for up to 48 hours without ac power
- Buzzer and flashing light alarms
- NC/NO Terminals for remote alarm connections
- Five alarm conditions: High /low temperature, power failure, sensor error, door ajar, low voltage in backup battery

Ergonomic Design

- Safety lock to prevent unauthorized access
- Storage space designed for easy sorting of a variety of blood products
- Caster design and interior light
- Optional baskets or stainless steel drawers

Blood Bank Refrigerator

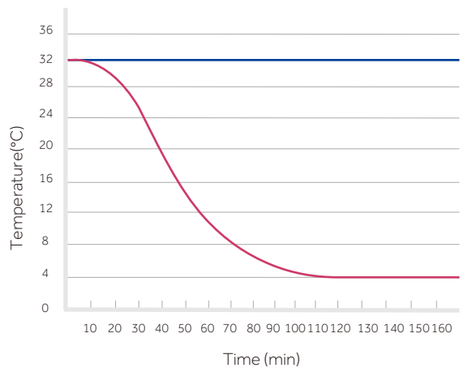


Alarm	Alarm Triggering Condition
High Temperature	Temperature reaches the warm alarm limit
Low Temperature	Temperature reaches the low alarm limit
Power Failure	Equipment loses power
Probe Failure	1.Main cabinet temperature control sensor fails 2.Condenser sensor fails 3.Ambient sensor fails 4.Heat exchanger sensor fails
Low Battery	Battery capacity runs low or battery switch is not turned on
Door Ajar	Door opening time exceeds 600 seconds

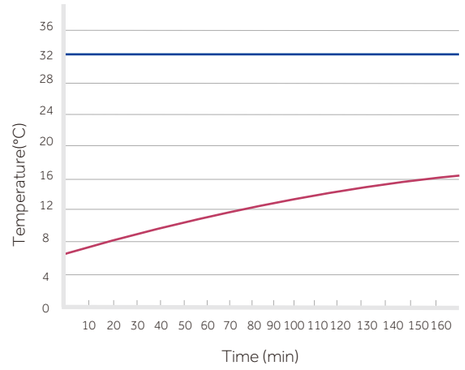
Blood Bank Refrigerator

Standard drawers can be optionally fitted with adjustable dividers to ensure stored products neatly organized.

HXC-608 Pull down test at 32°C ambient



HXC-608 Warm up test at 32°C ambient



Blood Bank Refrigerator

HXC-1308

Ergonomic Design

- Auto-closing door
- It provides a clear view of stored items through the large glass windows
- Two access ports for ease of testing
- Built-in 7-day circular chart recorder， standard USB port
- Bright, energy-efficient LED interior lighting
- Environmentally friendly CFC-free refrigerant
- "One lock one key" to safeguard valuable contents

Blood Bank Refrigerator

Application

- HXC-1308(B) is a large capacity blood refrigerator designed for storage of whole blood products, and biological products. It is frequently installed in blood banks, hospitals and disease prevention centers

Advantages

- More Stable: The temperature range is 2-6℃
- Safety: Anti-low/high temperature function
- Double-pane electric heated glass door
- Multilayer adjustable shelves
- Baskets or optional stainless steel drawers
- Each shelf can be labelled
- Ensures the safety in daily use

HXC-1308B

Function

- Storage of large blood bags
- Each blood basket holds twelves 450 ml blood bags. Each drawer can hold sixty 450 ml blood bags
- HXB-1308 unit's capacity is five hundreds and seventy six (576) 450 ml blood bags. HXC-1308B can hold seven hundreds twenty 450 ml blood bags.
- Microprocessor system works with an optimized refrigeration system and controls the temperature within 2℃ to 6 ℃ and a quick recovery after a door opening
- Redundant mechanical control system allows the unit to operate and maintain proper temperature should there be a malfunction on the electronic control system
- Defrosting function is performed automatically with minimal impact to temperature
- Perfect alarm system: High /Low temperature alarm, door open alarm, sensor error alarm, remote alarm under audible (buzzer) and visible (light flashing) alarm
- Backup battery supports the digital display and alarm system for up to 48 hours

HXC-1308B

Blood Bank Refrigerator

Specification

	Model	HXC-158	HXC-358	HXC-608	HXC-1308
Technical Data	Type	Basket-Type			
	Climate Class	ST	ST	ST	N
	Cooling Type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
	Defrost Mode	Auto	Auto	Auto	Auto
	Refrigerant	CFC-Free	CFC-Free	CFC-Free	CFC-Free
	Sound level(dB(A))	42	43	43	45
Performance	Temperature Range(°C)	4±1	4±1	4±1	4±1.5
	Ambient Temperature (°C)	10-38	10-38	10-38	16-32
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED
Electrical Data	Power Supply(V/Hz)	220~240/50/60	220~240/50/60	220~240/50/60 / 115/60	220~240/50
	Power(W)	350	460	490 / 560	850
	Electrical Current(A)	2.6	3	3.5 / 7.5	4.2
Dimensions	Capacity(L/Cu.Ft)	158/5.6	358/12.7	608/21.5	1308/46.2
	Blood Storage Capacity (450ml blood bags)	84	200	300	576
	Net/Gross Weight(approx) (kg)	107/120	158/174	204/227	310/360
	Net/Gross Weight(approx) (lbs)	235.9/264.6	348.3/383.6	449.7/500.4	683.4/793.7
	Interior Dimensions (W*D*H) (mm)	460*370*950	620*490*1160	680*640*1400	1320*700*1500
	Interior Dimensions (W*D*H) (in)	18.1*14.6*37.4	24.4*19.3*45.7	26.8*25.2*55.1	52.0*27.6*59.1
	Exterior Dimensions (W*D*H) (mm)	560*570*1530	720*690*1730	780*840*1945	1440*925*1980
	Exterior Dimensions (W*D*H) (in)	22.0*22.4*60.2	28.3*27.2*68.1	30.7*33.1*76.6	56.7*36.4*78.0
	Packing Dimensions (W*D*H) (mm)	645*675*1680	795*805*1870	865*945*2090	1570*1010*2120
	Packing Dimensions (W*D*H) (in)	25.4*26.6*66.1	31.3*31.7*73.6	34.0*37.2*82.3	61.8*39.8*83.5
	Container load (20'/40'/40'H)	27/54/54	14/30/30	12/26/26	6/12/12
Functions	High/Low Temperature	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y
Accessories	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Porthole	Y	Y	Y	Y
	Shelves/Baskets	4/4	5/20	6/24	12/48
	Drawers/Inner doors	-/2	-/3	-/3	-/6
	USB Interface	Optional	Optional	Optional	Y
	Temperature Recorder	Optional	Y	Y	Y
Others	Certification	CE	CE	CE /	CE

Blood Bank Refrigerator

Model	HXC-158B	HXC-358B	HXC-608B	HXC-1308B
Type	Drawer-Type			
Climate Class	ST	ST	ST	N
Cooling Type	Forced air cooling	Forced air cooling	Forced air cooling	Forced air cooling
Defrost Mode	Auto	Auto	Auto	Auto
Refrigerant	CFC-Free	CFC-Free	CFC-Free	CFC-Free
Sound level(dB(A))	42	43	43	45
Temperature Range(°C)	4±1	4±1	4±1	4±1.5
Ambient Temperature (°C)	10-38	10-38	10-38	16-32
Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
Display	LED	LED	LED	LED
Power Supply(V/Hz)	220~240/50/60	220~240/50/60	220~240/50/60	220~240/50
Power(W)	350	460	490	850
Electrical Current(A)	2.6	3	3.5	4.2
Capacity(L/Cu.Ft)	158/5.6	358/12.7	608/21.5	1308/46.2
Blood Storage Capacity (450ml blood bags)	84	200	360	720
Net/Gross Weight(approx) (kg)	113/126	165/181	211/234	335/385
Net/Gross Weight(approx) (lbs)	249.1/277.8	363.8/399.0	465.2/515.9	738.5/848.8
Interior Dimensions (W*D*H) (mm)	460*370*950	620*490*1160	680*640*1400	1320*700*1500
Interior Dimensions (W*D*H) (in)	18.1*14.6*37.4	24.4*19.3*45.7	26.8*25.2*55.1	52.0*27.6*59.1
Exterior Dimensions (W*D*H) (mm)	560*570*1530	720*690*1730	780*840*1945	1440*925*1980
Exterior Dimensions (W*D*H) (in)	22.0*22.4*60.2	28.3*27.2*68.1	30.7*33.1*76.6	56.7*36.4*78.0
Packing Dimensions (W*D*H) (mm)	645*675*1680	795*805*1870	865*945*2090	1570*1010*2120
Packing Dimensions (W*D*H) (in)	25.4*26.6*66.1	31.3*31.7*73.6	34.0*37.2*82.3	61.8*39.8*83.5
Container load (20'/40'/40'H)	27/54/54	14/30/30	12/26/26	6/12/12
High/Low Temperature	Y	Y	Y	Y
Power Failure	Y	Y	Y	Y
Sensor Error	Y	Y	Y	Y
Low Battery	Y	Y	Y	Y
Door Ajar	Y	Y	Y	Y
Remote Alarm	Y	Y	Y	Y
Caster	Y	Y	Y	Y
Foot	Y	Y	Y	Y
Porthole	Y	Y	Y	Y
Shelves/Baskets	–	–	–	–
Drawers/Inner doors	4/-	5/-	6/-	12/-
USB Interface	Optional	Optional	Optional	Y
Temperature Recorder	Y	Y	Y	Y
Certification	CE	CE	CE	CE

Product appearance and specifications are subject to change without notice

Vaccine Storage Solution

Solar Direct Drive Combined Refrigerator/Freezer

WHO Approved

Display panel

Lock catch designed to match padlock

HTCD-160

Handgrip

Storage Security

- The internal temperature of the cooling chamber is not lower than 0°C due to its anti-freeze function.
- Under ambient temperature of 43 degrees, the inner box temperature will be no more than 8°C after power outage for more than 121 hours and no more than 10°C after power outage for more than 160 hours, so as to guarantee safe storage of vaccine.
- The freezing chamber can freeze 2.08kg of ice every day, with storage of 10.68kg in total.
- Solar energy temperature display, clear temperature in the inner box.
- Lock catch designed to match padlock
- Cooling chamber meet the A level WHO requirements of anti-freezing protection.

Temperature control

- Microprocessor Control; guarantee temperature precision.

Ergonomic Design

- Equipped with USB charging socket, for charging the mobile phone, etc.
- Eliminate storage battery and only provide solar energy power, which is green and friendly environment.
- There is illumination on temperature display screen, it can display the inner box temperature even though it is powered off, which is convenient for administration.
- The refrigerating chamber and freezing chamber both have the separate refrigerating systems; the two independent refrigerating systems ensure safety of the vaccine storage.
- Sensor error alarm.
- Low noise.

Solar Direct Drive Combined Refrigerator/Freezer

WHO Approved

Model			HTCD-160
Technical Data	Cabinet Type		Upright
	Ambient Temperature(°C)		5~43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Sound level(dB(A))		38
Performance	Temperature Range(°C)		Freezer ≤-10 Refrigerator: 2~8
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power Supply(V)		24
	Maximal Current(A)		9
	Energy Consumption: Stable Running(KWh/24h)		0.86
	Energy Consumption: Cool Down Test(KWh/24h)		0.86
	Holdover Time at 43°C		160hrs8mins
	Autonomy Time		121hrs27mins
	At a Solar Radiation Reference Period of		3.5kwh/m²/day
	Voltage of Solar Panel		24V
	Power of Solar Panel		255W*3
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		100/3.5
	Gross Volume(L/Cu.Ft)		Refrigerator: 120/4.2 Freezer: 40/1.4
	Net/Gross Weight(approx)	kg	160/186
		lbs	352.7/410.1
	Interior Dimensions(W*D*H)	mm	Cooling Chamber: 545*500*530 Freezer Chamber: 560*520*150
		in	Cooling Chamber: 21.5*19.7*20.9 Freezer Chamber: 22.0*20.5*5.9
	Exterior Dimensions(W*D*H)	mm	865*825*1695
		in	34.1*32.5*66.7
	Packing Dimensions(W*D*H)	mm	960*890*1860
		in	37.8*35.0*73.2
	Solar Panel(L*W*D)	mm	1640*990*35
		in	64.6*39.0*1.4
	Container Load(20'/40'/40'H)		12/26/26
Alarm	High/Low Temperature		N
	Sensor Error		Y
	Low Battery		-
Accessories	Baskets		/
	Shelves		2(Refrigerator Room)
Others	Certification		CE/WHO/PQS
	Data Logger		Y
	Freezer Protection Level		A
	Waterpack Storage Capacity(kg)		10.68
	Waterpack Freezing Capacity(kg/24h)		2.08

Product appearance and specifications are subject to change without notice

Solar Direct Drive Combined Refrigerator/Freezer

WHO Approved

The refrigerator with freezer combination, this product can be used to store vaccine, reagent and freeze ice pack. Applicable to the sunny and power shortage remote area.

Solar energy display panel

HTCD-90

Product features

- The refrigerating chamber and freezing chamber both have the separate refrigerating systems; the two independent refrigerating systems ensure safety of the vaccine storage
- Solar direct drive, green and environment-friendly
- Microprocessor control, solar energy display panel for showing refrigerator and freezer interior temperature, refrigerator temperature range is 2~8°C, freezer temperature is less than -10°C
- Cooling chamber with patented technology for keeping interior temperature, holding time is longer when power off
- Cooling chamber meet the A level WHO requirements of anti-freezing protection
- Patented technology, better temperature uniformity
- Wide temperature range, working normally at 5-43°C ambient

Ergonomic design

- Safety lock for unauthorized access control
- Equipped with USB charging socket, for charging the mobile phone, etc
- Equipped with storage basket, easy-reach retrieval of sample
- Low noise
- Aluminum chamber interior, corrosion-proof and ease to clean
- Equipped with handles on both sides of the cabinet, easy to move

Solar Direct Drive Combined Refrigerator/Freezer

WHO Approved

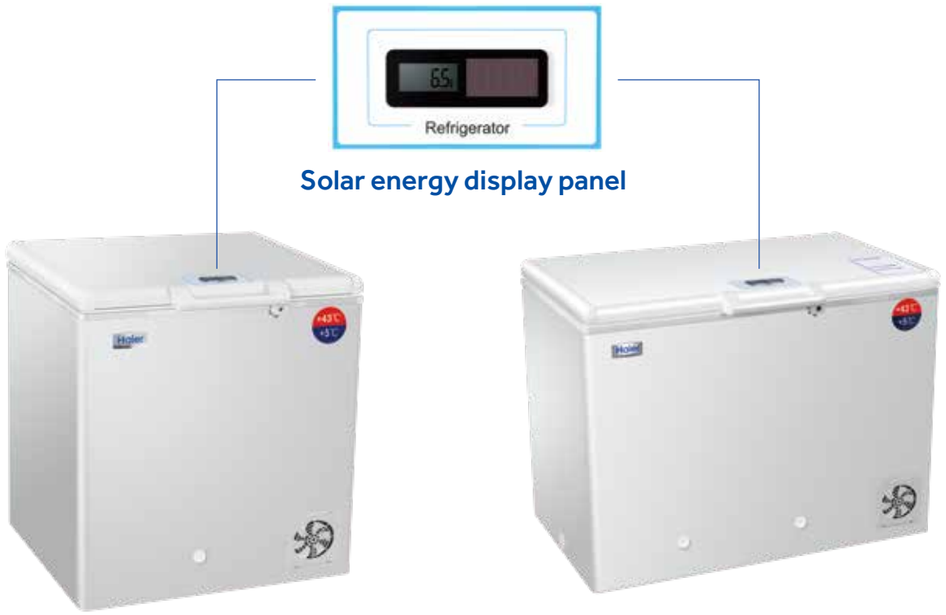
Model			HTCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature(°C)		5~43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Sound level(dB(A))		<38
Performance	Temperature Range(°C)		Freezer ≤-10 Refrigerator: 2~8
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power Supply(V)		24
	Maximal Current(A)		7
	Energy Consumption: Stable Running(KWh/24h)		0.86
	Energy Consumption: Cool Down Test(KWh/24h)		0.81
	Holdover Time at 43°C		137hrs 47mins
	Autonomy Time		114hrs 56mins
	At a Solar Radiation Reference Period of		3.5kwh/m²/day
	Voltage of Solar Panel		24V
	Power of Solar Panel		180W *4
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		37.5/1.3
	Gross Volume(L/Cu.Ft)		Refrigerator: 58/2.1 Freezer: 32 /1.1
	Net/Gross Weight(approx)	kg	83/108
		lbs	183.0/238.1
	Interior Dimensions(W*D*H)	mm	Cooling Chamber: 270*345*555 Freezer Chamber: 170*370*575
		in	Cooling Chamber: 10.6*13.6*21.9 Freezer Chamber: 6.7*14.6*22.6
	Exterior Dimensions(W*D*H)	mm	1128*654*875
		in	44.4*25.7*34.4
	Packing Dimensions(W*D*H)	mm	1175*775*1080
		in	46.3*30.5*42.5
	Solar Panel(L*W*D)	mm	1335*990*40
		in	52.6*39.0*1.6
	Container Load(20'/40'/40'H)		30/60/60
Alarm	High/Low Temperature		N
	Sensor Error		Y
	Low Battery		-
Accessories	Baskets		4
	Shelves		-
Others	Certification		CE/WHO/PQS
	Data Logger		Y
	Freezer Protection Level		A
	Waterpack Storage Capacity(kg)		12
	Waterpack Freezing Capacity(kg/24h)		2.08

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Refrigerator

WHO Approved

This product is designed to store vaccine, reagents, etc. Applicable to the sunny and power shortage remote area.



HTC-40 HTC-110

Product features

- Solar direct drive, green and environment-friendly
- Microprocessor control, solar energy display panel for showing interior temperature
- Patented technology for keeping interior temperature, holding time is longer when power off
- Cooling chamber meet the A level WHO requirements of anti-freezing protection
- Patented technology, better temperature uniformity
- Inner door offer additional temperature protection
- Wide temperature range, working normally at 5-43°C ambient

Ergonomic design

- Safety lock for unauthorized access control
- Equipped with USB charging socket, for charging the mobile phone, etc.
- Equipped with storage basket, easy-reach retrieval of samples
- Low noise
- Aluminum chamber interior, corrosion-proof and ease to clean
- Equipped with handles on both sides of the cabinet, easy to move

Solar Direct Drive Vaccine Refrigerator

WHO Approved

Model			HTC-40	HTC-110
Technical Data	Cabinet Type		Chest	Chest
	Ambient Temperature(°C)		5~43	5~43
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		/	/
	Refrigerant		CFC-Free	CFC-Free
	Sound level(dB(A))		<30	<30
Performance	Temperature Range(°C)		2~8	2~8
Control	Controller		Microprocessor	Microprocessor
	Display		Solar LED Temperature Display	Solar LED Temperature Display
Electrical Data	Power Supply(V)		24	24
	Maximal Current(A)		5	5
	Energy Consumption: Stable Running(KWh/24h)		0.69	0.58
	Energy Consumption: Cool Down Test(KWh/24h)		0.71	0.62
	Holdover Time at 43°C		122hrs18mins	106hrs17mins
	Autonomy Time		117hrs	96hrs
	At a Solar Radiation Reference Period of		3.5kwh/m²/day	3.5kwh/m²/day
	Voltage of Solar Panel		24V	24V
	Power of Solar Panel		180W *2	180W *2
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		22.5/0.8	59/2.08
	Gross Volume(L/Cu.Ft)		40/1.4	110/3.88
	Net/Gross Weight(approx)	kg	55/75	69/94
		lbs	121.3/165.0	152.0/203.0
	Interior Dimensions(W*D*H)	mm	200*345*575	545*345*575
		in	7.9*13.6*22.6	21.5*13.6*22.6
	Exterior Dimensions(W*D*H)	mm	788*654*875	1128*654*875
		in	31.0*25.7*34.4	44.4*25.7*34.4
	Packing Dimensions(W*D*H)	mm	835*775*1080	1175*775*1080
		in	32.9*30.5*42.5	46.3*30.5*42.5
	Solar Panel(L*W*D)	mm	1335*990*40	1335*990*40
		in	52.6*39.0*1.6	52.6*39.0*1.6
	Container Load(20'/40'/40'H)		36/78/78	30/60/60
Alarm	High/Low Temperature		N	N
	Sensor Error		Y	Y
	Low Battery		-	-
Accessories	Baskets		2	4
	Shelves		-	-
Others	Certification		CE/WHO/PQS	CE/WHO/PQS
	Data Logger		Y	Y
	Freezer Protection Level		A	A
	Freezer Gross Volume (L/Cu.Ft)		-	-
	Waterpack Storage Capacity(kg)		-	-
	Waterpack Freezing Capacity(kg/24h)		-	-

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Freezer

WHO Approved

This product can be used to freeze ice pack, applicable to the sunny and power shortage remote area.

Solar energy display panel

HTD-40

Product features

- Solar direct drive, green and environment-friendly
- Solar energy display panel for showing interior temperature, the interior temp less than -10℃
- High-performance refrigeration
- Wide temperature range, working normally less than 43℃ ambient
- Heavy insulation layer, high-efficiency of heat insulation

Ergonomic design

- Safety lock for unauthorized access control
- Equipped with storage basket, easy-reach retrieval of samples
- Low noise
- Aluminum chamber interior, corrosion-proof and ease to clean
- Equipped with USB charging socket, for charging the mobile phone, etc

Solar Direct Drive Vaccine Freezer

WHO Approved

Model			HTD-40
Technical Data	Cabinet Type		Chest
	Ambient Temperature(℃)		≤43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Sound level(dB(A))		<30
Performance	Temperature Range(℃)		<-10
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power Supply(V)		24
	Maximal Current(A)		5
	Energy Consumption: Stable Running(KWh/24h)		0.46
	Energy Consumption: Cool Down Test(KWh/24h)		0.50
	Holdover Time at 43°C		-
	Autonomy Time		120hrs
	At a Solar Radiation Reference Period of		3.5kwh/m²/day
	Voltage of Solar Panel		24V
	Power of Solar Panel		180W *2
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		-
	Gross Volume(L/Cu.Ft)		48/1.7
	Net/Gross Weight(approx)	kg	65/85
		lbs	143.0/187.4
	Interior Dimensions(W*D*H)	mm	265*370*575
		in	10.4*14.6*22.6
	Exterior Dimensions(W*D*H)	mm	788*654*875
		in	31.0*25.7*34.4
	Packing Dimensions(W*D*H)	mm	835*775*1080
		in	32.9*30.5*42.5
	Solar Panel(L*W*D)	mm	1335*990*40
		in	52.6*39.0*1.6
	Container Load(20'/40'/40'H)		36/78/78
Alarm	High/Low Temperature		N
	Sensor Error		Y
	Low Battery		-
Accessories	Baskets		-
	Shelves		-
Others	Certification		CE/WHO/PQS
	Data Logger		-
	Freezer Protection Level		/
	Waterpack Storage Capacity(kg)		20
	Waterpack Freezing Capacity(kg/24h)		2.4

Product appearance and specifications are subject to change without notice

Haier Biomedical

Ice-Lined Refrigerator

WHO Approved

Refrigeration System

- Optimized refrigeration system design
- special structure design to maintain 2°C to 8°C for more than 30 hours at 43°C ambient
- CFC-free high density foam insulation
- Complied with WHO/UNICEF standards **Grade A** freeze protection to make the vaccine never frozen in the compartment
- Wide ambient temperature range, 5-43°C

Temperature Control

- Digital Solar driven temperature display
- Inner temperature range is 2°C to 8°C

Ergonomic Design

- Door lock for storage safety
- Indicator light to show run or stop of the compressors
- Independent temperature data logger,monitoring,recording,and managing
- Wide voltage design， 172~264 volts

Solar energy display panel

HBC-80

Ice-Lined Refrigerator

WHO Approved

Model			HBC-80	HBC-150	HBC-260
Technical Data	Cabinet Type		Chest	Chest	Chest
	Ambient Temperature(°C)		5~43	5~43	5~43
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling
	Refrigerant		CFC-Free	CFC-Free	CFC-Free
	Sound level(dB(A))		40	40	40
Performance	Temperature Range(°C)		2~8	2~8	2~8
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		Solar LED Temperature Display	Solar LED Temperature Display	Solar LED Temperature Display
Electrical Data	Power Supply(V/Hz)		220~240/50	220~240/50	220~240/50
	Power(W)		105	110	230
	Electrical Current(A)		0.9	1	1.8
	Power Consumption:Stable Running(KWh/24h)		0.57	0.53	1.62
	Power Consumption:Cool Down Test(KWh/24h)		0.63	0.61	1.47
	Holdover Time at 43°C		59hrs51mins	55hrs19mins	More than30hrs
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		61/2.2	122/4.3	211/7.5
	Gross Volume(L/Cu.Ft)		80/2.8	150/5.3	260/9.2
	Net/Gross Weight(approx)	kg	73/85	85/97	132/150
	Interior Dimensions(W*D*H)	mm	480*345*570	825*345*575	1350*345*575
		in	18.9*13.6*22.4	32.5*13.6*22.6	53.1*13.6*22.6
	Exterior Dimensions(W*D*H)	mm	788*654*875	1128*654*875	1650*654*875
		in	31*25.7*34.4	44.4*25.7*34.4	65*25.7*34.4
	Packing Dimensions(W*D*H)	Paper	Paper	Paper	Paper
		mm	835*775*1080	1175*775*1080	1705*770*1080
		in	32.9*30.5*42.5	46.3*30.5*42.5	67.1*30.3*42.5
Functions	Container Load (20'/40'/40'H)		36/78/78	30/60/60	18/42/42
	High/Low Temperature		Y	Y	Y
	Power Failure		Y	Y	Y
Accessories	Sensor Error		Y	Y	Y
	Foot		N	N	N
Others	Baskets		3	6	11
	Certification		CE,WHO/PQS	CE,WHO/PQS	CE,WHO/PQS
	Data Logger		Y	Y	Y
	Freezer Protection Level		A	A	A

Product appearance and specifications are subject to change without notice

Ice-Lined Refrigerator

WHO Approved

Refrigeration System

- Optimized refrigeration system design
- Built-in ice packs maintain 2°C to 8°C for more than 25 hours at 43°C ambient
- CFC-free high density foam insulation
- Complied with WHO/UNICEF standards

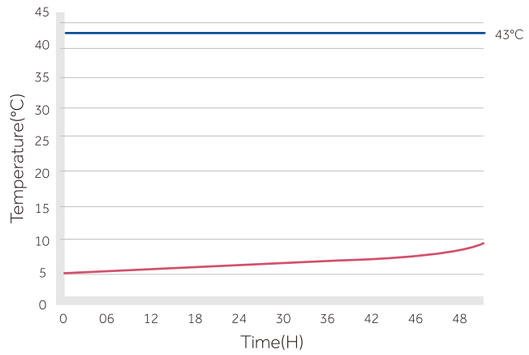
Temperature Control

- Digital temperature display
- Inner temperature range is 2°C to 8°C

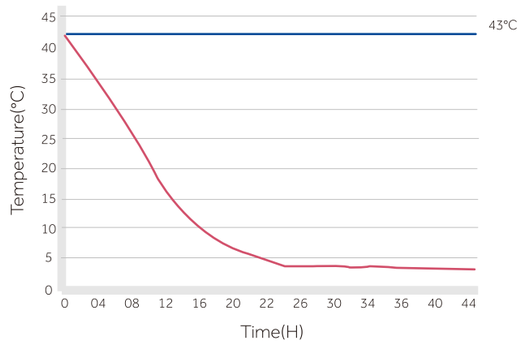
Ergonomic Design

- Door lock for storage safety
- Stainless steel interior for ease of cleaning and corrosion proof

HBC-340 Warm up test at 43 °C ambient

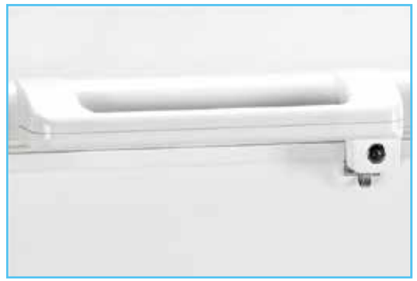


HBC-340 Pull down test at43°C ambient



Inside structure

Interior icepack



Lock

Controller

Ice-Lined Refrigerator

WHO Approved

Model		HBC-70		HBC-110	HBC-200		HBC-340
Technical Data	Cabinet Type	Chest		Chest	Chest		Chest
	Ambient Temperature(°C)	5~43		5~43	5~43		5~43
	Cooling Type	Direct Cooling		Direct Cooling	Direct Cooling		Direct Cooling
	Defrost Mode	Auto		Auto	Auto		Auto
	Refrigerant	CFC-Free		CFC-Free	CFC-Free		CFC-Free
	Sound level(dB(A))	43		43	44		42.5
Performance	Temperature Range(°C)	2~8		2~8	2~8		2~8
Control	Controller	Microprocessor		Microprocessor	Microprocessor		Microprocessor
	Display	LCD		LCD	LCD		LCD
Electrical Data	Power Supply(V/Hz)	220~240/50	220~240/60	220~240/50	220~240/50	208~230/60	220~240/50/60
	Power(W)	156	180	155	208	205	264
	Electrical Current(A)	1.1	1.4	1.2	1.4	1.4	2.1
	Power Consumption: Stable Running(KWh/24h)	0.64	1.1	1.2	1.34	1.6	2.06
	Power Consumption: Cool Down Test(KWh/24h)	2.4	2.4	1.28	4.1	4.1	2.13
	Holdover Time at 43°C	27hrs18mins		36hrs17mins	31hrs23mins		53hrs
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)	45/1.6		52.5/1.8	90/3.3		211/7.4
	Gross Volume(L/Cu.Ft)	71/2.5		110/3.9	198/7.0		340/12.0
	Net/Gross Weight (approx) kg	75/79		87/93	108/114		152/165
	Net/Gross Weight (approx) lbs	165.3/174.2		191.8/205.0	238.1/251.3		335.1/363.8
	Interior Dimensions (W*D*H) mm	400*360*610		595*360*610	970*360*610		1410*415*645
	Interior Dimensions (W*D*H) in	15.7*14.2*24.0		23.4*14.2*24.0	38.2*14.2*24.0		55.5*16.3*25.4
	Exterior Dimensions (W*D*H) mm	670*630*818		860*630*818	1243*630*818		1650*650*855
	Exterior Dimensions (W*D*H) in	26.4*24.8*32.2		33.9*24.8*32.2	48.9*24.8*32.2		65.0*25.6*33.7
	Packing Dimensions (W*D*H) Paper	Paper		Paper	Paper		Paper
	Packing Dimensions (W*D*H) mm	755*760*880		950*760*880	1325*760*880		1705*760*1010
	Packing Dimensions (W*D*H) in	29.7*29.9*34.6		37.4*29.9*34.6	52.2*29.9*34.6		67.1*29.9*39.8
	Packing Dimensions (W*D*H) Wooden	Wooden		Wooden	Wooden		/
	Packing Dimensions (W*D*H) mm	820*820*1045		1000*820*1045	1375*820*1045		/
	Packing Dimensions (W*D*H) in	32.3*32.3*41.1		39.4*32.3*41.1	54.1*32.3*41.1		/
	Container Load (20'/40'/40'H) Paper	42/90/135		36/72/108	24/54/81		18/42/42
	Container Load (20'/40'/40'H) Wooden	28/56/56		20/44/44	16/32/32		
Functions	High/Low Temperature	Y		Y	Y		Y
	Power Failure	Y		Y	Y		Y
	Sensor Error	Y		Y	Y		Y
Accessories	Foot	Y		Y	Y		Y
	Baskets	3		5	9		11
Others	Certification	CE,WHO/PQS		CE,WHO/PQS	CE,WHO/PQS		CE,WHO/PQS

Product appearance and specifications are subject to change without notice

Vaccine & Icepack Freezer

WHO Approved

The refrigerators are designed to store vaccine, freeze icepack, pharmaceuticals and so on. Applications could be found in epidemic prevention, clinics, hospitals, research institutes etc.

HBD-116

Refrigeration System

- Famous brand high quality compressor
- CFC-free high density foam insulation
- Optimized refrigeration system design

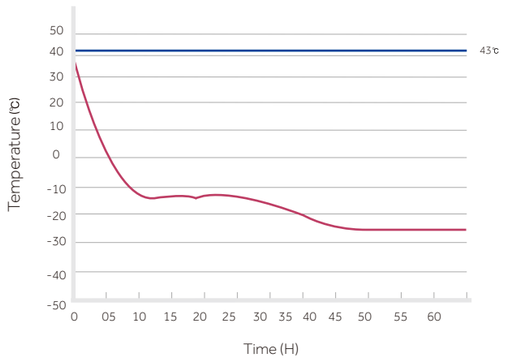
Temperature Control

- Electronic temperature controller with digital display
- Inner temperature range is -15°C to -25°C

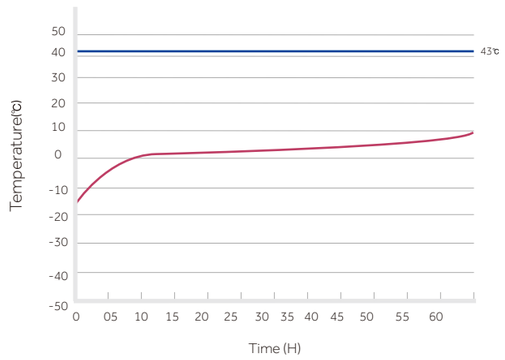
Ergonomic Design

- Safety lock for unauthorized access
- Stainless steel interior and ease of cleaning
- Shelving designs for various sizes of storage baskets
- Drainage system for ease of cabinet cleaning
- LCD temperature display

HBD-286 Pull down test at 43 °C ambient



HBD-286 Warm up test at 43 °C ambient



Vaccine & Icepack Freezer

WHO Approved

Model			HBD-116	HBD-286
Technical Data	Cabinet Type		Chest	Chest
	Ambient Temperature(°C)		<43	<43
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual
	Refrigerant		CFC-Free	CFC-Free
	Sound level(dB(A))		43	44
Performance	Temperature Range(°C)		-15~-25	-15~-25
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LCD
Electrical Data	Power Supply(V/Hz)		220~240/50	220~240/50
	Power(W)		134	185
	Electrical Current(A)		1.1	1.3
	Power Consumption:Stable Running(KWh/24h)		3.01	4.36
	Power Consumption: Cool Down Test(KWh/24h)		3.77	3.77
	Holdover Time at 43°C		More than 4hrs(up to -5°C)	More than 5hrs(up to -5°C)
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		-	-
	Gross Volume(L/Cu.Ft)		121/4.3	286/10.1
	Net/Gross Weight(approx)	kg	58/67	85/97
		lbs	110.3/121.3	174.2/187.4
	Interior Dimensions(W*D*H)	mm	497*457*655	1067*457*655
		in	19.6*18.0*25.8	42.0*18.0*25.8
	Exterior Dimensions(W*D*H)	mm	670*630*915	1240*630*915
		in	26.4*24.8*36.0	48.8*24.8*36.0
	Packing Dimensions(W*D*H)	paper	paper	paper
		mm	755*760*1005	1325*760*1005
		in	29.7*29.9*39.6	52.2*29.9*39.6
	Container Load(20'/40'/40'H)	paper	42/90/90	24/50/50
Accessories	Foot		Y	Y
	Baskets		2	3
Others	Certification		CE,WHO/PQS	CE,WHO/PQS

Product appearance and specifications are subject to change without notice

Walk-In Cold/Freezer Room

WHO Approved

Haier walk-in cold room is for storage of vaccines, and the complete unit is also designed for installation in a housed area such as a warehouse in order to meet designed temperature standards. Haier's WICs & WIFs have passed WHO / PQS and is long term supplier of UNICEF. The units have been installed in India, Guinea, Syria, Pakistan, Burundi, Zimbabwe, etc.

Type	Freezer Room	Freezer Room	Cold Room	Cold Room	Cold Room	Cold Room	Cold Room	Combined Cold/Freezer Room	
								Cold Room	Freezer Room
Model	HRZK-40D	HRZK-20D	HRZK-10G	HRZK-15G	HRZK-20G	HRZK-30G	HRZK-40G	HRZK-40G	
Defrost Mode	Electrical heating								
Refrigerant	CFC-Free								
Internal Temperature Range(°C)	-20	-20	2-8	2-8	2-8	2-8	2-8	2-8	-20
Evaporator Temperature(°C)	-25	-25	-7	-7	-7	-7	-7	-7	-25
Power Supply(V/Hz)	380/50	380/50	220/50	220/50	220/50	380/50	380/50	380/50	
Power(W)	5300	2630	1300	1750	1750	2520	2610	2520	2010
Refrigeranting Output(W)	4200	2060	1560	2230	2230	2950	3250	2950	1580
Capacity(m^3)	40	20	10	15	20	30	40	25	15
Condensation Temperature(°C)	43								
Density(Kg/Cbm)	40±2								
K-Value(m^2K)	0.22								
Insulation Thickness(mm)	100								
Certification	–	WHO/PQS							

Product appearance and specifications are subject to change without notice

Walk-In Cold/Freezer Room

WHO Approved

Integral Cold Store Unit

- The cold room is suitable to freeze or refrigerate relevant articles for medical service, scientific research, agricultural, biological and chemical industries, etc. Its interior temperature can be controlled respectively within the range of 2~8°C or-20°C

Features of the Cold Room

- The cold room for vaccines and medicines is controlled and adjustable within the range of 0~10°C or -15~-25°C with resolution of 0.1°C
- Insulation material CFC-free polyurethane foamed-in-piece, density 42kg/cbm
- Insulation thickness 100 mm, K-value 0.22 W/m2K or better
- Internal and external surfaces of hot-dipped galvanized steel sheet, white polyester coating and floor clad with non-slip material
- Rooms equipped with tungsten lighting
- Rooms equipped with shelving system on three walls
- Dual refrigeration system is equipped. When one set of system is working, the other system is for backup
- Forced air-cooled condenser refrigeration units
- Door equipped with heavy duty hinges and lock with internal safety release. CFC-free refrigerant
- Automatic defrosting
- System to be offered with manual change over switch as standard automatic change-over switch is optional
- Temperature recorder and audible alarm system

Technical Characteristics of the Refrigerating Unit

- The LYJ series of machine, called mono block, that integrates evaporator, condenser, compressor, electrical control units into one compact body, can be widely used for cold storage rooms of temperature of -5°C~5°C or -15°C~-20°C, in hotels, restaurants, medicines, agricultural, chemicals industries all other place where cold storage is needed. This series products feature below
- With very compact structure
- With TECUMSEH hermetic compressors, high efficient in-grooved copper tube and aluminum fin heat exchangers and world famous brand refrigeration parts for all products
- The electronic control boards are with functions of automatic temperature set, control, and electric heater defrosting. Protection devices for over loading, over heating, lack of phase, high & low pressure etc
- Safe, easy, and low cost for installation and operation

Temperature Recorder

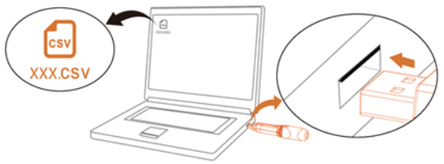
- Upper and lower limits +50°C to -30°C
- Accuracy ±1°C
- Resolution ±0.5°C
- Minimum acceptable recording period between chart changes is 7 days
- USB interface is equipped

30-Day Eelectronic Temperature Logger

Haier Vaccine Cold Chain Storage Safety Solution
· Continuous, real-time, whole-process traceable monitoring for vaccine safety storage solution
· Listed in the WHO procurement menu

30-Day electronic temperature logger

WHO Certified
PQS code:E006/042



Easy to download data

Accessory: Bracket

30-Day Eelectronic Temperature Logger

Product Features

- Approved by WHO's PQS, PQS code:E006/042
- Special designed for 2~8℃ vaccine storage, equipped with high/low temperature visual alarm according to WHO standard
- Recording capacity is over 30days, recording interval is 6 minutes, and outdated data will be overwritten by new one automatically, when the recording volume is full
- With LCD screen, displays temperature
- Integrated sensor devices, dust and water resistant is IP65 protection standard, it can be placed in Cold Box or vaccine refrigerator to monitor the temperature directly
- The Logger can be plugged into the USB of any PC to automatically generate a CSV file including temperature data and temperature graph which can be generated by data management software
- Built-in disposable wide temperature range lithium battery(Non-replaceable) with a minimum operating life of two years after a maximum shelf life of one year
- The bracket is a standard accessory

Specifications

Model	HETL-01
Temperature Range(℃)	-20~+50
Main Material	ABS (Transparent Shield: PC)
Data Interface	USB Interface
Display Medium	LCD
Resolution	0.1℃
Accuracy	±0.5℃ for -20℃~+40℃ , ±1℃ for the others
Recording Volume	8192 Data Points(34 days)
Logging Interval	6 min
Power Source	Non-Replaceable Battery
Size (Length*Diameter mm)	131*24
Service Life	2~3 years

Product appearance and specifications are subject to change without notice

Automatic Voltage Stabilizer

Introduction

This product is a high-speed and fully automatic voltage stabilizer based on latest technologies and controlled by an intelligent microprocessor. The product widely applies to devices that use electricity in household or work space, such as refrigerator, freezer, television, electric fan, printer, telephone, fax machine, media player, monitor, etc. When electric supply is between the range of 160 and 280 VAC, the voltage stabilizer can support 230 VAC with a ±10% precision.

Features

Automatic Voltage Regulator
It can automatically adjust the input voltage of your device to a more stable range to avoid breaking electric devices.

Microprocessor Control

Innovative software-control program integrates a powerful microprocessor into the complex hardware circuit. On one side, it reduces overall size. Also, it decreases defect rate and increase precision of the voltage stabilizer.

Voltage Display

The device's output voltage is displayed through a simulated voltmeter.

Time Delay

When time-delay switch is on or protection starts, the voltage stabilizer will wait for three minutes before outputting.

Work Principle

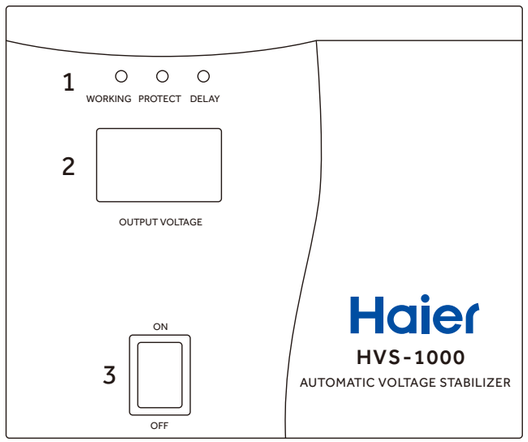
The intelligent CPU circuit receives voltage by sampling, then controls relay's action to control the voltage stabilizer's output tap or its combination to adjust output voltage.

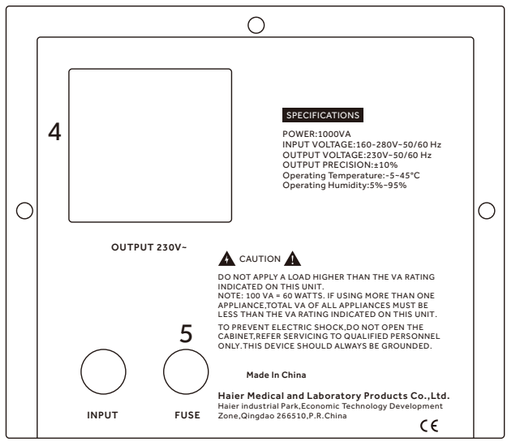
Automatic Voltage Stabilizer

Specifications

Model		HVS-1000VA
Power(VA)		1000
Input Voltage Range(Vac)		160~280
Frequency(Hz)		50/60
Output Voltage Range		230V±10%
Efficiency		>98%
Phase		Single Phase
Display		Simulated Voltmeter Displaying Output Voltage
Indicator Light		Green(Power),Yellow(Delay), Red(Protection/Malfunction)
Output Low-Voltage Protection		195V±5V
Output High-Voltage Protection		255V±5V
Operating Temperature Range		- 5~45 Celsius Degree
Relative Humidity (Not Condensation)		10%~100%
Atmospheric Pressure	Kpa	84~107
Dimension(W*D*H)	mm	215*150*130

Product appearance and specifications are subject to change without notice





Laboratory Equipment

Biological Safety Cabinet

Main Uses

Specialized local air purifying equipment. It is suitable for microbiology, biomedicine, biosafety laboratories and other laboratories. It is the most basic protection and isolation equipment for biosafety.

Pluggable Power Cable: Power cable can be changed according to a user’ s need.

Standard water-proof socket, water valve and air valve.

HR1200-IIA2-D

LCD screen displays real time operating parameters, filters lifecycles and other critical parameters.

Debris grid catches debris such as paper scrap to damage negative pressure zone.

Adjustable stand fits a customer’s need.

Drop-down glass door is easy to clean.

Compartmented working surface is easy to be sterilized and cleaned.

Biological Safety Cabinet

Product Advantages

BSC HR1200-IIA2-D, the latest biosafety cabinet developed based on European client's need.The product is certified with Europe EN12469 standard. BSC HR1200-IIA2-D uses DC fan and EC fan (assures performance, low noise and energy saving) and highly efficient filter ULPA. There are two exhaust filters to enhance protection to people and environment. The product features a two-side glass structure for better lighting.Additional features include height adjustable stand,air valve,vacuum valve,etc

Double Exhaust-Filters
Highly efficient HEPA's dual output filtering structure provides an extra layer of protection. There is no need for external wind pipe and no worry for lab pollution!
Two-Side Glass Walls
Two-side glass structure provides better lighting and larger operation space.

Compartmented Working Surface
The compartmented working surface can easily be removed for sterilization and bottom cleaning.
Safe Airflow System
The working space has airflow blocking design. The upper end of front window and the sides all have air curtain protection to prevent cross flow between the inside and outside air and also contamination from spreading.

Features

· E.U. EN12469 Standard Certification
· The main filter uses damp-proof, fire-proof glass fiber ULPA filter. Filtering efficiency for ≥0.12μm particulate matter is ≥99.9995% for cleaner air and safer samples.
· DC fan operates with lower noise and better uniformity air flow.
· LCD screen displays various parameters and clear operational conditions.
· Ultraviolet light can be set with one single key to for automate on/off time, and sterilization time interval from 0 to 24 hours.Downtime is reduced.
· The product features ultraviolet sterilization, fluorescent lamp, front window and fan motor' s quadruple locking system.
· Multiple Sound/Light Alarming Function: Hardware malfunction alarm, operating parameter overrun alarm, filter/ultraviolet light lifecycle ending alarm, etc.
· Patented Water-Proof Socket Timer: The two water-proof sockets have timed on/off function.

Ergonomic Design

· Front working surface's 10 degree leaning design provides a comfortable work space for operators.
· Height in the lower stand is adjustable. Adjustment mechanism is hidden to avoid contamination.
· Universal caster for convenient moving.
· Drop-down front window design for easier cleaning of glass interior's upper end.
· Removable hand resting stand reduces arm fatigue and does not interfere air inflow.
· Optional accessories include water valve, air valve, anti-collapse wind blowing valve, etc.

Alarm Functions

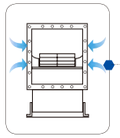
· Fan turn-off alarm after door opening
· Alarm for expired door opening
· Door open more than limit alarm
· Filter Block Alarm
· Filter Damage Alarm
· Filter Lifetime Lack Alarm
· Front glass blocks ultraviolet

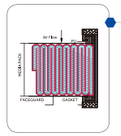
Biological Safety Cabinet

Biological safety cabinet is designed to protect operator, laboratory environment and samples from being exposed to the infective aerosol produced when the sample is bacteria strains, diagnostic material, and other infective subjects. It provides the operators with a more comfortable and safer working condition. It is widely used in medical health, disease prevention, food safety, biological pharmacy and environment monitoring. And it has been the important basis of sample safety and environment security.

CEN EN 12469

Ultra Low Penetration Air Filter System





Intelligent constant air velocity patent technology

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity, and keeps the safety cabinet under constant air velocity through adjustment of the fan speed by microcomputer system

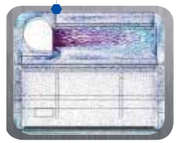
304 stainless steel operation platform and internal wall

- Stainless steel operation platform without screws, no accumulation of contaminant
- Dismountable air in-flow plate, easy to clean and disinfect
- Concaved operation platform, waste liquid easily collected

Digital microprocessor control system

- LCD display
- Real-time display of key parameters: downflow velocity, inflowvelocity, airflow volume, static pressure, negative pressure, accumulative running time of fan and UV lamp, left lifetime of filter
- Sound & light alarming function
- UV sterilization reservation setting function

HR1200-IIA2



Professional air flow distributiondesign

Through professional air flow distribution design, the air flow of the worktable is more uniform, with the noise<62dBA

V-shaped air inlet design

Swivel caster, Internal thread support leg

Biological Safety Cabinet

Features

Patent Intelligent Constant Air Velocity

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity, and keeps the safety cabinet under constant air velocity through adjustment of the fan speed by microcomputer system

Low Noise Safety Energy-saving Mode

When the human body detecting module detects under the intelligent mode that the person is outside the operating area for over 15 minutes, the microcomputer program will automatically switch the safety cabinet to Low Noise Safety energy conservation mode, so as to realize noise reduction and energy conservation and to improve the service life of the filter

Professional Air-flow Distribution Module

Through professional air flow distribution design, the air flow of the worktable is more uniform, with the noise <62dBA

Ultra Low Penetration Air Filter System

Sweden Camfil (ULPA) filter is tested to a typical efficiency of > 99.999% for 0.12 micron particles. ULPA filter provides vertical laminar flow to the worktable, so as to protect samples from pollution

Patent Technology of Air Flow Disruption

Adopt the patent technology of air flow disruption on the upper edge and both sides of the front window (Patent No. ZL200520125549.X) to eliminate the safety protection blindness. Adopt the patent technology of side air flow disruption design to eliminate the exposure of microorganism

Unique Drop-down Front Glass Window

Remove the hand-placing frame by hand, and pull down the front glass window to clean the upper part of the glass and to avoid dead corners

Dismountable Platform-type Hand-placing Frame

Platform-type hand-placing frame is comfortable to use and helps to relieve fatigue

	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	EN 12469, Europe CFDA YY-0569, China	ISO 14644.1, Class 3, Worldwide US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	EN61010

Biological Safety Cabinet

American AAF ULPA filter is tested to a typical efficiency of >99.9995% for 0.12 micron particles

Reverse centrifugal fan allows double side air inflow, decreasing noise and saving energy

Reverse centrifugal fan allows double side air inflow, decreasing noise and saving energy

Digital microprocessor control system for easy operation

Intelligent alarming system

Multiple interlocking functions eliminate potential safety problems caused by misoperation.

Removable stainless steel work surface makes cleaning easier

Ergonomic angled design to improve comfort

Adjustable foot

HR40-IIA2

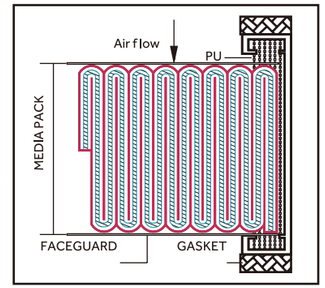
Biological Safety Cabinet

304 Stainless Steel Operation Platform and Internal Wall

- Stainless steel operation platform without screws, no accumulation of contaminant
- Dismountable air in-flow plate, easy to clean and disinfect
- Internal wall is constructed by a single plate, and the12mm arc angle conner leaves no cleaning blind area
- The volume of liquid tank is over 4L, equipped with outlet valve for convenient cleaning and maintaining
- Concaved operation platform, waste liquid easily collected
- Adjustable supporter (0-75mm) without exposed screw thread, preventing the germs from multiplying

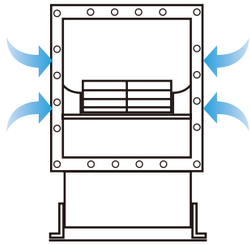
Ultra Low Penetration Air Filtration System

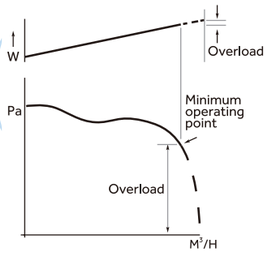
- American AAF ULPA filter
- Tested to a typical efficiency of 99.9995% for 0.12 micron particles
- Provides FED STD 209E class 1 (or ISO14644.1 class 3) clean air to work surface in a stable vertical laminar flow to protect samples
- The exhaust ULPA filter traps biohazard particles acquired from the work surface before air is exhausted to the room, offering personnel and environmental protection

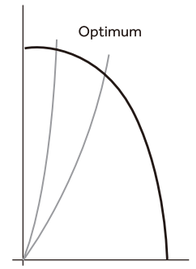


High Efficiency Blower System

- The blower system is designed for high performance operation, maximum energy efficiency and minimal maintenance
- Self cooling system reduces energy consumption while enhancing reliability







Reverse centrifugal fan	Double-side air inflow design decreases running noise	Air velocity auto-compensation function guarantees stable wind speed	Provide uniform airflow by adjusting working voltage of fan

Biological Safety Cabinet

Specification

Model		HR900-IIA2	HR1200-IIA2	HR1200-IIA2-D	HR1200-IIA2-S
Working Voltage& Frequency		220V/50Hz	220V/50Hz	220V/50Hz/60Hz	220V/50Hz/60Hz
Power(VA)		1400	1500	1600(Active Power 200W)	1600(Active Power 210W)
Power of Blower(W)		335	475	DC 190W, EC 170W	Down fan 120W,Exhaust fan 112W
Airflow Circulation		70% downflow,30% exhaust	70% downflow,30% exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust
Main Filter Typical Effiency		ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm
Exhaust Filter Typical Effiency		ULPA,99.9995%@0.12μm	HEPA,99.995%@0.3μm	HEPA,99.995%@0.3μm	HEPA,99.995%@0.3μm
Filter's Brand		AAF	AAF	AAF	AAF
Downflow Velocity(m/s)		0.33	0.34	0.30	0.30
Inflow Velocity(m/s)		0.55	0.55	0.45	0.45
Fluorescent Lamp Intensity(Lux)		900	900	1000	1000
Net/Gross Weight	kg	290/315	320/347	335/360	335/360
	lbs	639.3/694.5	705.5/765.0	738.5/793.7	738.5/793.7
Internal Dimensions (W*D*H)	mm	920*620*650	1220*620*650	1310*620*630	1310*620*630
	in	36.2*24.4*25.6	48.0*24.4*25.6	51.6*24.4*24.8	51.6*24.4*24.8
External Dimensions (W*D*H)	mm	1080*845*2160	1380*845*2160	1380*780*2160	1380*780*2160
	in	42.5*33.3*85.0	54.3*33.3*85.0	54.3*30.7*85.0	54.3*30.7*85.0
Packing Dimensions (W*D*H)	mm	1145*920*1690	1470*920*1690	1470*920*1690	1470*920*1690
	in	45.1*36.2*66.5	57.9*36.2*66.5	57.9*36.2*66.5	57.9*36.2*66.5
Supporter		690-900mm adjustable	690-900mm adjustable	690-900mm adjustable	690-900mm adjustable
Container load (20'/40'/40'H)		12/24/24	8/16/16	8/16/16	8/16/16
Alarm		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certification		CE,EN12469,CFDA	CE,EN12469,CFDA	CE,EN12469	CE,EN12469

Biological Safety Cabinet

Model		HR1500-IIA2	HR30-IIA2	HR40-IIA2	HR50-IIA2	HR40-IIB2
Working Voltage& Frequency		220V/50Hz	220V/50Hz	220V/50Hz/60Hz	220V/50Hz	220V/50Hz
Power(VA)		1300	1300	1300	1300	1500
Power of Blower(W)		650	350	350	650	505
Airflow Circulation		70% downflow,30% exhaust	70% downflow, 30% exhaust	70% downflow, 30% exhaust	70% downflow, 30% exhaust	100% exhaust
Main Filter Typical Effiency		ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm
Exhaust Filter Typical Effiency		ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	HEPA,99.995%@0.3μm	ULPA,99.9995%@0.12μm	HEPA,99.995%@0.3μm
Filter's Brand		AAF	AAF	AAF	AAF	AAF
Downflow Velocity(m/s)		0.31	0.31	0.28	0.28	0.28
Inflow Velocity(m/s)		0.55	0.55	0.55	0.55	0.55
Fluorescent Lamp Intensity(Lux)		900	≥1100	≥1100	≥1100	≥1100
Net/Gross Weight	kg	350/375	220/248	258/293	285/320	280/308
	lbs	771.6/826.7	485.0/546.7	568.8/646.0	628.3/705.5	617.3/679.0
Internal Dimensions (W*D*H)	mm	1520*620*650	900*610*680	1167*610*680	1585*610*680	1167*610*680
	in	59.9*24.4*25.6	35.4*24.0*26.8	45.9*24.0*26.8	62.4*24.0*26.8	45.9*24.0*26.8
External Dimensions (W*D*H)	mm	1680*845*2160	1100*790*2200	1360*790*2200	1780*790*2200	1360*790*2400
	in	66.1*33.3*85.0	43.3*31.1*86.6	53.5*31.1*86.6	70.1*31.1*86.6	53.5*31.1*94.5
Packing Dimensions (W*D*H)	mm	1755*920*1690	1160*920*1690	1420*920*1690	1840*920*1690	1420*920*1850
	in	69.1*36.2*66.5	45.7*36.2*66.5	55.9*36.2*66.5	72.4*36.2*66.5	55.9*36.2*72.8
Supporter		690-900mm adjustable	690mm adjustable	690mm adjustable	690mm adjustable	690mm adjustable
Container load (20'/40'/40'H)		6/12/12	10/20/20	8/16/16	6/12/12	8/16/16
Alarm		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certification		CE,EN12469,CFDA	CFDA	EN12469,CFDA,CE	CFDA	CFDA

Product appearance and specifications are subject to change without notice

Clean Bench

Main Uses

Professional local air purifying equipment suitable for pharmaceutical, medical sanitation, institutional research laboratories, photoelectric or microelectronics manufacturing, etc.

HCB-1300H

Clean Bench

Product Advantages

- Use efficient damp-proof and fire-proof glass fiber HEPA filter from well-known brand. The filtering efficiency for ≥0.3μm particulate is ≥99.99%.
- Air cleanliness conforms to ISO14644.1 Class 5 Standard, which is better than 100 Class cleanliness requirement.
- The industry's first innovated pre-cleaning function pre-cleans the working area before sample handling to further improve sample protections.
- Time delay activation of ultraviolet light prevents operators from being exposed to potentially harmful ultraviolet.
- The pre-set function for the ultraviolet sterilization improves user's operation efficiency.

Features

· Internal lighting reduces eye fatigue.

The internal light is positioned to block a direct viewing of by a user to reduce a health risk.

· One-touch operation for.

The ultraviolet light can be programmed to turn off in between 0 and 99 minutes.

· Inter-lock function provides a safer operation.

The fluorescent light and ultraviolet light interlock with each other. The ultraviolet light can only be switched on when the fluorescent light is turned off. When the flrorescent light is on, the ultraviolet light is powered off immediately to minimize any risks.

Ergonomic Design

· Ergonomic design of the unit allows ease of operation.

The working surface is 800mm above the floor. The position is suitable for standing or sitting. And it can reduce operator' s fatigue and make operations relaxing.

· The delay to start function of the ultraviolet sterilization prevents operator' s exposure to harmful lighting.

When ultraviolet light is switched on, the sound and light alarms will notify operators to leave immediately.

The light will be on after 10 seconds to prevent operators from ultraviolet harms.

· The pre-set sterilization function improves productivity.

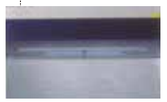
The product has ultraviolet sterilization pre-set timer function provides more rest to users and improve work efficiency.

· The detachable chassis makes installation and moving convenient.

The chassis and cabinet are detachable. It equips with universal casters and adjustable bottom stand for conve nient moving and placing.

Clean Bench

- Featuring many patented technologies and authoritative testing certification for reliability
- Microcomputer intelligent control panel with durable touch buttons
- Multiple safety protection functions including UV delay start
- Interlocking function to put an end to incorrect operation
- Various personalized design to ensure comfortable operation
- Perfect memory function to avoid repeat setting
- Combined under-frame structure with universal truckle design



UV lamps , fans, lighting linkage system to enhance user safety

Clean Bench

High-Efficiency Filter HEPA

The world famous damp and fire resistant fiberglass high-efficiency air filter (HEAP) 99.99%@0.3μm, enjoys the cleaning class up to Class V, ISO14644.1 which is superior to the cleaning requirement of class 100, safer and cleaner

304 Stainless Operation Table

The excellent 304 stainless operation table without fixing screws can avoid the accumulation of dirt

Ergonomic Design

- Adopting recess lighting to eliminate the radiation of the fluorescent lamps on the eyes and thus preventing the eyes from being tired
- Equalizer bar design: In the working area, the stainless equalizer bar with hooks is provided for facilitating the movement of articles

Patented Technology

- UV sterilization startup delay (keep away the injury by UV light) patent technology (ZL201220087011.4). After the UV lamp switch is pressed down, the audible and visual alarm will be activated to remind the operator to leave in time. After 10s, the UV light is on. Therefore, the operator can be protected from the injury by UV light
- Preset function: It can preset the UV sterilization startup delay to provide users with more rest and to improve working efficiency, possessing the patent technology (ZL201220087011.4)

Interlocking Function

With the interlocking between illuminating lamp and UV lamp, the UV lamp can become on only when the illuminating lamp is off; When the UV lamp is on, it can be off if pressing the daylight lamp. The risk of incorrect operation can be avoided

Memory Function

The UV lamp startup delay time, sterilization duration, preset start time, fan position can be set and saved by user on request for the convenience of startup

One-key Operation

- After the UV lamp switch is pressed, the time function can be activated automatically. The default sterilization time is 30min, which can be adjusted by user within 0~99min on request
- Sterilization preset, when pressing the UV lamp, the preset lamp will become on to remind user that the sterilization preset function has been activated and that the sterilization preset can be conducted

Pre-cleaning Function

The only pre-cleaning function can further improve the protection on sample

Model		HCB-900V	HCB-1300V	HCB-1300H	HCB-1600H
Flow Type		Vertical	Vertical	Horizontal	Horizontal
Voltage/Frequency		220V/50Hz	220V/50Hz/60Hz	220V/50Hz/60Hz	220V/50Hz/60Hz
Power		1200W	1200W	350W	350W
Vibration Amplitude		≤2um	≤2um	≤2um	≤3um
Exhaust Filter Typical Efficiency		HEPA,99.995%@0.3um	HEPA,99.995%@0.3um	HEPA,99.995%@0.3um	HEPA,99.995%@0.3um
Average Velocity		0.2~0.5m/s	0.2~0.5m/s	0.3~0.5m/s	0.3~0.5m/s
Fluorescent Lamp Intensity(Lux)		≥300	≥300	≥900	≥1000
Net/Gross Weight	kg	115/140	145/175	135/165	165/205
	lbs	254/309	320/386	297.6/363.7	363.7/415.9
Sound level(dB(A))		≤60	≤60	≤60	≤60
Internal Dimension (W*D*H)	mm	900*550*520	1300*550*520	1310*550*750	1710*550*750
	in	35.4*21.7*20.5	51.2*21.7*20.5	51.5*21.7*29.5	67.3*21.7*29.5
External Dimension (W*D*H)	mm	970*630*1730	1370*630*1730	1380*792*1960	1780*792*1960
	in	38.2*24.8*68.1	53.9*24.8*68.1	54.3*31.1*77.2	70.1*31.1*77.2
Packing Dimension (W*D*H)	mm	1105*745*1280	1505*745*1280	1465*940*1370	1865*940*1370
	in	43.5*29.3*50.4	59.3*29.3*50.4	57.7*37.0*53.9	73.4*37.0*53.9
Supporter		750mm high chassis	750mm high chassis	750mm high chassis	750mm high chassis
Cleanliness Classification		ISO14644.1 Class 5	ISO14644.1 Class 5	ISO14644.1 Class 5	ISO14644.1 Class 5
Container Load(20'/40'/40'H)		15/33/33	10/25/25	8/16/16	6/12/12
Certification		CFDA	CFDA	CFDA	CFDA

Product appearance and specifications are subject to change without notice

Liquid Nitrogen Container

Liquid Nitrogen Container

Haier Liquid Nitrogen Storage System Biobank Series

Biobank Series has six models with capacity of 300, 500, 800, 1000, 1500, and 1800. Biobank Series is designed to ensure the maximum storage capacity with the minimum consumption of liquid nitrogen to lower the overall cost of operations.

Product Advantages

Optimal Use of Storage Space

Racks are stored on the rotating tray with an appropriate distance from the wall of the chamber. Liquid nitrogen or supercooled nitrogen vapor is filled in the space between the tray and the wall to maintain temperature uniformity. Storage space is equally divided into four or six fan-shaped storage rooms which are clearly labeled. Each storage room is easily rotated to the opening of the tank for convenient sample access.

Designed for Both Liquid and Vapor Phase Storage

Each model of Biobank Series is designed for both liquid and vapor phase storage. For vapor phase storage, samples are kept away from the liquid nitrogen while stored in a uniform temperature that is close to the temperature range of liquid nitrogen.

Advanced Vacuum Technology and Superinsulation Technology

Haier Liquid Nitrogen Storage System Biobank Series applies advanced vacuum technology and superinsulation technology to ensure storage safety and temperature uniformity while reducing the consumption of liquid nitrogen. The temperature difference of the entire storage area does not exceed 10°C even in vapor phase storage, and temperature near the top of the shelf can be as low as -190°C.

Cryosmart Intelligent Liquid Nitrogen Control System

Haier Liquid Nitrogen Storage System Biobank Series features Cryosmart system for complete monitoring and controlling. High-precision temperature and liquid level censors are used to ensure accuracy. All data and samples are protected by secure access control system.

Features

- Massive capacity between 13000 to 94875 ×2ml Vials.
- Vapor phase storage is the only guaranteed method to prevent cross-contamination
- Vapour phase storage at -190°C.
- 5 year vacuum warranty
- One-touch defogging for easier access.
- LN_2 splash proof make the operation more secure.
- Biobank storage compatible.

Liquid Nitrogen Container

Product Details

Top of the Container

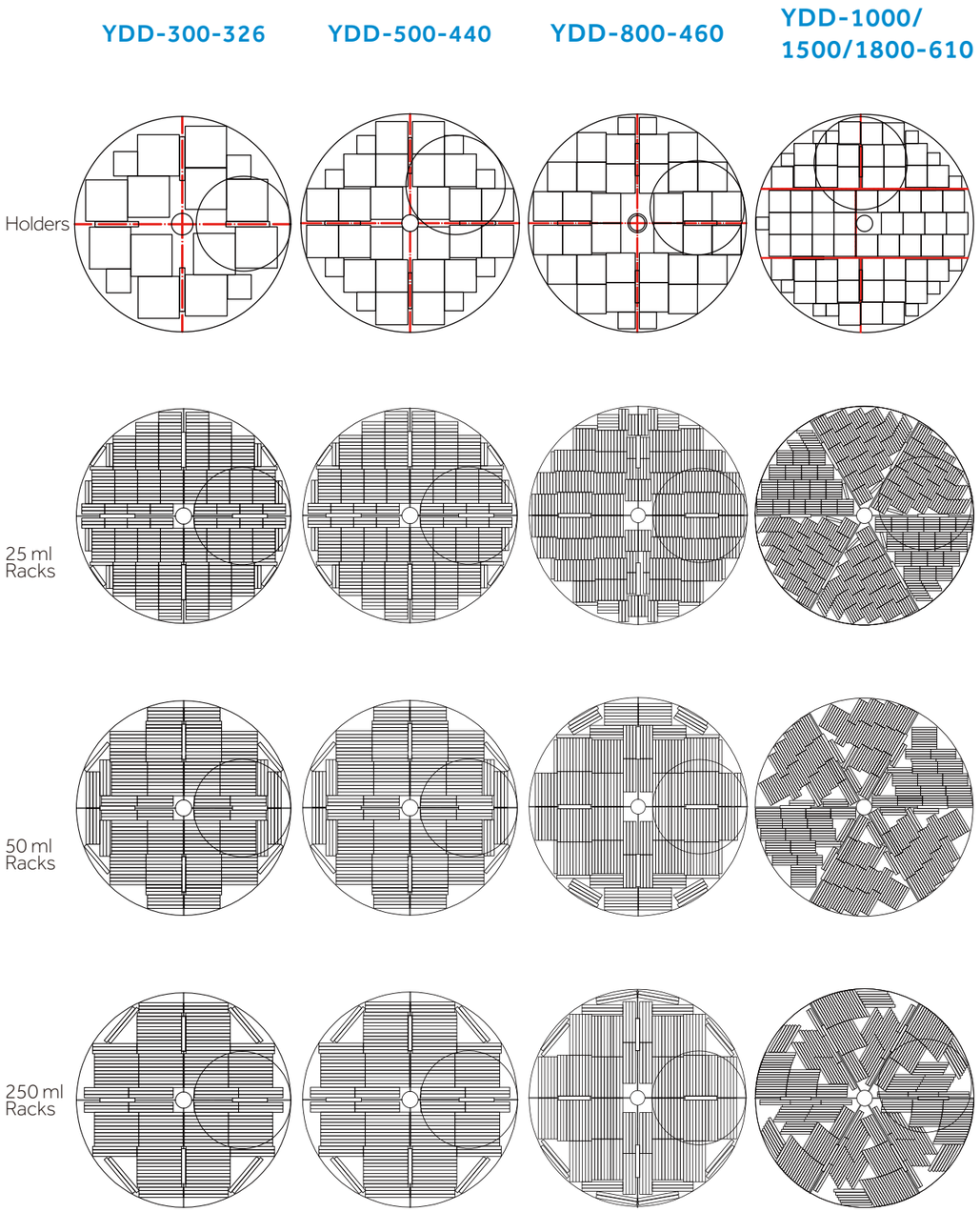
Lid Open

A Low-temperature hose connects the inlet and liquid nitrogen tank for supplement. A silencer reduces the noise of nitrogen emission to grant a quiet environment.

Vapor condensation near the container opening is controlled. The strength of the container is reinforced at liquid nitrogen temperature to extend service life.

Small self-pressurized liquid nitrogen supply system suitable for research institutes dealing with fewer samples.

Distribution of Racks and Holders



Distribution of Racks and Holders

Technical Parameters

Model	YDD-300 -326	YDD-500 -440	YDD-800 -460	YDD-1000 -610	YDD-1500 -610	YDD-1800 -610
Maximum Storage Capacity						
2 ml Vials (Internal Thread)	13000	26000	42900	58500	76050	94875
Freeze Rack (100 wells)	12	24	32	54	54	60
Freeze Rack (25 wells)	4	8	4	18	18	13
Layers of each rack	10	10	13	10	13	15
0.5 ml Vials (Internal Thread)	18200	36400	58100	81900	99450	126500
Freeze Rack (100 wells)	12	24	32	54	54	60
Freeze Rack (25 wells)	4	8	4	18	18	13
Layers of each rack	14	13	17	14	17	20
Capacity						
Internal Capacity	280	470	675	895	1316	1520
Volume of LN_2 under the tray (L)	55	80	135	265	300	320
Dimensions						
Inside Neck Diameter (MM)	326	440	460	610	610	610
Height (MM)	1326	1321	1559	1404	1589	1883
Operating Height (MM)	1263	1266	980	997	967	1097
Outside Diameter (MM)	870	1080	1180	1565	1565	1565
Door Width Requirements (MM)	1000	1200	1300	1700	1700	1700
Empty Weight (KG)	219	328	441	851	914	985
Gross Weight (KG)	502	805	1160	1934	2255	2504

Blood Bag Capacity

	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks
25 ml	1272	6	212	2376	6	396	3360	7	480	4716	6	786	5502	7	786	7758	9	862
50 ml	792	6	132	1416	6	236	2016	7	288	2916	6	486	3402	7	486	4905	9	545
250 ml	288	3	96	552	3	184	944	4	236	1560	4	390	1950	5	390	2095	5	419

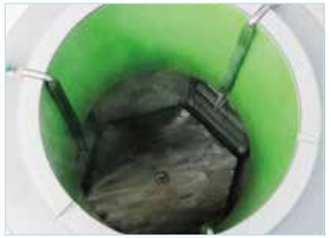
Liquid Nitrogen Container

Haier Liquid Nitrogen Storage System Medical Series features low LN_2 consumption and relatively small footprint for medium capacity sample storage.

Product Advantages

ULT Storage with Extremely Low LN2 Evaporation

Freezer racks are in the ultra-low temperature environment with extremely low LN_2 evaporation. Even stored in vapor phase, the temperature will be below -190°C for a long time.

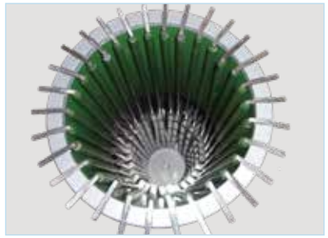


Advanced Vacuum Technology and Superinsulation Technology

Advanced vacuum and insulation technologies ensure cryopreservation for as long as four months.

Compatible for Blood Bag Storage

According to users' needs, Medical Series can be adapted to LN_2 tanks for temporary storage of blood bags before transferred to larger scale LN_2 storage.



Auto-Refill System

Auto-refill system is particularly suitable for vapor phase storage. For liquid phase storage, it can also facilitate users' operations by avoiding frequent refills.
The auto-refill system continuously monitors the inside temperature through ZTC-100B/100C Level Monitor, and automatically controls inlet valve to replenish LN_2. Although less economical, it provides accurate control and ensures safety storage for over 8 weeks.

Level Monitor

Liquid level monitor continuously and reliably monitors the temperature inside the tank and informs users to refill LN_2. It is suitable for institutes that require long time cryopreservation.
Three models (ZTC-100A/100B/100C) are available. The monitor offers real-time temperature display and audible/visual alarms for high temperature, sensor failure, and low liquid level.

Features

- 5 models from 2400 to 6000 cryovial capacity
- Heavy duty lockable enclosure offers excellent security
- Compatible with all major cryobox brands
- Durable aluminium construction
- Temperature data-logging monitoring available
- Liquid or vapour phase option available
- High thermal efficiency
- 5 year vacuum warranty
- Ultra-low evaporative Losses

Liquid Nitrogen Container

Technical Parameters

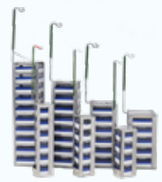
Model	YDS-65-216-F	YDS-95-216-F	YDS-115-216-F	YDS-140-216-F	YDS-175-216-F
Maximum Storage Capacity					
No. of holders	6	6	6	6	6
2 ml Cryovials (100 per box)	2400	3000	3600	4800	6000
No. of boxes in (2ml each holder)	4	5	6	8	10
5 ml Cryovials (36 per box)	648	864	1080	1296	1728
No. of boxes in (5ml each holder)	3	4	5	6	8
Capacity					
Volume of LN_2 (L)	65	95	115	140	175
Static Evaporation* (L/Day)	0.79	0.81	0.83	0.87	0.87
Working Volume	55	85	105	130	165
Duration of Normal** Operation (Day)	44	66	80	94	126
Dimensions					
Opening Diameter(MM)	216	216	216	216	216
Height(MM)	710	726	796	910	1026
Outside Diameter(MM)	681	681	681	681	681
Empty Weight(KG)	27.5	34.5	38.5	42.5	55
Gross Weight(KG)	80.8	112.4	132.8	157.3	198.5

* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.
** Duration of normal operation is for reference only to estimate container performance under normal operating conditions. Actual duration may differ due to different atmospheric conditions, usage history, manufacturing tolerances, and particular circumstances.

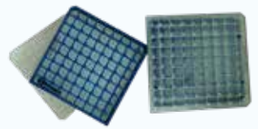
Accessories:

Trolley

Holders



Cryogenic Boxes



216 Diameter Lock Cap

5 ml Customized Holder

5 ml Customized Cryogenic Box

Haier Biomedical Models Line-up

Cryo Freezer

DW-150W200

-86 °C ULT Freezer

TwinCool Salvum Slim Upright Salvum

DW-86L578S DW-86L829BP/959BP DW-86L338 DW-86L388A DW-86L486 DW-86L578 DW-86L628 DW-86L728 DW-86L828 DW-86L338J DW-86L388J

ULT Water Cooling

DW-86L828W DW-86L959W

-60°C Freezer

DW-60W138 DW-60W258/388

Salvum Patronus Chest

DW-86L490J DW-86L578J DW-86L728J DW-86L828J DW-86L729 DW-86L959 DW-86W100/100J DW-86W420J

-40°C Biomedical Freezer

Upright Chest Double Door

DW-40L92 DW-40L262 DW-40L278 DW-40W100 DW-40W255 DW-40W380 DW-40L348 DW-40L508

-30°C Biomedical Freezer

DW-30L420F DW-30L278 DW-30L508

-25°C Biomedical Freezer

Upright

DW-25L92 DW-25L262

Combined Refrigerator and Freezer

HYCD-282 HYCD-282A

Pharmacy Refrigerator

New Generation Under-counter Pharmacy Refrigerator

HYC-290/290(basic) HYC-390/390(basic) HYC-390F HYC-68 HYC-68A HYC-118 HYC-118A HYC-260 HYC-360 HYC-610

Haier Biomedical Models Line-up

Spark Free Freezer/Refrigerator

HYC-940 HYC-940F HYC-1378

HLR-118SF/FL HLR-310SF/FL DW-25L92SF/FL DW-30L278SF/FL

Laboratory Refrigerator

HLR-198F/310F

Vaccine & Icepack Freezer

HBD-116 HBD-286

SDD Vaccine Refrigerator

HTCD-160

SDD Vaccine Refrigerator

HTCD-90 HTC-40 HTC-110 HTD-40

Ice-lined Refrigerator

HBC-70 HBC-80 HBC-110 HBC-150 HBC-200 HBC-260 HBC-340

Blood Bank Refrigerator

Baskets Drawers

HXC-158 HXC-358 HXC-608 HXC-1308 HXC-158B HXC-358B HXC-608B HXC-1308B

Clean Bench

HCB-900V HCB-1300V HCB-1300H HCB-1600H

Biological Safety Cabinet

TYPE A2 New Generation TYPE B2

HR30-IIA2 HR40-IIA2 HR50-IIA2 HR900-IIA2 HR1200-IIA2 HR1200-IIA2-D HR1500-IIA2 HR40-IIB2

Liquid Nitrogen Container

YDS-35B-80 YDD-1800-610 YDZ-500