Haier

Haier Biomedical

2019 General Catalogue

2019-07

Qingdao Haier Biomedical Co.,Ltd.

Brand Building, Haier Industrial park, No. 1
Haier Road, Qingdao,266101,P.R.China
Tel: +86-0532-88936011 / 5955
Website: www.haiermedical.com

Note: If slight difference occurs between pictures and actual products, please refer to actual products. Our company reserves the right of final interpretation to this brochure and please contact with us for future information you might need.

Group Profile

Haier Group is a global leading provider of better-life solutions, and it's home appliances business brand has lead the way for nine consecutive years. In this technology driven era and the Internet of Things (IoT), Haier transformed from a traditional manufacturing enterprise into a cutting-edge, win-win IoT community ecology, taking the lead in igniting the Internet of Things economy.

The founder of the company, Mr. Zhang Ruimin, is the Chairman of the Board of Directors and Chief Executive Officer.

The company was founded on December 26, 1984. Under the guidance of the enterprise management philosophy and business philosophy of Zhang Ruimin, Haier Group focussed on development and continuously implemented strategic transformations to build the business. Applying a programme of strategies including brand building, diversification, internationalization, global branding and networking, Haier has developed from the collective small factory on the verge of collapse into a business ecosystem led by the Internet of Things.

In 2018, Haier Group's global turnover reached $38 billion US dollars with a year-on-year increase of 10%, and global profits and taxes were $4.8 billion with a year-on-year increase of 10%. In 2018, Haier Group's annual revenue was over $2 billion, increasing by 75% as compared with the previous figure.

Haier Group boasts 10 R&D centres, 24 industrial parks, 108 manufacturing plants and 66 marketing centres across the world.

Currently, Haier Group owns Haier, Casarte, GE Appliances, Fisher & Paykel, Hoover Candy, AQUA and Leader as its smart home appliances brands. In the IoT service area it's RRS, Haier Consumer Finance, COSMOPlat and Shunguang and Haier Bros in the cultural and creative industry. The global brand matrix reflects the strategy of "Smart Home Customization" in other words a smart home customized for a better life.

In the process of continuous entrepreneurial innovation, Haier adheres to the development line of "Human value comes first", implementing Haier's unique organisational model - RenDanHeYi for the IoT era, which is significantly different from the western traditional classic management model. The Haier and RenDanHeYi model is included in Harvard Business School syllabus in the US, IESE in Spain and IMD in Switzerland have added Haier to their case studies for teaching and researching purposes. Oliver Hart, the Nobel Prize winner in economics, and Gary Hamel spoke highly of it. Some management experts view Rendanheyi Model as the next social model.

In terms of IoT, COSMOPlat, the mass customization solution under the Rendanheyi Model, could be considered ahead of German Industry 4.0 and the American Industrial Internet model and it is determined by the IEEE (Institute of Electrical and Electronics Engineers) to take the lead of establishing an international standard for mass customization models. Making the Haier brand and Haier models the centre of the world stage in the era of the Internet of Things.

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

Haier Biomedical or Qingdao Haier Biomedical Co. Ltd. was founded to focus on the design, manufacturing, marketing and sales of low temperature storage equipment for biomedical samples. Like Haier Group, through the concept of IoT, the company has become a provider of comprehensive solutions for a number of common biotechnological challenges. Operating globally, Haier Biomedical provides complete storage solutions for a range of applications including biological sample storage, blood management, vaccines, medical product and reagent storage, in various sectors including academia, pharma, biotech and medical/clinical.

Within China, the company has responded to new national challenges to meet the high demands on blood supply management and vaccine safety, designing and implementing intelligent global networks and safe solutions for IoT-based blood management systems and vaccinations.

So far, the company's storage solutions for biological sample banks are found in strategic projects of national importance such as China's Bone Marrow Bank, China National GeneBank, and Chinese Genetic Resources Bank. Haier-supported sample storage facilities are also operating in many hospitals and it's low-temperature equipment and sample management systems have been installed in over five-hundred bio-storage banks. The company has significantly contributed to the advancement of China's biological technology and research.

Globally, it's solutions can be found in many prestigious and leading organisations in UK, Europe and Asia.

One significant contribution from Haier Biomedical is the development of solar-powered refrigeration units for areas that lacked electric power supply. Haier medical equipment and services are seen in more than seventy countries along the Belt and Road Initiative as it is the long-term supplier for the UN organizations.

In addition, with substantial research and development capabilities vested, the company developed a specialized refrigerator for aerospace application, supported an important national initiative for space exploration. The refrigerator was installed on China spacecraft Shenzhou 8,9,10 and 11 and launched into orbit successfully. Haier's ultra-low temperature freezers, loaded with the company's core refrigeration technology, are also on-board China's Xuelong ship which is part of a team working on Antarctic scientific survey and research. Haier's refrigeration unit was also installed in China's scientific submarine Rainbow Fish for deep sea expeditions.

Haier Biomedical has successfully created a new synergy by combining its manufacturing with IoT-based biological and medical sciences and practices. The company is the driving force of innovation in product design and application. Its low-temperature storage equipment works with IoT-based technology to make it possible for product real-time monitoring and tracking, intelligent and precise sample management. Haier Biomedical leads a new revolution in traditional manufacturing as well as innovative technology development.

CONTENT

Cryo 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 LN_2 refrigeration systems. By providing a storage environment about 20°C colder than the water recrystallization temperature, the freezer is suitable for storage of a varieties of biological samples such as viruses, erythrocytes, leukocytes, cutis, skeleton, sperms, oceanic products, special test materials and even electronic products for testing. It can be installed in institutions including blood banks, hospitals, epidemic prevention services, research institutes, and research laboratories.

Temperature Control

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

Refrigeration System

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

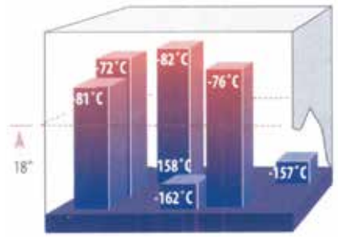
Other Features

- Large LED display for easy viewing
- Ambient range of 10 °C to 30°C
- LN_2 back up system compatible
- Remote monitoring
- Smart condenser fans for energy saving

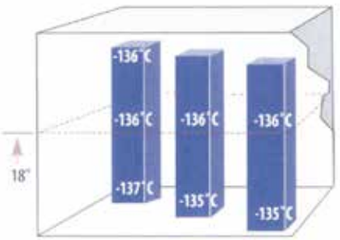
Safety Control System

- 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)

Specifications

Model			DW-150W200
Technical Data	Cabinet Type		Chest
	Climate Class		N
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		HFC
	Sound Level(dB(A))		67
Performance	Cooling Performance(°C)		-150
	Temperature Range(°C)		-126 ~-150
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply(V/HZ)		380/50
	Power(W)		2800
	Electrical Current(A)		11
Dimensions	Capacity(L/Cu.Ft)		200/7.1
	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
Alarms	High/Low Temperature		Y
	Hot Condenser		Y
	Power Failure		Y
	High/Low Voltage		Y
	Sensor Error		Y
	Low Battery		Y
	High Ambient Temperature		Y
	Door Ajar		N/A
Accessories	Caster		Y
	Foot		Y
	Porthole		Y/1
	Shelves/Inner doors		-/2
	USB Interface		N/A
	Remote Alarm		Y
	5V Power Supply Port		N/A
	Temperature Recorder		Optional
	Rs232/485 Port		Optional
	CO_2 Backup System		N/A
	LN_2 Backup System		Optional
Others	Certification		N/A

Product appearance and specifications are subject to change without notice

TwinCool
ULT Freezer

Scope of Application

The TwinCool ULT freezer can be used for the storage and protection of valuable samples which require strict and continuous storage conditions such as viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semens and other biological products and special materials. Designed to operate even in the event of a compressor failure. Applicable to many storage requirements found within blood storage facilities, hospitals, disease control and prevention centres, scientific research institutions, biomedical engineering institutes and electronics and chemical industry.

Advanced Hardware System

Smart Full-size Touch Screen

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

A Dual independent refrigeration systems, making the samples safer

The dual refrigeration systems run independently and alternately, and both of them can reach up to -80°C through independent refrigeration. In case that failure occurs to one system, the sample storage safety can still be guaranteed.

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

It uses auto-cascade hydrocarbon refrigeration technology for faster pulldown; it takes just 180 minutes to reduce the temperature from ambient 25°C to -80°C. Typically, the temperature in the freezer can quickly recover to - 75°C in 1 minute after the door being opened and closed so that the sample safety can be guaranteed.

C World-leading energy saving refrigeration technology

It adopts auto-cascade hydrocarbon refrigeration technology, three-layer energy saving and superinsulation design, which can increase the insulation efficiency by 30%, and reduce the energy by 50%. Power consumption is only 11kWh/day and the unit is certified by The National Quality Certification Center for energy saving and environmental protection.

IoT Software System

Simplified Sample Management Experience

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

Wireless Monitoring Connectivity

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

Friendly Design

Safe and secure

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

Low noise design , reducing the noise down to 53dB

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

Cloud data storage available

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

Optimized insulation

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

Specifications

	Model		DW-86L578ST		DW-86L728ST
Technical Data	Cabinet Type		Upright		Upright
	Climate Class		N		N
	Cooling Type		Direct Cooling		Direct Cooling
	Defrost Mode		Manual		Manual
	Refrigerant		HC		HC
	Sound Level(dB(A))		53	52	50
Performance	Cooling Performance(°C)		-86		-86
	Temperature Range(°C)		-40~-86		-40~-86
Control	Controller		Microprocessor		Microprocessor
	Display		Touch Screen LCD		Touch Screen LCD
Electrical Data	Power Supply(V/HZ)		208～230/50	120/60	208～230/50
	Power(W)		1400		1400
	Electrical Current(A)		10	14	10
Dimensions	Capacity(L/Cu.Ft)		578/20.4		728/25.7
	Net/Gross Weight(approx)	kg	325/355		350/385
		lbs	716.5/782.6		771.6/848.8
	Interior Dimension(W*D*H)	mm	620*716*1310		766*716*1310
		in	24.4*28.2*51.6		30.2*28.2*51.6
	Exterior Dimension(W*D*H)	mm	895*998*1980		1046*998*1980
		in	35.2*39.3*78.0		41.2*39.3*78.0
	Packing Dimension(W*D*H)	mm	950*1055*2150		1100*1105*2150
		in	37.4*41.5*84.6		43.3*43.5*84.6
	Container Load(20'/40'/40'H)		12/24/24		10/20/20
Alarms	High/Low Temperature		Y		Y
	Hot Condenser		Y		Y
	Power Failure		Y		Y
	High/Low Voltage		Y		Y
	Sensor Error		Y		Y
	Low Battery		Y		Y
	High Ambient Temperature		Y		Y
	Door Ajar		Y		Y
Accessories	Caster		Y		Y
	Foot		Y		Y
	Porthole		Y/2		Y/2
	Shelves/Inner Doors		3/4		3/4
	USB Interface		Y		Y
	Remote Alarm		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	UL,ENERGY STAR	CE

Product appearance and specifications are subject to change without notice

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

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

Maximum Energy Efficiency

12kWh

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

World-leading Energy Saving Refrigeration Technology

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

Reduced running costs

V·I·P

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

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

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

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

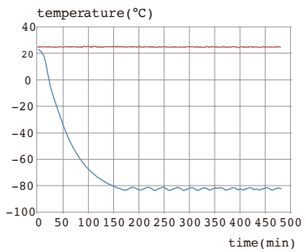
DW-86L578S

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

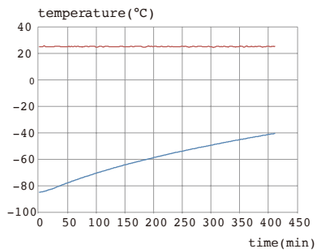
Improved Handle Design
Lockable handle safeguards your precious samples. A padlock can also be added for extra sample safety

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

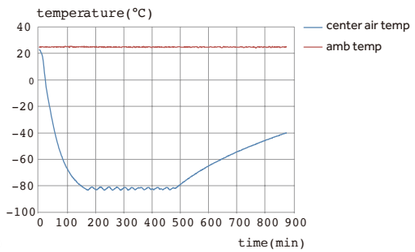
DW-86L578S | TYPICAL PERFORMANCE CHARACTERISTICS IN 25°C AMBIENT



Temperature Cool Down Curve



Temperature Recover Curve



Comprehensive Curve

Specifications

	Model		DW-86L578S	DW-86L728S
Technical Data	Cabinet Type		Upright	Upright
	Climate Class		N	N
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual
	Refrigerant		HC	HC
	Sound Level(dB(A))		53	50
Performance	Cooling Performance(°C)		-86	-86
	Temperature Range(°C)		-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply(V/HZ)		208～230/50	208～230/50
	Power(W)		1400	1400
	Electrical Current(A)		10	10
Dimensions	Capacity(L/Cu.Ft)		578/20.4	728/25.7
	Net/Gross Weight(approx)	kg	325/355	350/385
		lbs	716.5/782.6	771.6/848.8
	Interior Dimension(W*D*H)	mm	620*716*1310	766*716*1310
		in	24.4*28.2*51.6	30.2*28.2*51.6
	Exterior Dimension(W*D*H)	mm	895*998*1980	1046*998*1980
		in	35.2*39.3*78.0	41.2*39.3*78.0
	Packing Dimension(W*D*H)	mm	950*1055*2150	1100*1105*2150
		in	37.4*41.5*84.6	43.3*43.5*84.6
	Container load(20'/40'/40'H)		12/24/24	10/20/20
Alarms	High/Low Temperature		Y	Y
	Hot Condenser		Y	Y
	Power Failure		Y	Y
	High/Low Voltage		N/A	N/A
	Sensor Error		Y	Y
	Low Battery		Y	Y
	High Ambient Temperature		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y/2	Y/2
	Shelves/Inner doors		3/4	3/4
	USB Interface		Y	Y
	Remote Alarm		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

SmartFrequency Conversion ULT Freezer

Salvum Ultimate SmartFrequency Conversion ULT Freezer

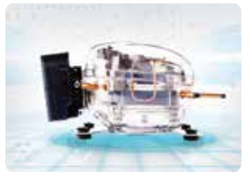
Scope of Application

It can be used for products which require strict storage conditions such as viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semen, biological products, ocean products, electronic devices and special materials. Suitable for long term storage, meeting the cold storage requirements found in hospitals, disease control and prevention centres, scientific research institutions biomedical engineering institutes, agriculture/ fishery companies as well as the electronics and chemical industry.

Advanced Hardware System

Smart Full-size Touch Screen

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



Hc & Variable Frequency Drive Refrigeration System for Additional Energy Saving

Advanced innovative design delivers excellent energy saving performance. Energy consumption is down to a single digit

IoT Software System

Simplified Sample Management Experience

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

Wireless Monitoring Connectivity

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

A Quicker product access, identification and retrieval

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

B 24-hour sample protection

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

C Super energy efficient with three environmentally friendly innovations

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

Friendly Design

Safe and secure

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

Low noise design , reducing the noise down to 53dB

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

Cloud data storage available

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

Optimized insulation

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

Salvum Ultimate SmartFrequency Conversion ULT Freezer

Specifications

	Model		DW-86L579BPT	DW-86L729BPT	DW-86L829BPT	DW-86L959BPT
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright
	Climate Class		N	N	N	N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC
	Sound Level(dB(A))		43.5	43.5	43.5	47
Performance	Cooling Performance(℃)		-86	-86	-86	-86
	Temperature Range(℃)		-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		Touch Screen LCD	Touch Screen LCD	Touch Screen LCD	Touch Screen LCD
Electrical Data	Power Supply(V/HZ)		100～230/50/60	100～230/50/60	208～230/50/60	208～230/50/60
	Power(W)		1100	1100	1100	1300
	Electrical Current(A)		6	6	6	7
Dimensions	Capacity(L/Cu.Ft)		579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight(approx)	kg	325/355	350/385	380/415	450/485
		lbs	716.5/782.6	771.6/848.8	837.7/914.9	992.1/1069.2
	Interior Dimension(W*D*H)	mm	620*716*1310	766*716*1310	870*716*1310	1016*716*1310
		in	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimension(W*D*H)	mm	895*998*1980	1046*998*1980	1145*998*1980	1296*998*1980
		in	35.2*39.3*78.0	41.2*39.3*78.0	45.1*39.3*78.0	51.0*39.3*78.0
	Packing Dimension(W*D*H)	mm	950*1055*2150	1100*1105*2150	1190*1045*2150	1365*1105*2150
		in	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6	53.7*43.5*84.6
	Container load(20'/40'/40'H)		12/24/24	10/20/20	8/20/20	8/16/16
Alarms	High/Low Temperature		Y	Y	Y	Y
	Hot Condenser		Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y
	High/Low Voltage		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Low Battery		Y	Y	Y	Y
	High Ambient Temperature		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
Accessories	Caster		Y	Y	Y	Y
	Foot		Y	Y	Y	Y
	Porthole		Y/2	Y/2	Y/2	Y/2
	Shelves/Inner Doors		3/4	3/4	3/4	3/4
	USB Interface		Y	Y	Y	Y
	Remote Alarm		Y	Y	Y	Y
	5V Power Supply Port		Y	Y	Y	Y
	Temperature Recorder		Optional	Optional	Optional	Optional
	Rs232/485 Port		Optional	Optional	Optional	Optional
	CO_2 Backup System		Optional	Optional	Optional	Optional
	LN_2 Backup System		Optional	Optional	Optional	Optional
Others	Certification		CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR

Product appearance and specifications are subject to change without notice

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

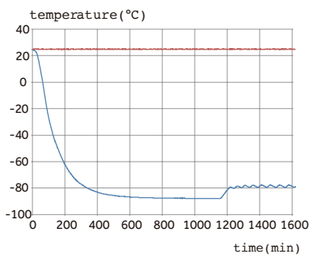
DW-86L829BP

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

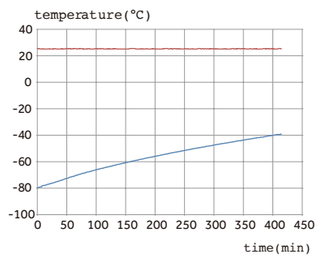
Improved Handle Design
Lockable handle with unique key prevents other Haier freezer owners access to your precious samples, also comes with space for a padlock for that extra security

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

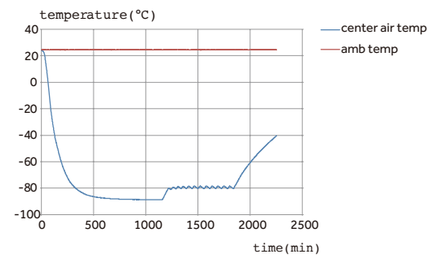
DW-86L829BP | TYPICAL PERFORMANCE CHARACTERISTICS IN 25°C AMBIENT



Temperature Cool Down Curve



Temperature Recover Curve



Comprehensive Curve

Salvum Ultimate SmartFrequency Conversion ULT Freezer

Specifications

	Model		DW-86L579BP	DW-86L729BP	DW-86L829BP	DW-86L959BP
Technical Data	Cabinet Type		Upright	Upright	Upright	Upright
	Climate Class		N	N	N	N
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC
	Sound Level (dB(A))		43.5	43.5	43.5	47
Performance	Cooling Performance(°C)		-86	-86	-86	-86
	Temp Range(°C)		-40～-86	-40～-86	-40～-86	-40～-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LED	LED	LED
Electrical Data	Power Supply(V/Hz)		100～230/50/60	100～230/50/60	208～230/50/60	208～230/50/60
	Power(W)		1100	1100	1100	1300
	Electrical Current(A)		6	6	6	7
Dimensions	Capacity(L/Cu.Ft)		579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight(approx)	kg	325/355	350/385	380/415	450/485
		lbs	716.5/782.6	771.6/848.8	837.7/914.9	992.1/1069.2
	Interior Dimensions(W*D*H)	mm	620*716*1310	766*716*1310	870*716*1310	1016*716*1310
		in	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimensions(W*D*H)	mm	895*998*1980	1046*998*1980	1145*998*1980	1296*998*1980
		in	35.2*39.3*78.0	41.2*39.3*78.0	45.1*39.3*78.0	51.0*39.3*78.0
	Packing Dimension(W*D*H)	mm	950*1055*2150	1100*1105*2150	1190*1045*2150	1365*1105*2150
		in	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6	53.7*43.5*84.6
	Container Load(20'/40'/40'H)		12/24/24	10/20/20	8/20/20	8/16/16
Alarms	Remote Alarm		Y	Y	Y	Y
	High/Low Temp		Y	Y	Y	Y
	Hot Condenser		Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y
	Low Battery		Y	Y	Y	Y
	High Ambient Temp		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
Accessories	Caster		Y	Y	Y	Y
	Foot		Y	Y	Y	Y
	Porthole		Y/2	Y/2	Y/2	Y/2
	Shelves/ Inner Doors		3/4	3/4	3/4	3/4
	USB Interface		Y	Y	Y	Y
	5V Power Supply Port		Y	Y	Y	Y
	Temp Recorder		Optional	Optional	Optional	Optional
	RS232/485 Port		Optional	Optional	Optional	Optional
	CO_2 Backup System		Optional	Optional	Optional	Optional
	LN_2 Backup System		Optional	Optional	Optional	Optional
Other	Certification		CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR	CE,UL,ENERGY STAR

Product appearance and specifications are subject to change without notice

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

Circular- chart Recorder (Optional)

- Front-mounted.
- For independent temperature monitoring.

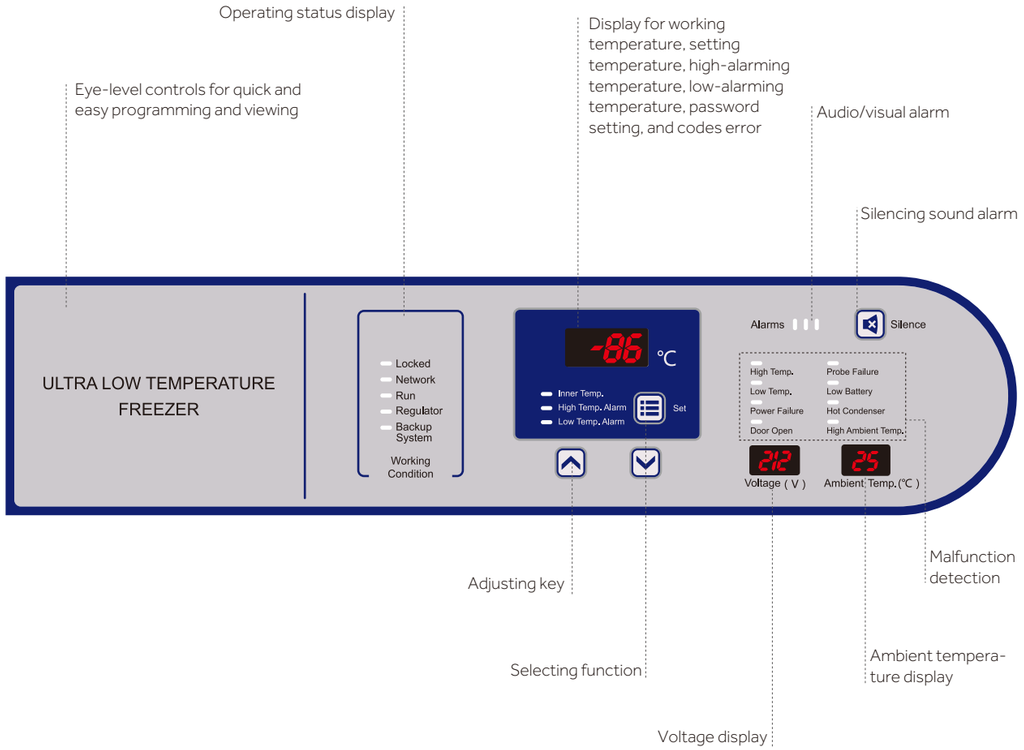
Pressure Equalization Port

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

High Efficiency Refrigeration Components

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

Two port holes for ease of temperature monitoring



Specifications

Alarm	Alarm Triggering Condition
High Temperature	Temperature reaches the warm alarm limit
Low Temperature	Temperature reaches the low alarm limit
Power Failure	Equipment loses power
Door Ajar	Door opening time secedes set time, settable between 0 and 20 minutes
Sensor Error	E0.Ambient sensor fails E1.Condenser sensor fails E2.Main cabinet temperature control sensor fails E3.Heat exchanger sensor fails E4.Heat exchanger temperature fails
Low Battery	Battery capacity runs low or battery switch is not turned on
Hot Condenser	1. Condensers filter element is clogged 2. Ambient temperature is too high
High Ambient Temperature	Ambient temperature exceeds 32°C

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

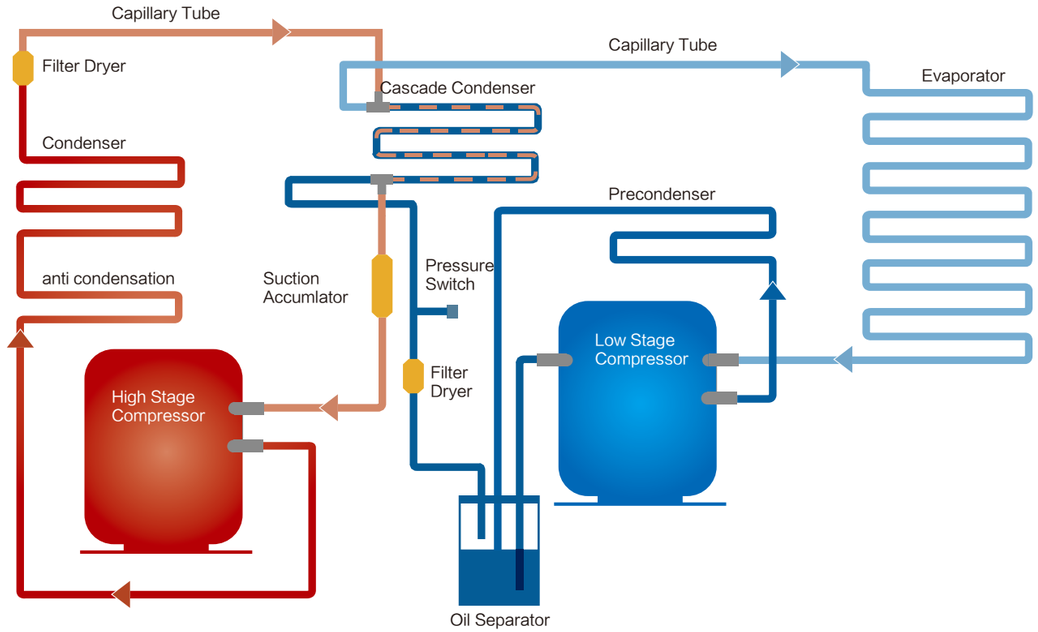
Energy saving

- 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

Specifications

Model		HBX-IC	HBX-IB
Technical Data	Cabinet Type	Horizontal	
	Climate Class	N	
	Cooling Type	Direct cooling	
	Refrigerant	CO_2	
Performance	Cooling Performance(°C)	-70	
	Temperature Range(°C)	-40~-70	
Control	Controller	Thermostat	
	Display	LED	
Electrical Data	Power Supply(V/Hz)	220~240/50	208~230/60 115/60
	Power(W)	20	
	Electrical Current(A)	0.25	
Dimensions	Net/Gross Weight(approx)	11.2/14	
		24.7/30.86	
	Exterior Dimensions(W*D*H)	200*400*160	
		7.8*15.7*6.3	
	Packing Dimensions(W*D*H)	370*530*330	
		14.6*20.9*13	
Alarms	CO_2 Margin Insufficient Alarm	Y	
	Low Battery Alarm	Y	
	Sensor Error Alarm	Y	
	Main Power Off Alarm	Y	
	Charge Indicator	Y	
	CO_2 Injection Test Button	Y	
Accessories	Foot	4	
Others	Certification	CE	UL

Product appearance and specifications are subject to change without notice

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

Specifications

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	
		33.1/37.5	
	Exterior Dimensions（W*D*H）	360*305*445	
		14.2*12.0*17.5	
	Packing Dimensions（W*D*H）	417*357*698	
		16.4*14.1*27.5	
Alarms	Low Battery Alarm	Y	
	Sensor Error Alarm	Y	
	Main Power Off Alarm	Y	
	Charge Indicator	Y	
Others	Certification	CE	UL

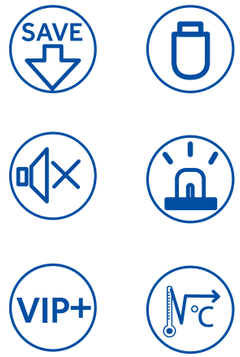
Product appearance and specifications are subject to change without notice

Salvum Ultimate ULT Freezer

This product line is designed and manufactured for long term storage of various biological products, including viruses, germs, erythrocytes and leucocytes. Applications can be found in blood banks, hospitals, epidemic prevention services, research institutes, biological engineering institutes, laboratories in electronic and chemical plants.
Haier Salvum brand of ULT freezers has been designed to deliver energy savings and reduced carbon footprint. This range uses environmentally safe hydrocarbon refrigerants and high efficiency fan motors to maximize the cooling ability of the system and reduce energy consumption. While providing sample safety, the freezer design makes energy savings possible for laboratories.

Advantages

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



Safety

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

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

Global Most Energy Efficiency

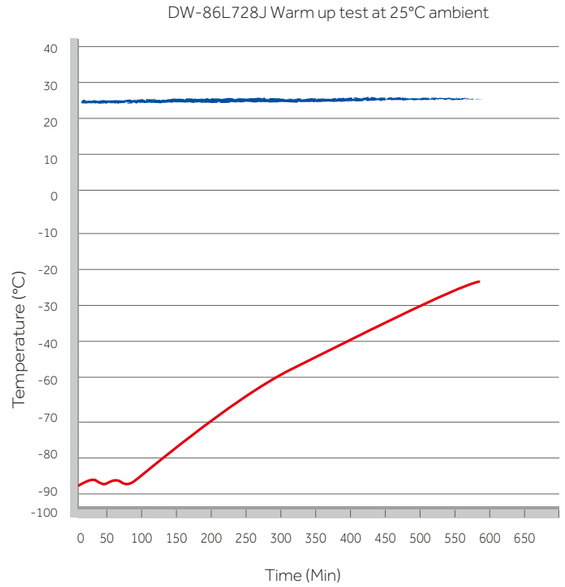
Typical electric cost of a 700-liter ULT freezer

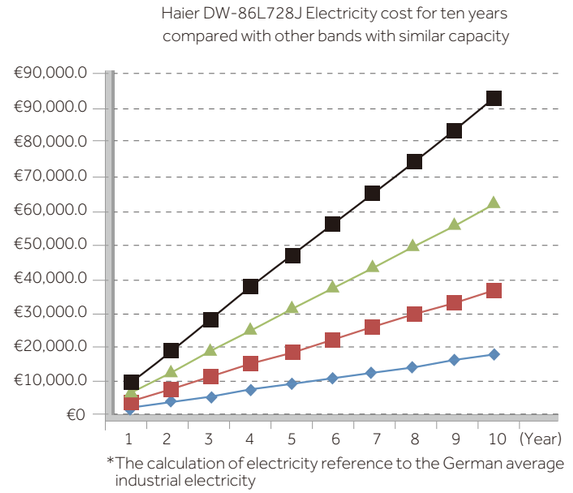
Model	Power Consumption (Kwh/Day)	Ambient Temperature	Electricity Charge (1year)	Electricity Charge (5year)	Electricity Charge (10year)
DW-86L728J	10.5*	25°C	€ 1,724.6	€ 8,623.1	€ 17,246.3
Brand P	11.5	22~26°C	€ 1,888.9	€ 9,444.4	€ 18,888.8
Brand N	15.2	23°C	€ 2,496.6	€ 12,483.0	€ 24,966.0
Brand T	19.0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

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





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

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

Specifications

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

-86°C ULT Freezer

Specifications








	Model	DW-86L338	DW-86L338A	DW-86L338J	DW-86L338JA	DW-86L388A	DW-86L388J	DW-86L486E	DW-86L490J	DW-86L490JA	DW-86L578J	DW-86L578JA	DW-86L628E
Technical Data	Cabinet Type	Upright		Upright		Upright	Upright	Upright	Upright		Upright		Upright
	Climate Class	N		N		N	N	N	N		N		N
	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	HFC		HC		HFC	HC	HC	HC		HC		HC
	Sound level(dB(A))	50		50		50	50	49	50		50		49
Performance	Cooling Performance(℃)	-86		-86		-86	-86	-86	-86		-86		-86
	Temperature Range(℃)	-40～-86		-40～-86		-40～-86	-40～-86	-40～-86	-40～-86		-40～-86		-40～-86
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)	220～240/50	208～230/60	220～240/50	115/60	208～230/60	220～240/50	220～240/50	220～240/50	208～230/60	220～240/50	115/60	208～230/60	220～240/50
	Power(W)	900	1000	650	700	1000	1000	650	1000	900	1000	750	1000	1000	1200
	Electrical Current(A)	7.5	8	7.5	11	7.5	8	8	10	8	8	9	18	9	11
Dimensions	Capacity(L/Cu.Ft)	338/11.9		338/11.9		388/13.7	388/13.7	486/17.1	490/17.3		578/20.4		628/22.2
	Net/Gross Weight (approx) kg	238/278		238/278		255/286	255/286	290/310	295/335		300/330		301/323
	Net/Gross Weight (approx) lbs	524.7/612.9		524.7/612.9		562.2/630.5	562.2/630.5	639.3/683.4	650.4/738.5		661.4/727.5		664.0/712.0
	Interior Dimension (W*D*H) mm	465*630*1165		465*630*1165		465*630*1310	465*716*1310	590*630*1310	590*630*1310		620*716*1310		760*630*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	23.3*24.8*51.6	23.2*24.8*51.6		24.4*28.2*51.6		29.9*24.8*51.6
	Exterior Dimension (W*D*H) mm	812*893*1846		812*893*1846		812*893*1980	830*998*1980	945*900*1980	860*900*1980		895*980*1960		1035*900*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	32.7*39.3*78.0	37.2*35.4*78.0	33.9*35.4*78.0		35.4*38.6*77.2		40.7*35.4*78.0
	Packing Dimension (W*D*H) mm	875*970*2010		875*970*2010		875*970*2135	893*1078*2135	995*995*2150	925*985*2150		950*1055*2125		1080*965*2150
	Packing Dimension (W*D*H) in	34.4*38.2*79.1		34.4*38.2*79.1		34.4*38.2*84.1	35.2*42.4*84.1	39.2*39.2*84.6	36.4*38.8*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		12/24/24		12/24/24
Alarms	High/Low Temperature	Y		Y		Y	Y	Y	Y		Y		Y
	Hot Condenser	Y		Y		Y	Y	Y	Y		Y		Y
	Power Failure	Y		Y		Y	Y	Y	Y		Y		Y
	High/Low Voltage	Y		N/A		Y	N/A	N/A	N/A		N/A		N/A
	Sensor Error	Y		Y		Y	Y	Y	Y		Y		Y
	Low Battery	Y		Y		Y	Y	Y	Y		Y		Y
	High Ambient Temperature	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/1		Y/2		Y/1	Y/2	Y/2	Y/2		Y/2		Y/2
	Shelves/Inner doors	3/2		3/2		3/2	3/2	3/4	3/4		3/4		3/4
	USB Interface	Y		Y		Y	Y	Y	Y		Y		Y
	Remote Alarm	Y		Y		Y	Y	Y	Y		Y		Y
	5V Power Supply Port	N/A		Y		N/A	Y	Y	Y		Y		Y
	Temperature Recorder	Optional		Optional		Optional	Optional	Optional	Optional		Optional		Optional
	Rs232/485 Por	Optional		Optional		Optional	Optional	Optional	Optional		Optional		Optional
	CO_2 Backup System	Optional		Optional		Optional	Optional	Optional	Optional		Optional		Optional
	LN2 Backup System	Optional		Optional		Optional	Optional	Optional	Optional		Optional		Optional
Others	Certification	CE	UL	CE	UL	CE	CE	CE	CE	UL	CE,ENERGY STAR	UL,ENERGY STAR	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

Specifications



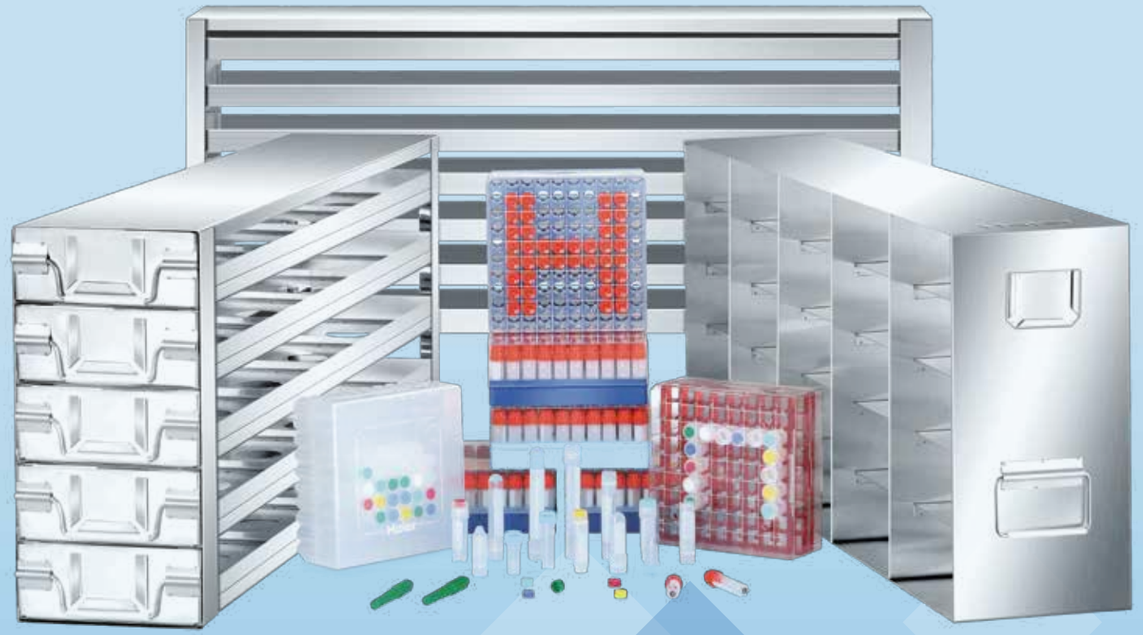
	Model	DW-86L728D	DW-86L728J	DW-86L728JA	DW-86L828
Technical Data	Cabinet Type	Upright	Upright		Upright
	Climate Class	N	N		N
	Cooling Type	Direct cooling	Direct cooling		Direct cooling
	Defrost Mode	Manual	Manual		Manual
	Refrigerant	HFC	HC		HFC
	Sound level(dB(A))	50	50		49
Performance	Cooling Performance(℃)	-86	-86		-86
	Temperature Range(℃)	-40～-86	-40～-86		-40～-86
Control	Controller	Microprocessor	Microprocessor		Microprocessor
	Display	LED	LED		LED
Electrical Data	Power Supply(V/HZ)	220～240/50	220～240/50	115/60	208～230/60	220～240/50	208～230/60
	Power(W)	1200	1000	1000	1000	1200	1200
	Electrical Current(A)	9	10	18	10	9	9
Dimensions	Capacity(L/Cu.Ft)	728/25.7	728/25.7			828/29.2	
	Net/Gross Weight (approx) kg	345/385	345/385			380/410	
	Net/Gross Weight (approx) lbs	760.6/848.8	760.6/848.8			837.7/903.9	
	Interior Dimension (W*D*H) mm	766*716*1310	766*716*1310			870*716*1310	
	Interior Dimension (W*D*H) in	30.2*28.2*51.6	30.2*28.2*51.6			34.3*28.2*51.6	
	Exterior Dimension (W*D*H) mm	1041*980*1980	1041*980*1980			1145*980*1980	
	Exterior Dimension (W*D*H) in	41.0*38.6*78.0	41.0*38.6*78.0			45.1*38.6*78.0	
	Packing Dimension (W*D*H) mm	1090*1050*2150	1090*1050*2150			1190*1045*2150	
	Packing Dimension (W*D*H) in	42.9*41.3*84.6	42.9*41.3*84.6			46.9*41.1*84.6	
	Container load(20'/40'/40'H)	12/20/20	12/20/20			8/20/20	
Alarms	High/Low Temperature	Y	Y			Y	
	Hot Condenser	Y	Y			Y	
	Power Failure	Y	Y			Y	
	High/Low Voltage	Y	N/A			Y	
	Sensor Error	Y	Y			Y	
	Low Battery	Y	Y			Y	
	High Ambient Temperature	Y	Y			Y	
	Door Ajar	Y	Y			Y	
Accessories	Caster	Y	Y			Y	
	Foot	Y	Y			Y	
	Porthole	Y/2	Y/2			Y/1	
	Shelves/Inner doors	3/4	3/4			3/4	
	USB Interface	Y	Y			Y	
	Remote Alarm	Y	Y			Y	
	5V Power Supply Port	Y	Y			Y	
	Temperature Recorder	Optional	Optional			Optional	
	Rs232/485 Interface	Optional	Optional			Optional	
	CO_2 Backup System	Optional	Optional			Optional	
	LN_2 Backup System	Optional	Optional			Optional	
Others	Certification	CE	CE,ENERGY STAR	CE	UL	CE	UL




	Model	DW-86L828J	DW-86L828JA	DW-86W100	DW-86W100J	DW-86W420J	DW-86W420JA
Technical Data	Cabinet Type	Upright		Chest	Chest	Chest	
	Climate Class	N		N	N	N	
	Cooling Type	Direct cooling		Direct cooling	Direct cooling	Direct cooling	
	Defrost Mode	Manual		Manual	Manual	Manual	
	Refrigerant	HC		HFC	HC	HC	
	Sound level(dB(A))	50	51.5	49	49	50	
Performance	Cooling Performance(℃)	-86		-86	-86	-86	
	Temperature Range(℃)	-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	220～240/50	115/60	220～240/50	220～240/50	208～230/60
	Power(W)	1000	1100	650	650	550	1000	
	Electrical Current(A)	10	10	7.5	12	4	7.5	
Dimensions	Capacity(L/Cu.Ft)	828/29.2		100/3.5		100/3.5	420/14.8	
	Net/Gross Weight (approx) kg	380/410		138/160		138/160	310/357	
	Net/Gross Weight (approx) lbs	837.7/903.9		304.2/352.7		304.2/352.7	683.4/787.0	
	Interior Dimension (W*D*H) mm	870*716*1310		470*450*480		470*450*480	1367*462*652	
	Interior Dimension (W*D*H) in	34.3*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		769*825*1120		769*825*1120	2130*870*1020	
	Exterior Dimension (W*D*H) in	45.1*38.6*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		845*855*1250		845*855*1250	2195*895*1130	
	Packing Dimension (W*D*H) in	46.9*41.1*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		12/24/48		12/24/48	6/12/24	
Alarms	High/Low Temperature	Y		Y		Y	Y	
	Hot Condenser	Y		Y		Y	Y	
	Power Failure	Y		Y		Y	Y	
	High/Low Voltage	N/A		Y		N/A	N/A	
	Sensor Error	Y		Y		Y	Y	
	Low Battery	Y		Y		Y	Y	
	High Ambient Temperature	Y		Y		Y	Y	
	Door Ajar	Y		N/A		Y	Y	
Accessories	Caster	Y		Y		Y	Y	
	Foot	Y		Y		Y	Y	
	Porthole	Y/2		Y/1		Y/1	Y/1	
	Shelves/Inner doors	3/4		-/1		-/1	-/3	
	USB Interface	Y		N/A		Y	Y	
	Remote Alarm	Y		Y		Y	Y	
	5V Power Supply Port	Y		N/A		N/A	N/A	
	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,ENERGY STAR	UL	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.

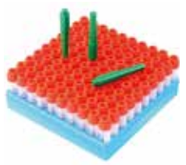
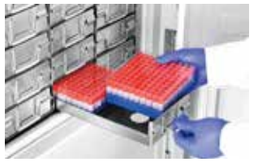
Certifications:

- 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 transpor tation 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;

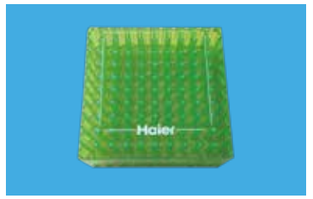
Freezer Boxes

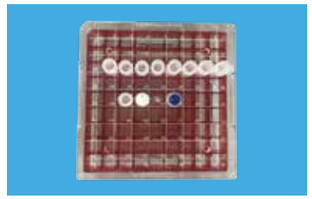
Various sizes of boxes are available for storing cryo tubes commonly required in Biobanks.

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.

Specifications

Product	Model	Rack Description	Rack Dimension(W*D*H)	ULT Freezer Models
2 inch stainless stell rack	DCJ-44-A(2014)	2 inch stainless steel rack 4*4 (2 inch box *16)	138*565*240(mm) 5.4*22.9*9.4(in)	DW-86L338/338J/490J
	DCJ-44-B(2014)	2 inch stainless steel drawer rack 4*4 (2 inch box *16)	140*565*240(mm) 5.5*22.2*9.4(in)	
	DCJ-54-A(2014)	2 inch stainless steel rack 5*4 (2 inch box *20)	138*565*293(mm) 5.4*22.2*11.5(in)	DW-86L338/388A/486/486E/ 490/628/628E
	DCJ-54-B(2014)	2 inch stainless steel drawer rack 5*4 (2 inch box *20)	140*565*293(mm) 5.5*22.2*11.5(in)	
	DCJ-55-A(2014)	2 inch stainless steel rack 5*5 (2 inch box *25)	138*685*293(mm) 5.4*27.0*11.5(in)	DW-86L388J/578/578S/578ST/578J/5 79BP/579BPT/728/728S/728ST/728J/ 729BP/729BPT/828/828J/829BP/829B PT/959BP/959BPT
	DCJ-55-B(2014)	2 inch stainless drawer rack 5*5 (2 inch box *25)	140*685*293(mm) 5.5*27.0*11.5(in)	
	DCJ-08-A(2014)	2 inch stainless steel drawer rack 8*1 (2 inch box *8)	140*140*480(mm) 5.5*5.5**18.9(in)	DW-86W100/DW-86W100J
	DCJ-10-A(2014)	2 inch stainless steel rack 10*1 (2 inch box *10)	140*140*600(mm) 5.5*5.5*23.6(in)	DW-86W420J/DW-150W200

Haier ULT Freezer + Consumables Solutions

Specifications

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 staninless steel side-access freezer rack 5*4(2 inch freezer box X20 units)	6	120	12000
	DCJ-54-B(2014) (Middle ,2 layers)	2 inch staninless steel sliding-drawer freezer rack 5*4(2 inch freezer box X20 units)	6	120	12000
	DCJ-44-A(2014) (Top and bottom layers)	2 inch staninless steel side-access freezer rack 4*4(2 inch freezer box X16 units)	6	96	9600
	DCJ-44-B(2014) (Top and bottom layers)	2 inch staninless steel sliding-drawer freezer rack 4*4(2 inch freezer box X 16 units)	6	96	9600
DW- 86L388A	DCJ-54- A (2014)	2 inch stainless steel side-access freezer rack 5*4(2 inch freezer box x20 units)	12	240	24000
	DCJ-54- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*4(2 inch freezer box x20 units)	12	240	24000
DW- 86L388J	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5(2 inch freezer box x25 units)	12	300	30000
	DCJ-55- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*5(2 inch freezer box x25 units)	12	300	30000
DW-86L486/486E	DCJ-54- A (2014)	2 inch stainless steel side-access freezer rack 5*4(2 inch freezer box x20 units)	16	320	32000
	DCJ-54- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*4(2 inch freezer box x20 units)	16	320	32000
DW-86L490J	DCJ-54- A (2014) (Top 2 layers)	2 inch stainless steel side-access freezer rack 5*4(2 inch freezer box x20 units)	8	160	16000
	DCJ-54- B (2014) (Top 2 layers)	2 inch stainless steelsliding-drawer freezer rack 5*4(2 inch freezer box x20 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 x16 units)	8	128	12800
	DCJ-44- B (2014) (Bottom 2 layers)	2 inch stainless steelsliding-drawer freezer rack 4*4(2 inch freezer box x16 units)	8	128	12800
DW-86L578J/578/578S/ 578ST/579BP/579BPT	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5(2 inch freezer box x25 units)	16	400	40000
	DCJ-55- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*5(2 inch freezer box x25 units)	16	400	40000
DW-86L628/628E	DCJ-54- A (2014)	2 inch stainless steel side-access freezer rack 5*4(2 inch freezer box x20 units)	20	400	40000
	DCJ-54- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*4(2 inch freezer box x20 units)	20	400	40000
DW-86L728/728J/728S/ 728ST/729BP/729BPT	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5(2 inch freezer box x25 units)	20	500	50000
	DCJ-55- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*5(2 inch freezer box x25 units)	20	500	50000
DW-86L828/828J/ 829BP/829BPT	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5(2 inch freezer box x25 units)	24	600	60000
	DCJ-55- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*5(2 inch freezer box x25 units)	24	600	60000
DW-86L959BP/959BPT	DCJ-55- A (2014)	2 inch stainless steel side-access freezer rack 5*5(2 inch freezer box x25 units)	28	700	70000
	DCJ-55- B (2014)	2 inch stainless steelsliding-drawer freezer rack 5*5(2 inch freezer box x25 units)	28	700	70000
DW- 86W100/100J	DCJ-08- A (2014)	2 inch chest-type freezer rack (2 inch freezer box x8 units)	9	72	7200
DW-86W420J	DCJ-10- A (2014)	2 inch chest-type freezer rack (2 inch freezer box x10 units)	27	270	27000
DW-150W200	DCJ-10- A (2014)	2 inch chest-type freezer rack (2 inch freezer box x10 units)	12	120	12000

Biomedical Freezer

-60°C Freezer

The series of freezers is designed for storage of fishery products such as tuna, Australian lobster, salmon, south American shrimps, Argentina red shrimp, top quality beef, kanpachi, octopus, yellow tail, bonito fish, grouper, and fugu rubripes. This is a necessary requirement for fishery products for human consumption and hence these freezers are popular among professional oceanic fisherman, sea food distributors, specialty sea food stores and sushi restaurants and commercial food manufacturers.

Dual-seal design

Efficient and reliable fan

German made energy efficient compressor

Digital temperature control display

Quickly freeze sea food products to retain their original taste, structure and freshness.

Low noise output, noise cancelling technology yields a smoother operation and a sound level of less than 43dB(A).

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.

Specifications

	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(°C)		-60	-60	-60
	Temperature Range(°C)		-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
Dimensions	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 Dimensions (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

-40°C Biomedical Freezer(Double Doors Type)

The double door -40°C biomedical freezer models offer a large capacity storage space with rapid cooling. Integrated design of cold shelf and evaporator provides additional refrigeration efficiency. Designed to store vaccines, blood plasma and many other biological materials. Installations can be found in research institutions and clinical sites in the life science, pharma, biotech, medical and electronics sectors.
The DW-40L348 is 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.

DW-40L508

DW-40L348

Control panel

Drawer

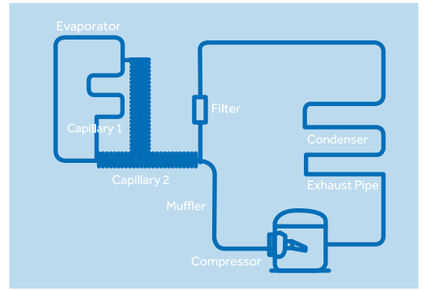
Shelf

-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.

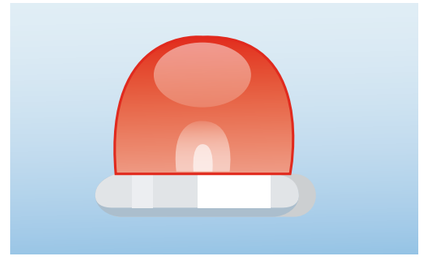
Reliability and Key Features

- 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
- 90mm 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
- LCD digital display for clear observation
- Wide voltage tolerance design with applicable voltage range of 198~252 V/AC

Inner

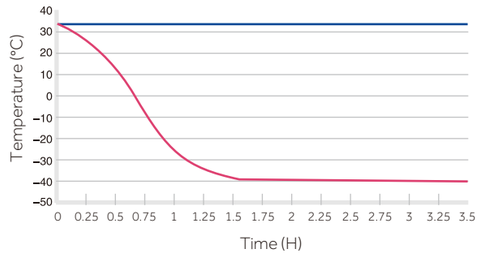
Safety

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

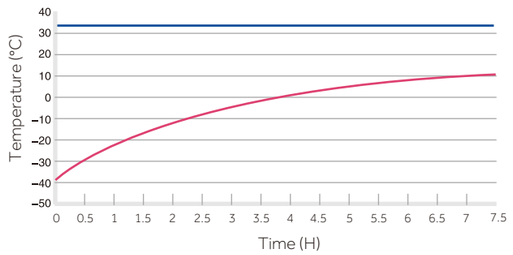
Ergonomic Design

- 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

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








Specifications

	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	CFC-Free	HC	HC	CFC-Free	CFC-Free		CFC-Free	CFC-Free
	Sound Level(dB(A))	40	44		40	44	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 Touchscreen		LCD Touchscreen	LCD Touchscreen
Electrical Data	Power Supply(V/Hz)	220~240/50	220~240/50/60	115/60	220~240/50	220~240/50/60	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	370	280	285	430	260	255	410	550
	Electrical Current(A)	0.5	4.8	7.5	2.9	5.1	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 Dimensions (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 Dimensions (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 Dimensions (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 Dimensions (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 Dimensions (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 Dimensions (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
Alarms	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

Typical Installation and Application

Suitable for sample and storage within blood banks, hospitals, disease control centers, research institutes, electr-onic, chemical and other industries, cryopreservation of plasma, biologics and other products, and cold tests for components and materials.

DW-30L818BP

Key Features

Energy saving with variable speed inverter technology
Optimized refrigeration system with a high efficiency inverter compressor to reduce energy consumption.

Excellent temperature uniformity in a large storage space
Features built-in evaporator, large storage space and adjustable shelf, providing faster temperature pulldown and a better temperature uniformity of set point ±3°C.

Low noise
Sound reduction design lowers the sound level to 37dB(A) at 220V/50Hz.

Environment Friendly
1)HC refrigeration system contains zero chlorine and fluorine,which is better for the environment.
2)Urethane foam insulation complies with European ROHS regulation.

-30°C Biomedical Freezer

Product Advantages

Ergonomic Design: document holding compartment for storing size A4 paper and pens.

Optional USB port allows users to download temperature data saved up to 10 years for compliance and auditing purposes.

Double door seals for better insulation performance.

Microprocessor temperature control: LED displays cabinet temperature with 0.1°Cresolution, ambient temperature, and input voltage.

Pressure equalization port for easy door opening.

Ergonomic handle design: easy access to storage space, built in lock and padlock features.

Casters and leveling legs for ease of maneuvering and positioning.

Inner door design reduces loss of cold air to improve energy efficiency and stable temperature.

Power coating galvanized interior with large round corner design， corrosion resistance and easy to clean.

Adjustable shelves made with stainless steel or coated steel.

-30°C Biomedical Freezer

Microprocessor Control System

·Microprocessor-based temperature control. Large LED displays cabinet temperature with 0.1 C resolutions. The temperature range is -10 C to -30 C.
·Cabinet temperature, ambient temperature and voltage are shown on the panel.
·Alarm conditions include high and low temperature, sensor error, power failure, low battery, door ajar and high ambient.
·Alarm modes are audible and flashing lights. Remote alarm terminals are available.
·Battery supports display and alarm system for forty eight hours after power outage.
·Optional features are IoT module, USB port, temperature recorder and NFC swipe card functions.

Insulation

·70 mm thick insulation.
·Optional inner doors for better thermal efficiency.

Porthole

·Two standard portholes allow ease of temperature testing.

Security Lock

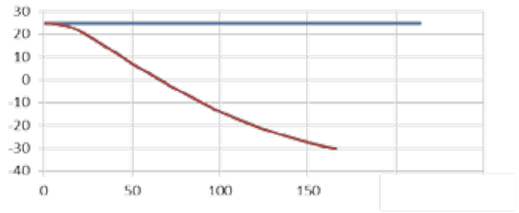
·Padlock is standard. Magnetic lock is optional for added protection and security

Temperature Recorder

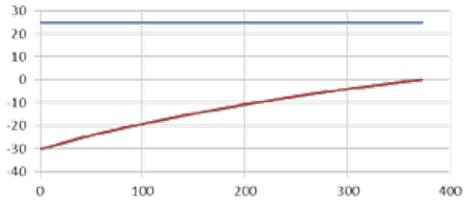
·Optional temperature recorder for temperature recording and compliance.

Typical Performance Characteristics in 25°C ambient

Ambient Temp.
Center Temp.



Time (min)



Time (min)

-30°C Biomedical Freezer

Specifications

Model			DW-30L818BP
Technical Data	Cabinet Type		Upright
	Climate Class		4
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level(dB(A))		37(220V/50Hz)
Performance	Cooling Performance(°C)		-30
	Temp Range(°C)		-10~-30
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply(V/Hz)		100～230/50/60
	Power(W)		470W(220V/50Hz)
	Electrical Current(A)		2.5A(220V/50Hz)
	Capacity(L/Cu.Ft)		818
Dimensions	Net/Gross Weight(approx)	kg	210/240
		lbs	463/529.1
	Interior Dimension(W*D*H)	mm	750*755*1460
		in	29.5*29.7*57.5
	Exterior Dimension(W*D*H)	mm	988*950*1979
		in	38.9*37.4*77.9
Alarms	Remote Alarm		Y
	High/Low Temp		Y
	Hot Condenser		/
	Power Failure		Y
	High/Low Voltage		/
	Sensor Error		Y
	Low Battery		Y
	High Ambient Temp		Y
Accessories	Door Ajar		Y
	Caster		Y
	Foot		Y
	Porthole		Y(2)
	Shelves/ Inner Doors		5/3(Optional)
	USB Interface		Optional
	5V Power Supply Port		Optional
	Temp Recorder		Optional
	RS485 Port		Y
	CO_2 Backup System		/
	LN_2 Backup System		/
Other	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 maximum temperature stability and minimize energy use
- High-performance refrigeration system: achieves excellent temperature uniformity with intelligent operation control at -30°C
- Microprocessor control with digital display: 0.1°C control increments, 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)

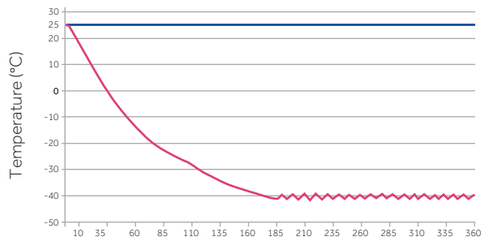
Safety

- Alarm system includes audible and visual alerts. Alarms include high and low temperature, sensor error, power failure, door ajar, low battery and high ambient temperature. Remote contacts are standard
- Backup battery provides continuous monitoring and displays the interior temperature for up to 48hs in the event of a mains power failure
- Standard USB port on DW-30L420F allows users to download temperature data
- Lockable door with padlock for added sample security

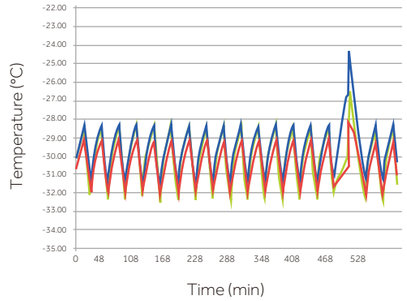
Ergonomic Design

- Self-closing door with 90°stay-open feature conserves energy and helps maintain temperature uniformity to protect your valuable samples
- Corrosion-free interior brushed stainless steel liner and exterior coated steel plate
- 5 adjustable stainless steel shelves and optional drawer
- Casters and levelling legs, 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 Biomedical -30 °C low temperature freezers: energy-saving Hydrocarbon refrigerants, safe and reliable with smart control.

DW-30L278

DW-30L508

Application

Biomedical and life science laboratories within blood banks, hospitals, disease control centres, research institutes as well as electronics and chemical industries. Used for 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 refrigeration system**
  Industrial grade energy-saving compressor and optimized cooling system reduces power consumption by more than 55% compared with older models.
- **Green and environmentally friendly**
  Hydrocarbon refrigerant compressor system and use of hydrocarbon refrigerants makes the refrigeration system completely green and environmental friendly; Built with isopentane foam polyurethane insulation, which complies with European RoHS Directive.
- **Superior temperature uniformity**
  Evaporator-shelf design speeds up the cooling process and provides a more uniform temperature distribution. The temperature uniformity at specific points throughout the unit is ±4°C.
- **Low Sound Level**
  Sound-reducing design with optimized system reduces the sound level, smoother operation eliminates 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

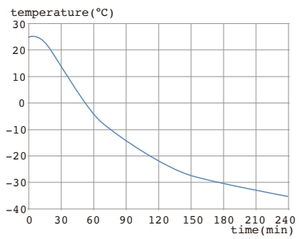
Porthole
Porthole design is standard for test

Recorder
Optional chart temperature recorder available

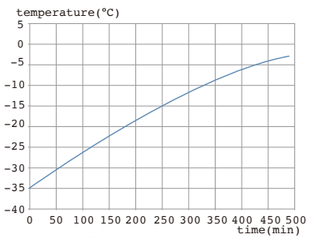
-30°C Biomedical Freezer

DW-30L508

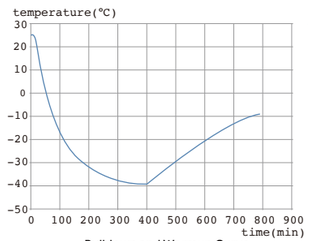
DW-30L508 | TYPICAL PERFORMANCE CHARACTERISTICS IN 25°C AMBIENT



Temperature Cool Down Curve



Temperature Recover Curve



Pulldown and Warmup Curve

-30°C Biomedical Freezer

Specifications

	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 Touchscreen	LCD Touchscreen	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)		4.0/5.8(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
	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(Optional)/-	6/-	10/-
	Temperature Recorder		Optional		Optional	Optional
	USB Interface		Y		/	/
Others	Certification		CE		CE	CE / UL

Product appearance and specifications are subject to change without notice

-25°C Biomedical Freezer

The Haier Biomedical -25°C low temperature freezer maximises storage space. Integrated cold shelf and evaporator design provides maximum refrigeration efficiency.

DW-25L262

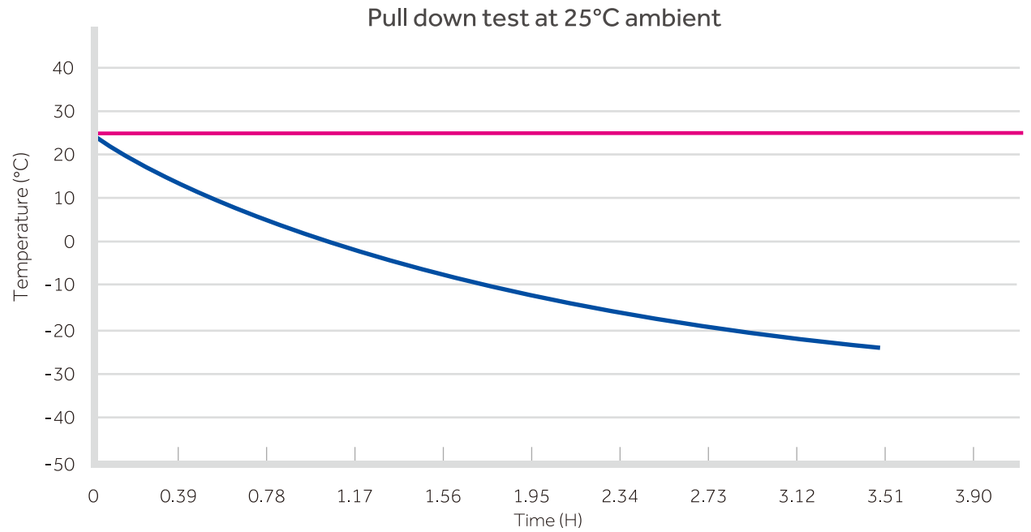
Reliability and Key Features

- 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



Specifications

	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)		0.68	1.8	0.96	2.6
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	
Alarms	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 with out notice

Spark Free Freezer

-30°C Spark Free Freezer

Typical Installation

It can be used for safe storage of potentially flammable items and other temperature sensitive samples at low temperatures. Applications found within life science, medical, electronics and chemistry industries.

DW-30L278SF

-30°C Spark Free Freezer

DW-25L92FL

DW-30L278SF/FL

Product Advantages

Explosion Proof Interior

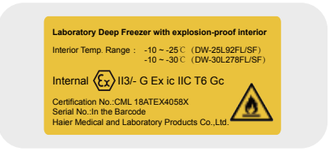
The SF series is composed of a non-anti-static liner, door lining and drawers; the FL series is composed of an anti-static liner, door lining and drawers. Equipped with an overcurrent and overvoltage protection system with all components earthed to ensure static is discharged safely. Certified to ATEX IIC-T6 EU and can be used in zone 2 environments.

Hydrocarbon Energy-saving

- Utilizing a hydrocarbon compressor and hydrocarbon refrigerant resulting in a more eco-friendly refrigeration system
- Cyclo-isopentane foaming polyurethane insulation and manufactured with materials that comply with the European ROHS directive for environmental protection.
- The hydrocarbon energy-saving and high-efficiency compressor results in an optimized refrigeration system which more energy efficient than older models.

Excellent Temperature Uniformity

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



Low Noise

Cabinet structure and refrigeration system noise reduction design lowers noise level to less than 40dB(A) and eliminating any harsh high-frequency noises.

-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;
- Adjustable set point of between -10~-30°C;
- Alarm functions include a high and low temperature alarm, sensor failure alarm and power failure alarm;
- Audible and visual alarm;
- Display/Alarm is battery backed up for 24 hours in the event of a power failure.

Good thermal insulation

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

Safety lock

Dual-lock design of lock catch and key lock. An external padlock can be added for additional security.

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 SF series of freezer are provided with six 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 and levelling feet design, easy to move and fix in place.

-30°C Spark Free Freezer

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 Touchscreen	LED	LCD Touchscreen
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
Alarms	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/-	3/-	6/-
Others	Certification		CE ATEX	CE ATEX	CE ATEX	CE ATEX
	Interior Material/Colour		PS Plate/White	PS Plate/Grey	Antistatic PS Plate/Black	Antistatic PS Plate/Black

Product appearance and specifications are subject to change without notice

Combined Refrigerator and Freezer

HYCD-282

HYCD-282A





Combined Refrigerator and Freezer

Combined Refrigerator and Freezer

Excellent Performance

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

Separately Controlled Refrigerator and Freezer

- USB port for data download
- Capable of recording temperature data for up to ten years
- Independent display for refrigerator and freezer sections
- Adjustable shelving in refrigerator and freezer has drawers
- Multiple alarms to detect malfunctions

Specifications

	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	
Alarms	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

RFID Refrigerator

Smart Management of Reagents Starts with IoT Technology

From manufacturer to patients, the entire process is automatically and smartly controlled.

Smart IoT system means simple, precise and effective reagent storage management

Automatic management of reagents is a reality with the utilization of the RFID based smart IoT management system

Smart RFID label

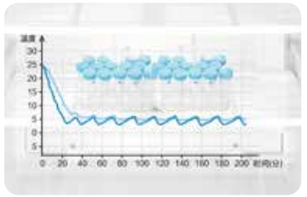
Smart RFID shelf

Industrial-grade IoT network module group

Secure, authorized access management

NFC authorized management system is traceable

Statistical analysis of data and precise verification for compliance



Precise temperature control for ultimate safety of test reagents

2°C- 8°C storage temperature and real time monitoring of cabinet temperature

Smart alerts for maintenance and product management

Smart alarm and alerts for abnormal temperature, low storage level alerts , deadline for clinical trials

RFID Refrigerator

Manpower savings
Smart process control improves accuracy and efficiency, saving manpower for reagent management.

Optimized procurement process reduces waste
Accurately and timely control of reagent usage. Make intelligent procurement decisions to reduce shortage and reduce inventory.

Rigorous reagent management to reduce risk
Constant temperature for reagent storage
Automatically trigger temperature alarms when fridge reaches critical temperature, ensuring safety of reagent usage.

Specifications

Model			HYC-390R
Technical Data	Cabinet Type		Upright, Single Door
	Climate Class		N
	Cooling Type		Forced Air Cooling
	Defrost Mode		Auto
	Refrigerant		CFC-Free
	Sound level(dB(A))		43
Performance	Cooling performance(°C)		±3
	Temperature Range(°C)		2-8
Control	Controller		Microprocessor
	Display		LED
Electrical Data	Power Supply(V/Hz)		208-230/50/60
	Power(W)		400
	Electrical Current(A)		2.4
Dimensions	Capacity(L/Cu.Ft)		390/ 13.77
	Net/Gross Weight(approx)	kg	116/139
		lbs	255.73/306.44
	Interior Dimensions(W*D*H)	mm	530*555*1380
		in	20.9*21.9*54.3
	Exterior Dimensions(W*D*H)	mm	720*710*1965
		in	28.3*28*77.4
	Packing Dimensions(W*D*H)	mm	792*790*2110
		in	31.2*31*82.9
	Container load (20'/40'/40'H)		14/45/45
Alarms	High/Low Temperature		Y
	Remote Alarm		Y
	Power Failure		Y
	Sensor Error		Y
	Low Battery		Y
	Door Ajar		Y
Accessories	Caster		Y
	Foot		Y
	Porthole		Y
	Shelves		5
	USB Interface		Y
Others	Certification		CE

Product appearance and specifications are subject to change without notice

Pharmacy Refrigerator with TEC

Pharmacy Refrigerator with Thermoelectric Cooler (TEC) Technology

The refrigerator can be used to store vaccines, medicines and laboratory products at 2°C to 8°C temperature range in pharmaceutical companies, laboratories, clinics, and hospitals.

HYC-51BF

With TEC technology for super low noise and minimum vibration

- Military grade TEC refrigeration technology (also called a Peltier device)
- Low noise DC fan
- Less than 35dB(A) sound level

Multi temperature protection

- Air temperature sensor for control
- Display sensor for displaying the actual temperature
- Overtemp or high-end temperature sensor to protect TEC module for a service life of more than 10 years

Microprocessor control for 2°C to 8°C

- Forced air cooling with ± 1°C temperature uniformity and display accuracy 0.1°C
- Maximum power for rapid temperature pulldown

Pharmacy Refrigerator with TEC

Safer by Design

Theory of Operation: Thermoelectric cooling uses the Peltier effect to create a heat flux at the junction of two different types of materials. The cooling power is controlled by pulsing signals to TEC module for tight temperature control of ±1°C.

The Advantage of Compressor Free Refrigerator

TEC Technology

- Sustainable & non-toxic refrigeration
- Energy efficient and low waste heat
- No pumps or motors for quiet operation
- No moving/mechanical parts for improved reliability and longevity
- Compact design allows more storage capacity
- Lab & Clean room ready dust-free operation

VS

Conventional Compressor

- Refrigerant required
- Less energy efficient
- Sound producing motors and compressors
- Moving mechanical parts
- Larger footprint, demands more valuable space
- Expensive filtration required

Power Protection Switch and Removable Power Cord

- Dual safety protections
- Power cord plug accessible on exterior of unit
- Suitable for on and under counter installation
- Universal power supply 220V/115V at 50/60Hz

Frost Free Cooling Fins on TE Module

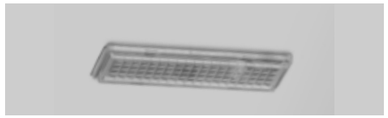
- Defrost process initiated after accumulated run hours
- Temperature does not exceed 7°C during defrost process

Natural Evaporation of Condensate

- Interior water is drained through a small hole into a stainless steel catch box. Condensate water is evaporated by warm air flow

Self-closing Doors

- Door stays opened at 90 degree
- Door automatically swings closed at less than 90 degree to reduce moisture infiltration
- Tested to x100,000 door opening and closes



LED Lighting

- Led lights illuminate interior

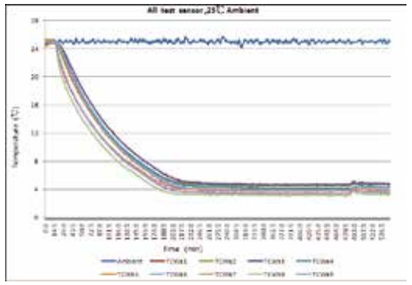
Low noise DC fan,sound level less than 35dB(A)

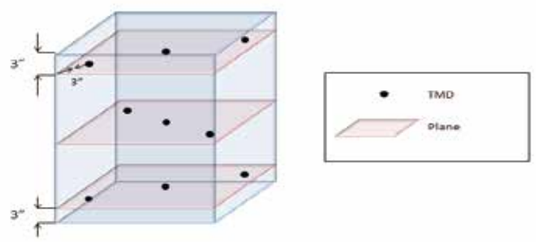
Removable Trays with ABS Material

- Manufactured using chemical and thermally stable ABS material
- Adjustable three-tray design
- Each tray holds thirty 50*50*50 mm storage boxes, totalling 150 boxes
- Trays designed for over 500,000 movements
- Weight limit at 100 kg/sq. M

Pharmacy Refrigerator with TEC

Typical Performance Characteristics In 25°C Ambient





Specifications

	Model		HYC-51BF	
Technical Data	Cabinet Type		Upright	
	Climate Class		N	
	Cooling Type		Force Air Cooling	
	Sound Level(dB(A))		34	
Performance	Cooling Performance(°C)		±2	
	Temp Range(°C)		2-8	
Control	Controller		Microprocessor	
	Display		LCD	
	LCD Size(in)		7	
Electrical Data	Power Supply(V/Hz)		115/60	220~240/50
	Power Input(W)		165	
	Rated Current(A)		1.5	0.8
Dimensions	Net/Gross Weight(approx)	kg	50/57	
		lbs	110.3/125.8	
	Interior Dimensions(W*D*H)	mm	380*330*470	
		in	15*13*18.5	
	Exterior Dimensions(W*D*H)	mm	525*565*720	
		in	20.7*22.2*28.3	
	Packing Dimensions(W*D*H)	mm	550*600*883	
		in	21.7*23.6*34.8	
	Container Load(20'/40'/40'H)		72/152/152	
Alarms	High/Low Temp		Y	
	Sensor Error		Y	
	Door Ajar		Y	
	Alarm Mode		Audible Buzzing and Alarm Window	
Accessories	Level Leg		4	
	Tray		3	
	Data Log		USB	
Others	Certification		UL	CE

Product appearance and specifications are subject to change without notice

Spark Free Refrigerator

Ergonomic Design

High Strength Glass Shelves

Tempered glass shelves hold 40 kg of products per shelve.

Low Noise

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

Dual Lock Design with Multiple Alarm Systems

A mortise lock is standard on the door. 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

Typical Installation

Spark free refrigerators are installed typically in many different 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

Explosion proof features 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. Adjustable set point for the range of 3°C ~16°C, factory default set temperature is 5°C, controlling the temperature inside the chamber is 2~8°C.

One-touch Search for Historic Data

The highest and lowest historic temperature data is saved and can be checked with one key stroke.

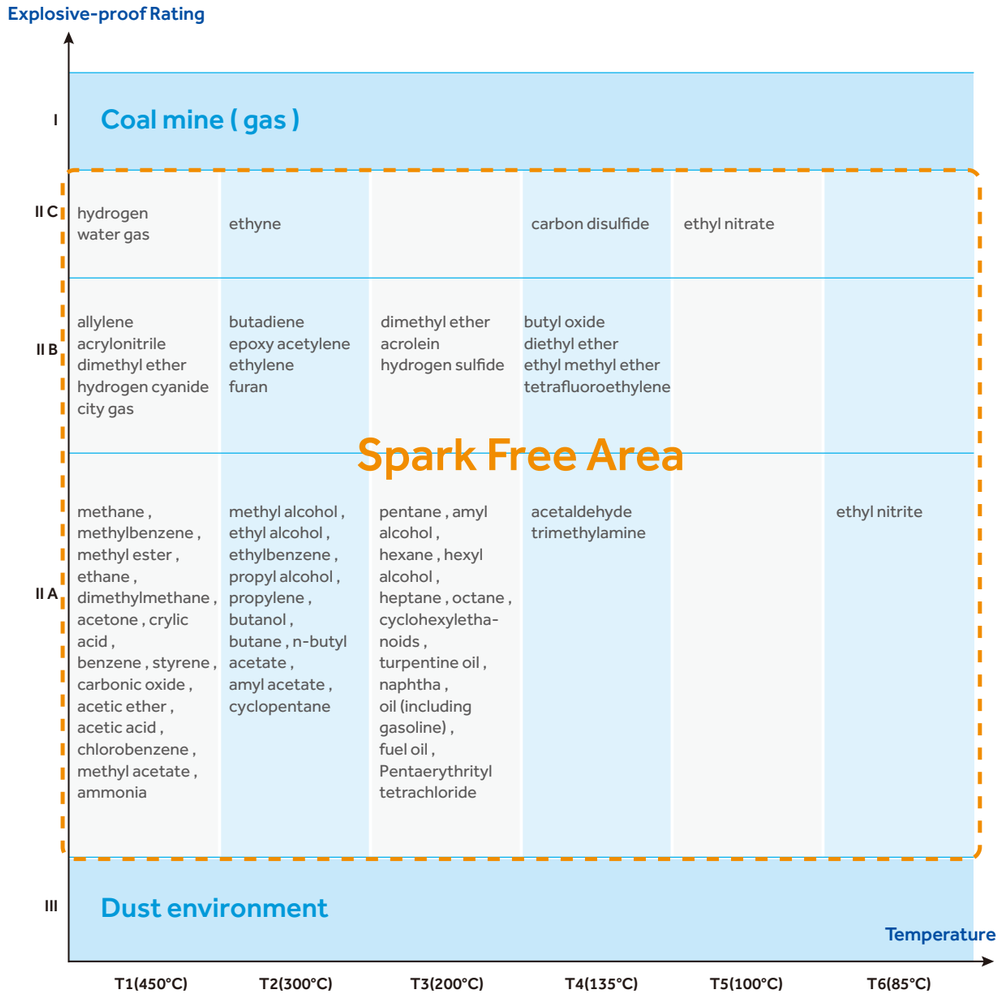
High Efficiency HC Cooling Technology

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

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), a typical environment within many biochemistry laboratories.



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

Spark Free Refrigerator

Specifications

	Model		HLR-118SF	HLR-310SF	HLR-118FL	HLR-310FL
Technical Data	Type		Under-Counter	Upright	Under-Counter	Upright
	Climate Class		N,ST	N,ST	N,ST	N,ST
	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 Adjustable	3-16 Adjustable	3-16 Adjustable
	Ambient Temperature (°C)		16~32	16~32	16~32	16~38
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
Dimensions	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 Dimensions(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 Dimensions(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 Dimensions(W*D*H)	mm	680*690*910	660*670*2020	680*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
Alarms	High/Low Temperature		Y	Y	Y	Y
	Power Failure		Optional	Optional	Optional	Optional
	Sensor Error		Y	Y	Y	Y
	Door Ajar		Y	Y	Y	Y
	Remote Alarm		Optional	Optional	Optional	Optional
Accessories	Caster		2	4	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		1	1	1	1
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

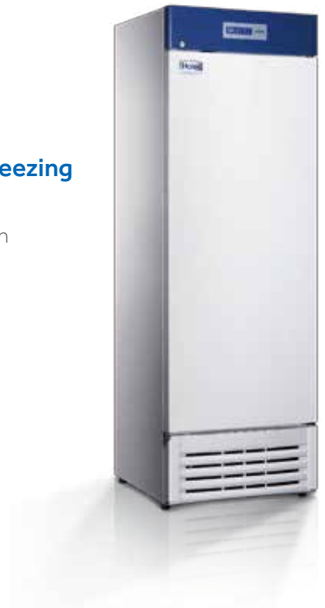
Product appearance and specifications are subject to change without notice

Laboratory Refrigerator

Laboratory Refrigerator

Typical Installation

Used to store chemicals, reagents and consumables within laboratories and research facilities.



Product Advantages

Precise Control of Temperature Adjustable Set Point 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 inside the chamber.

High Efficiency HC Cooling Technology

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

Ergonomic Design

One-touch search for historic data

The highest and lowest historic temperature data is saved and can be checked with one key stroke.

Low Noise

Noise cancelling technology reduces the sound level to less than 40 dB(A) for an improved working environment.

Automatic Door Closing Function

High Strength Glass Shelves

Tempered glass shelves hold 20 kg of products per shelf.

Dual lock design with multiple alarm systems

A mortise lock is standard on the door with option to add a padlock for additional security. Standard alarms include high and low temperature, door opening, and sensor errors.

Cabinet Structure

Glass Shelve

Fan/Interior Light

Display Board

Laboratory Refrigerator

Specifications

	Model		HLR-198F	HLR-310F
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	Temperature Range(°C)		3~16 Adjustable	3~16 Adjustable
	Ambient Temperature (°C)		16~32	16~32
Control	Controller		Microprocessor	Microprocessor
	Display		LED	LED
Electrical Data	Power Supply(V/Hz)		220-240/50	220-240/50
	Power(W)		135	225
	Electrical Current(A)		1	1.6
Dimensions	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 Dimensions(W*D*H)	mm	455*445*900	560*500*1290
		in	18.0*17.5*35.5	22.0*19.7*50.8
	Exterior Dimensions(W*D*H)	mm	535*570*1530	605*598*1840
		in	21.1*22.5*60.3	23.8*23.6*73.6
	Packing Dimensions(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
Alarms	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
Temperature Setting Mode			Password Protection	Password Protection
Temperature Sensor			1 Resistance Thermometer	1 Resistance Thermometer
Power Consumption(kWh/24h)			0.95	1.05
Certification			CE	CE

Product appearance and specifications are subject to change without notice

Blood/fluid Warming Cabinet

Application

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

Product Features

- Fast heating speed: variable power PTC heating module with fast heating speed and energy saving;
- UV sterilization: UV light sterilization in the cabinet with a variety of optional sterilization methods for effective prevention of possible contamination;
- Multiple overheat protections: electronic control + mechanical temperature control + overheat protection, multiple temperature control to ensure heating safety;
- Environmentally friendly: no compressor, external fan, extremely quiet with no disturbance to the airflow in the operating room and no effect on temperature, reduces risks of cross-contamination.

Product Advantages

- Fast and efficient heating;
- Standard UV sterilization for effective sterilization and other sterilization options available;
- Multiple over heating protections to ensure product viability;
- Two-sensor.

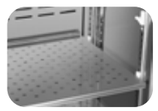
Ergonomic Design

- Extremely low noise level just 30 dB;
- Large and clear 7-inch LCD touch screen;
- Easy to clean stainless steel interior and flat external surfaces;
- Multiple alarms for over-heating protection.

Internal Structure

7 Inch LCD Screen

UV Sterilization Lamp



Stainless Steel Partition

Blood/fluid Warming Cabinet

Specifications

	Model		HYR-111	HLR-310F
Technical Data	Cabinet Type		Upright, one glass door	Upright, one glass door
	Climate Class		SN	SN
	Warming Type		Forced air warming	Forced air warming
	Sound Level(dB(A))		42	42
Performance	Temperature Range(°C)		26°C~50°C,above ambient temperature	26°C~50°C,above ambient temperature
Control	Controller		Microprocessor	Microprocessor
	Display		Touch	Touch
Electrical Data	Power Supply(V/Hz)		220/50	220/50
	Power(W)		130	360
Dimensions	Capacity(L/Cu.Ft)		111/3.9	351/12.39
	Net/Gross Weight(approx)	kg	58/68	108/118
		lbs	127.6/149.6	237.6/259.6
	Interior Dimensions(W*D*H)	mm	477*528*462	477*486*1402
		in	18.67*20.67*18.1	18.68*19*54.89
	Exterior Dimensions(W*D*H)	mm	597*682*833	597*682*1813
		in	23.37*26.7*32.61	23.37*26.7*70.98
	Packing Dimensions(W*D*H)	mm	680*742*913	680*742*1893
		in	26.6*29.1*35.7	26.6*29.1*74.1
	Container load (20'/40'/40'H)		24/48/48	24/48/48
Alarms	High/Low Temperature		Y	Y
	Sensor Error		Y	Y
	Door Ajar		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y	Y
	Shelves		Y	Y

Product appearance and specifications are subject to change without notice

Pharmacy Refrigerator

Pharmacy Refrigerator

Advanced Control Touchscreen Pharmacy Refrigerator

HYC-1099TF HYC-509T HYC-1099T HYC-509TF

Product Advantages

Intelligent and Interactive Touchscreen Control

- An intelligent, high definition liquid crystal touch screen control system, allows users to view temperature graphs, operation status, event and alarm records

Intelligent IoT System

- An optional IoT module is available, this allows real-time inquiry of temperature graphs and alarm information through an App on cell phones
- Standard RS485 data port

Secure Access and Authorized Management

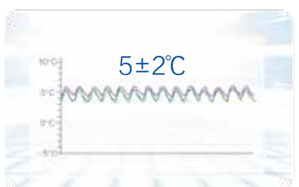
- NFC authority system works with a magnetic lock system to ensure product safety. In addition, access to unit and stored products is traceable
- Finger print module is optional for additional safety

Pharmacy Refrigerator

Advanced Pharmacy Refrigerator with LED Display

HYC-1099F HYC-509 HYC-1099 HYC-509F

Product Advantages



Precise Temperature Control and Reliable Operation

- Advanced control system
- Six sensors
- High efficiency air flow system
- Precise temperature control
- Uniform temperature distribution
- VFD driven compressor
- High-efficiency fan motor

Multiple Features for Sample Security And Protection

- Audible buzzer and visual flashing lights for alarm system as standard
- Alarm system includes door ajar, temperature, sensor malfunction, battery, loss of power and clogged condenser
- Remote alarm contact terminals as standard
- Supplied with mechanical lock as standard, there is an optional magnetic lock for added product safety

Environmentally Friendly Refrigeration

- R600a Hydrocarbon refrigeration system does not have any negative impacts of the ozone layer, with zero global warming effect

Pharmacy Refrigerator

Pharmacy Refrigerator

Specifications

	Model		HYC-509	HYC-509F	HYC-509T	HYC-509TF	HYC-1099	HYC-1099F	HYC-1099T	HYC-1099TF
Technical Data	Cabinet Type		Upright, Double Glass Door	Upright, Double Glass Door	Upright, Double Glass Door	Upright, Double Glass Door	Upright, Double Glass Door	Upright, Double Glass Door	Upright, Double Glass Door	Upright, Double Glass Door
	Climate Class		N	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	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))		42	42	42	42	42	42	42	42
Performance	Temperature Range(°C)		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	Touch	Touch	LED	LED	Touch	Touch
Electrical Data	Power Supply(V/Hz)		208-230/50/60	208-230/50/60	208-230/50/60	208-230/50/60	208-230/50/60	208-230/50/60	208-230/50/60	208-230/50/60
	Power(W)		370	315	370	315	470	440	470	440
	Electrical Current(A)		1.85	1.75	1.85	1.75	2.5	2.25	2.5	2.25
Dimensions	Capacity(L/Cu.Ft)		509/17.97	509/17.97	509/17.97	509/17.97	1099/38.5	1099/38.5	1099/38.5	1099/38.5
	Net/Gross Weight(approx)	kg	180/215	180/215	180/215	180/215	340/400	330/390	340/400	330/390
		lbs	396/473	396/473	396/473	396/473	748/1000	726/858	748/1000	726/858
	Interior Dimensions(W*D*H)	mm	593*585*1500	593*585*1500	593*585*1500	593*585*1500	1295*585*1500	1295*585*1500	1295*585*1500	1295*585*1500
		in	23.21*22.9*58.8	23.21*22.9*58.8	23.21*22.9*58.8	23.21*22.9*58.8	50.7*22.9*58.8	50.7*22.9*58.8	50.7*22.9*58.8	50.7*22.9*58.8
	Exterior Dimensions(W*D*H)	mm	693*813*1981	693*813*1981	693*813*1981	693*813*1981	1395*813*1981	1395*813*1981	1395*813*1981	1395*813*1981
		in	27.1*31.9*77.7	27.1*31.9*77.7	27.1*31.9*77.7	27.1*31.9*77.7	54.7*31.9*77.7	54.7*31.9*77.7	54.7*31.9*77.7	54.7*31.9*77.7
	Packing Dimensions(W*D*H)	mm	800*875*2100	800*875*2100	800*875*2100	800*875*2100	1525*900*2100	1525*900*2100	1525*900*2100	1525*900*2100
		in	31.3*34.3*82.3	31.3*34.3*82.3	31.3*34.3*82.3	31.3*34.3*82.3	59.8*35.3*82.3	59.8*35.3*82.3	59.8*35.3*82.3	59.8*35.3*82.3
	Container Load (20'/40'/40'H)		12/24/24	12/24/24	12/24/24	12/24/24	6/12/12	6/12/12	6/12/12	6/12/12
Alarms	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		Y/Optional	Y/Optional	Y/Optional	Y/Optional	Y/Optional	Y/Optional	Y/Optional	Y/Optional
	USB Interface		Y	Y	Y	Y	Y	Y	Y	Y
Others	Certification		CE	CE	CE	CE	CE	CE	CE	CE

Product appearance and specifications are subject to change without notice

Pharmacy Refrigerator
Standard Pharmacy Refrigerator

The Haier pharmacy refrigerators are suitable for pharmacies, drug stores, pharmaceutical companies, hospitals, clinics and other pharmaceutical storage areas such as storage and logistics.

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
Standard Pharmacy Refrigerator

Durable and Reliable - Key Features

- High-efficiency fit-for-purpose 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 with large digital display. Adjustable temperature with an increment of 0.1°C
- Wide voltage tolerance suitable for regions with an unstable voltage supply
- Designed for ambient temperature 10°C~32°C with humidity below 85%

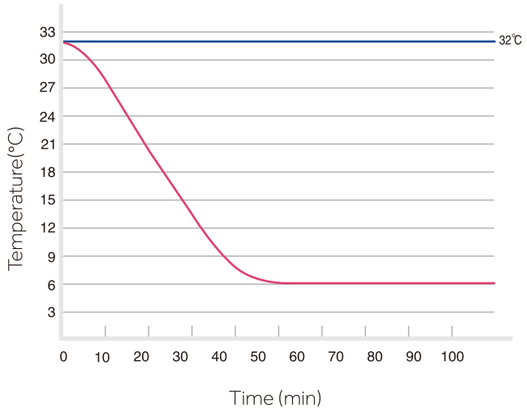
Safety

- 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

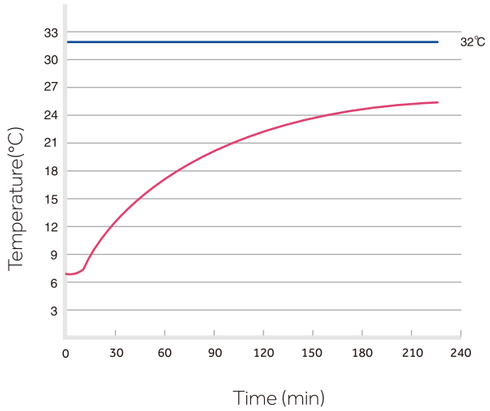
Ergonomic Design

- Optimized space utilization design with multi-level and adjustable shelf height to accommodate the different storage requirements of varied sized pharmaceutical products.
- Safety lock to prevent unauthorized access
- Caster design and levelling feet
- Interior light

Pull down test at 32°C ambient



Warm up test at 32°C ambient



Haier Biomedical

Pharmacy Refrigerator

New and improved Haier pharmacy refrigerators now offer an improved temperature profile and more user-friendly control features.

HYC-390

Pharmacy Refrigerator

Technical Advantages

- Accurate temperature control maintains 2°C 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

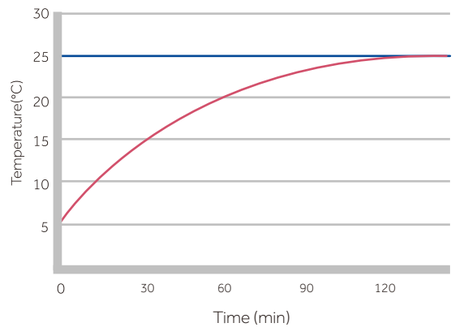
Ergonomic Design

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

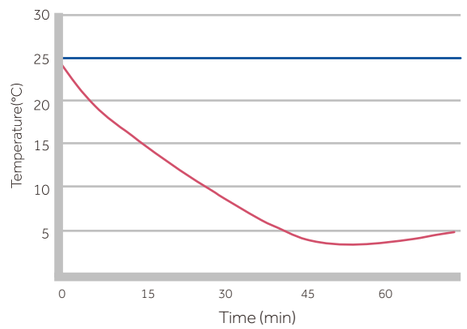
Safety

- Microprocessor control with digital display
- Temperature uniformity within 3°C
- Malfunction alarms include high/low temperature, door ajar, sensor error, power failure, low battery and 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 to Install, Ergonomic and Reliable

Haier are 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 fit-for-purpose 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%

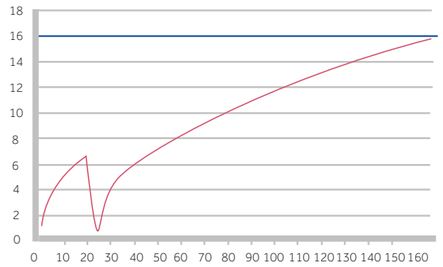
Safety

- 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

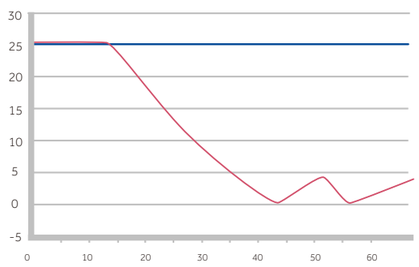
Ergonomic Design

- 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

Specifications






	Model	HYC-68		HYC-68A		HYC-118		HYC-118A		HYC-290(basic)	HYC-390(basic)
Technical Data	Cabinet Type	Upright, Solid Door		Upright, Glass Door		Upright, Solid Door		Upright, Glass Door		Upright, Single Door	Upright,Single Door
	Climate Class	4		4		4		4		N	N
	Cooling Type	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
	Refrigerant	CFC-Free		CFC-Free		CFC-Free		CFC-Free		CFC-Free	CFC-Free
	Sound Level(dB(A))	41		41		41		41		43	43
Performance	Temperature Range(℃)	2-8		2-8		2-8		2-8		2-8	2-8
Control	Controller	Microprocessor		Microprocessor		Microprocessor		Microprocessor		Microprocessor	Microprocessor
	Display	LED		LED		LED		LED		LED	LED
Electrical Data	Power Supply(V/Hz)	220-240/50	115/60	220-240/50	115/60	220-240/50/60	115/60	220~240/50/60	115/60	208~230/50/60	208~230/50/60
	Power(W)	84	72	84	72	135	75	165	140	340	380
	Electrical Current(A)	0.65	1.1	0.65	1.1	1.03	1.11	1.16	1.46	2.2	2.4
Dimensions	Capacity(L/Cu.Ft)	68/2.4		68/2.4		118/4.2		118/4.2		290/10.2	390/13.8
	Net/Gross Weight(approx) kg	38/40		38/40		41/46		46/51		105/127	116/139
	Net/Gross Weight(approx) lbs	83.8/88.2		83.8/88.2		90.5/101.5		101.5/112.5		231.6/280.1	255.8/306.6
	Interior Dimensions (W*D*H) mm	415*385*505		415*385*505		515*415*630		515*415*630		530*555*1080	530*555*1380
	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		20.9*21.9*42.5	20.9*21.9*54.3
	Exterior Dimensions (W*D*H) mm	495*580*660		495*580*660		597*635*835		597*635*835		665*710*1665	665*710*1965
	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		26.2*28.0*65.6	26.2*28.0*77.4
	PackingDimensions (W*D*H) mm	540*640*710		540*640*710		680*690*910		680*690*910		690*790*1810	690*790*2110
	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		27.1*31.0*71.1	27.1*31.0*82.9
	Container Load (20'/40'/40'H)	108/228/228		108/228/228		48/102/102		48/102/102		21/42/42	21/42/42
Alarms	High/Low Temperature	Y		Y		Y		Y		Y	Y
	Remote Alarm	Y		Y		Y		Y		Y	Y
	Power Failure	Y		Y		Y		Y		Y	Y
	Sensor Error	Y		Y		Y		Y		Y	Y
	Low Battery	Y		Y		Y		Y		Y	Y
	Door Ajar	Y		Y		Y		Y		Y	Y
Accessories	Caster	N/A		N/A		Y		Y		Y	Y
	Foot	Y		Y		Y		Y		Y	Y
	Porthole	Y		Y		Y		Y		Y	Y
	Shelves/Drawers	2/1		2/1		3/1		3/1		5/-	7/-
	USB Interface	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
Others	Certification	CE	UL	CE	UL	CE	UL	CE	UL ENERGY STAR	CE	CE







	Model	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, Double Glass Door	Upright, Double Solid Door	Upright, Double Door		
	Climate Class	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		
	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))	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		
Control	Controller	Microprocessor			Microprocessor			Microprocessor			Microprocessor		Microprocessor	Microprocessor	Microprocessor		
	Display	LED			LED			LED			LED		LED	LED	LED		
Electrical Data	Power Supply(V/Hz)	220-240/50	208-230/60	115/60	220-240/50	208-230/60	115/60	220-240/50	208-230/60	115/60	220-240/50	208-230/60	115/60	220-240/50	208-230/60	115/60	220-240/50	208-230/60	115/60
	Power(W)	340	340	200	380	380	240	300	300	115	550	550	560	850	770	850	600	800	800	950
	Electrical Current(A)	2.2	2.2	2.2	2.4	2.4	2.4	2.4	2.4	1.5	3.5	3.5	7.5	4.5	4.5	11	3	4.2	4.2	11
Dimensions	Capacity(L/Cu.Ft)	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	105/127			116/139			106/129			204/227		227/279	207/259	310/360		
	Net/Gross Weight(approx) lbs	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*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*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*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*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*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*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			12/26/26		8/18/18	8/18/18	6/12/12		
Alarms	High/Low Temperature	Y			Y			Y			Y		Y	Y	Y		
	Remote Alarm	Y			Y			Y			Y		Y	Y	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	Y			Y			Y			Y		Y	Y	Y		
	Foot	Y			Y			Y			Y		Y	Y	Y		
	Porthole	Y			Y			Y			Y		Y	Y	Y		
	Shelves/Drawers	5/-			7/-			7/-			6/-		12/-	12/-	12/-		
	USB Interface	Y			Y			Y			Optional		N/A	N/A	Y		
	Temperature Recorder	N/A			N/A			N/A			Optional		N/A	N/A	N/A		
Others	Certification	CE		UL	CE		UL	CE		ENERGY STAR	CE	UL	CE	CE	CE		UL

Product appearance and specifications are subject to change without notice

Blood Bank Refrigerator

Blood Bank Refrigerator
Automated Blood Management

Scope of Application

Suitable for blood transfusion departments, operating rooms, and emergency rooms, etc. of the hospitals

Product Advantages

Drastically Improves the Speed of Delivery

Innovative blood bank system, enables the blood to be advanced to the operating room to achieve 1-minute rapid blood collection.

Reduce Waste and Improve Efficiency

Electronic blood matching within 1 minute, reducing the cross matching time and reagent consumption. Quick and precise blood matching, combined with intelligent lighting indicators guide, guarantees the accurate identification and safe use of blood, without waste.

Intelligent Blood Management System

Allows integration and coordination of blood recovery within hospitals and blood allocation between hospitals and even across regions through the blood network cloud platform. Enabling the rational use of blood upon demand, thus reducing resource consumption.

Intelligent Blood Management System

Quickly and accurately identify blood bag location using onboard blood information management system.

The patient's blood matching information is shown and a blood bag automatically selected and a request for the bag is sent.

The system reads the blood information and light up indicators guide the user to the correct blood bag location.

Blood information is cross-checked and blood is issued. Inventory is automatically updated within the blood management system.

Blood Bank Refrigerator
Automated Blood Management

Specifications

	Model		HXC-149R		HXC-429R		HXC-629R	
Technical Data	Type		Drawer-Type		Drawer-Type		Drawer-Type	
	Climate Class		N		N		N	
	Cooling Type		Forced air cooling		Forced air cooling		Forced air cooling	
	Defrost Mode		Auto		Auto		Auto	
	Refrigerant		R600a		R600a		R600a	
	Sound Level(dB(A))		40		41		41	
Performance	Temperature Range(°C)		4±1		4±1		4±1	
	Ambient Temperature (°C)		16-32		16-32		16-32	
Control	Controller		Microprocessor		Microprocessor		Microprocessor	
	Display		LCD Touchscreen		LCD Touchscreen		LCD Touchscreen	
Electrical Data	Power Supply(V/Hz)		220-240V/50	230V/60	220-240V/50	230V/60	220-240V/50	230V/60
	Power(W)		240		280		300	
	Electrical Current(A)		1.4		1.8		1.9	
Dimensions	Capacity(L/Cu.Ft)		149		429		629	
	Blood Storage Capacity(450ml blood bags)		18		60		88	
	Net/Gross Weight(approx)	kg	129/179		245/280		295/335	
		lbs	283.8/ 393.8		539/616		649/737	
	Interior Dimensions(W*D*H)	mm	505*560*610		505*680*1315		645*680*1455	
		in	19.7*32.3*23.8		19.7*26.5*51.3		25.2*26.5*56.7	
	Exterior Dimensions(W*D*H)	mm	625*820*1425		925*940*1830		1065*940*1980	
		in	24.4*30.2*55.6		36.1*36.7*71.4		41.5*36.7*77.2	
	Packing Dimensions(W*D*H)	mm	740*945*1575		725*985*1940		875*995*2090	
		in	28.9*36.9*61.4		28.3*38.4*75.7		34.1*38.8*81.5	
	Container load (20'/40'/40'H)		18/36/36		18/35/35		12/26/26	
Alarms	High/Low Temperature		Y		Y		Y	
	Power Failure		Y		Y		Y	
	Sensor Error		Y		Y		Y	
	Low Battery		Y		Y		Y	
	Door Ajar		Y		Y		Y	
	Remote Alarm		Y		Y		Y	
Accessories	Caster		4		4		4	
	Foot		2		2		2	
	Porthole		Y		Y		Y	
	Drawers		9		30		44	
	USB Interface		Y		Y		Y	
	Temperature Recorder		Y		Y		Y	
Others	Certificate		CE	UL	CE	UL	CE	UL

Product appearance and specifications are subject to change without notice

Blood Bank Refrigerator

Advanced Blood Bank Refrigerator with Touchscreen

HXC-1369T HXC-629T HXC-429T HXC-149T

Product Advantages

Control Interface

• The simple and intuitive high-definition LCD touch screen can display temperature graph, working status, events and alarm record.

Real-time Control of Internal Temperature

• A dual control system of six high-precision sensors and mechanical thermostat ensures the temperature inside the cabinet is maintained at 4°C +/- 1°C.

Stable and Reliable Operation

• The refrigeration system is powered with a high-quality, energy-efficient inverter compressor and variable speed fan motors. Temperature control responses quickly and reliably for a more uniform temperature using less power and lower noise.

Multiple Safety Protection

• Multiple alarms include high and low temperature, power failure, door ajar, sensor failure, and low battery. Sound buzzer, visual flashing light and remote contacts are standard alarm features. Built-in battery provides power to the alarm system in the event of a mains power failure.
• Optional fingerprint and standard NFC swipe card module.

Blood Bank Refrigerator

Advanced Blood Bank Refrigerator with LED Display

HXC-1369 HXC-629 HXC-429 HXC-149

Product Advantages

With Multiple Temperature Control to Guarantee Constant and Precise Temperature

• The inside temperature is constant within 4±1°C, the digital temperature display resolution at 0.1°C.
• Equipped with 6 high-precision sensors and a mechanical thermostat which enables more accurate air cooling and temperature control to ensure uniform temperature inside the unit, maintained within the specified temperature range. The multi-layer inner door design reduces thermal loss after door openings and further ensures the temperature stability inside the cabinet.

With Multiple Safety Guarantees to Provide Worry-Free Service

• Equipped with complete alarm function, including alarm on high and low temperature, power failure, door opening, sensor failure, and low battery. Two alarm modes including audible buzzer and visual lights with remote alarm interface.
• Back-up battery design ensures alarm and temperature readings continue to operate in the event of a mains power failure.
• NFC swipe card module, with safer storage management.

Standard USB Interface

• Ability to record temperature data for ten years using the USB interface, an optional disc temperature recorder is also available

Blood Bank Refrigerator

Blood Bank Refrigerator

Specifications

	Model		HXC-149	HXC-149T	HXC-429	HXC-429T	HXC-629	HXC-629T	HXC-1369	HXC-1369T
Technical Data	Type		Basket-Type	Drawer-Type	Basket-Type	Drawer-Type	Basket-Type	Drawer-Type	Basket-Type	Drawer-Type
	Climate Class		N	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	Forced air cooling
	Defrost Mode		Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
	Refrigerant		R600a	R600a	R600a	R600a	R600a	R600a	R600a	R600a
	Sound Level(dB(A))		39	39	40	40	40	40	41	41
Performance	Temperature Range(°C)		4±1	4±1	4±1	4±1	4±1	4±1	4±1	4±1
	Ambient Temperature (°C)		16-32	16-32	16-32	16-32	16-32	16-32	16-32	16-32
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LED	LCD Touchscreen	LED	LCD Touchscreen	LED	LCD Touchscreen	LED	LCD Touchscreen
Electrical Data	Power Supply(V/Hz)		220-240V/50	220-240V/50	220-240V/50	220-240V/50	220-240V/50	220-240V/50	220-240V/50	220-240V/50
	Power(W)		215	215	245	245	255	255	320	320
	Electrical Current(A)		1.3	1.3	1.5	1.5	1.5	1.5	2	2
Dimensions	Capacity(L/Cu.Ft)		149	149	429	429	629	629	1369	1369
	Blood Storage Capacity(450ml blood bags)		60	60	195	195	312	312	624	624
	Net/Gross Weight(approx)	kg	97/125	108/136	169/204	182/217	187/217	212/252	345/410	380/445
		lbs	213.4/ 275	237.6/299.2	371.8/448.8	400.4/477.4	411.4/477.4	466.4/554.4	759/902	836/979
	Interior Dimensions(W*D*H)	mm	505*560*610	505*560*610	505*680*1315	505*680*1315	645*680*1455	645*680*1455	1425*680*1455	1425*680*1455
		in	19.7*32.3*23.8	19.7*32.3*23.8	19.7*26.5*51.3	19.7*26.5*51.3	25.2*26.5*56.7	25.2*26.5*56.7	55.6*26.5*56.7	55.6*26.5*56.7
	Exterior Dimensions(W*D*H)	mm	625*820*1150	625*820*1150	625*940*1830	625*940*1830	765*940*1980	765*940*1980	1545*940*1980	1545*940*1980
		in	24.4*30.2*44.9	24.4*30.2*44.9	24.4*36.7*71.4	24.4*36.7*71.4	29.8*36.7*77.2	29.8*36.7*77.2	60.3*36.7*77.2	60.3*36.7*77.2
	Packing Dimensions(W*D*H)	mm	720*920*1220	720*920*1220	725*985*1940	725*985*1940	875*995*2090	875*995*2090	1610*995*2090	1610*995*2090
		in	28.1*35.9*47.6	28.1*35.9*47.6	28.3*38.4*75.7	28.3*38.4*75.7	34.1*38.8*81.5	34.1*38.8*81.5	62.8*38.8*81.5	62.8*38.8*81.5
	Container load (20'/40'/40'H)		18/38/76	18/38/76	18/35/35	18/35/35	12/26/26	12/26/26	7/14/14	7/14/14
Alarms	High/Low Temperature		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
	Remote Alarm		Y	Y	Y	Y	Y	Y	Y	Y
Accessories	Caster		4	4	4	4	4	4	4	4
	Foot		2	2	2	2	2	2	2	2
	Porthole		Y	Y	Y	Y	Y	Y	Y	Y
	Baskets		6	6	15	15	24	24	48	48
	Shelves/Drawers		2/0	0/2	5/0	0/5	6/0	0/6	12/0	0/12
	Inner doors		2	0	5	0	6	0	12	0
	USB Interface		Y	Y	Y	Y	Y	Y	Y	Y
	Temperature Recorder		Y	Y	Y	Y	Y	Y	Y	Y
Others	Certificate		CE	CE	CE	CE	CE	CE	CE	CE

Product appearance and specifications are subject to change without notice

Transport Cooler

Main Application

This transportation box is for blood banks, blood collecting stations and transporting biological products such as blood, medicines, samples and reagents.

Product Advantages

Performance

- LCD display with 0.1°C resolution provides cabinet temperature, signal status, alarm information, battery power and local time
- Built-in SIM card with GPRS function to upload data to remote servers

Storage Security

- Alarm temperature and upload temperature can be set through data management software or cloud platform
- Magnetic lock design for sample security, additional security with software authorization and scan QR code to open function

Refrigeration System

- Passive cooling mode achieved by placing the case in a fridge
- Use the PCM ice pack during transportation to keep storage temperature at 2 to 10°C
- ABS thermoplastic interior for additional insulation

HZY–5B

User-Friendly Design

- Latch design for securing lid to protect stored products
- Supports connection to portable printer GF-P1
- ABS thermoplastic liner design for additional insulation

Transport Cooler

Product Advantages

Temperature Control

- Economical, energy-efficient refrigeration system design
- Microprocessor control with digital temperature display, resolution of 0.1°C
- Cabinet temperature range of 2 °C to 6°C under stable conditions
- Can hold 2 °C to 10°C in the event of a power outage

Storage Security

- Audible and visual alarms
- Alarm includes high and low temperature, sensor error and power failure
- NFC swipe card unlocking function, unlocked status information is uploaded in real time

Advanced Version Features A Cold Chain Monitoring Module

- Access real-time temperature and humidity RH information from any web enabled device
- GPS positioning feature shows location on a map
- Optional one touch Bluetooth records printing option
- Camera monitoring of internal storage space providing additional sample security and peace of mind

HZY–8Z/8ZA

Reliable Refrigeration System

- PCM icepacks increase thermal storage capacity, holding temperature longer
- Advanced fan design for improved cooling efficiency
- Aluminium liner improves thermal conductivity

User-Friendly Design

- 12 V and 220 V power supply for in-vehicle operation
- Backup battery sustains display and alarm functions in event of power failure
- Secure latch design keeps the lid closed for product security
- ABS thermoplastic interior for additional insulation

HZY–15Z/15ZA

Transport Cooler

Transport Cooler






Specifications

	Model	HZY-5B	HZY-8Z	HZY-15Z	HZY-8ZA	HZY-15ZA	HZY-35B
Technical Data	Storage Temperature(℃)	2~6	2~6	2~6	2~6	2~6	2~6
	Operating Temperature(℃)	2~10	2~10	2~10	2~10	2~10	2~10
Dimensions	Exterior Dimensions (W*D*H mm)	285×186×200	300×265×260	520×300×270	300×265×260	520×300×270	550x328x370
	Interior Dimensions (W*D*H mm)	220×118×126	230×140×170	430×150×180	230×140×170	430×150×180	478x246x295
	Packing Dimensions (W*D*H mm)	305x206x220	320x285x280	540x320x290	320x285x280	540x320x290	580x260x320
	Net weight(kg)	2	4	6	4	6	10
	Gross weight(kg)	3	5	7	5	7	11
	Blood Bag Capacity	5	8	15	8	15	35
Functions	Cold Chain Monitoring	/	/	/	Y	Y	/
	RFID Identification	/	/	/	/	/	/
	NFC Unlock	/	/	/	Y	Y	/
	Foam material	High density foam	High density foam	Polyurethane Cycloisopentane	High density foam	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
	Refrigeration method	Passive cooling	Semiconductor active refrigeration	Semiconductor active refrigeration	Semiconductor active refrigeration	Semiconductor active refrigeration	Passive cooling
	Warm up time	3 hours(32oc ambient temperature load situation)	2 hours(32°C ambient temperature load situation)	2 hours(32°C ambient temperature load situation)	2 hours(32°C ambient temperature load situation)	2 hours(32°C ambient temperature load situation)	6 hours(43°C ambient temperature load situation)
	Shell/liner	ABS/ABS	ABS/ aluminium plate	ABS/ aluminium plate	ABS/ aluminium plate	ABS/ aluminium plate	ABS/ABS
	Alarm	High temperature,low battery	High temperature,sensor error, power off	High temperature,sensor error, power off	High temperature,sensor error, power off	High temperature,sensor error, power off	High temperature,sensor error, power off
	Battery	Rechargeable lithium battery	Rechargeable lithium battery	Rechargeable lithium battery	Rechargeable lithium battery	Rechargeable lithium battery	Button battery

Product appearance and specifications are subject to change without notice

Blood Bank Refrigerator
Standard Blood Bank Refrigerators

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.

Blood Bank Refrigerator
Standard Blood Bank Refrigerators

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

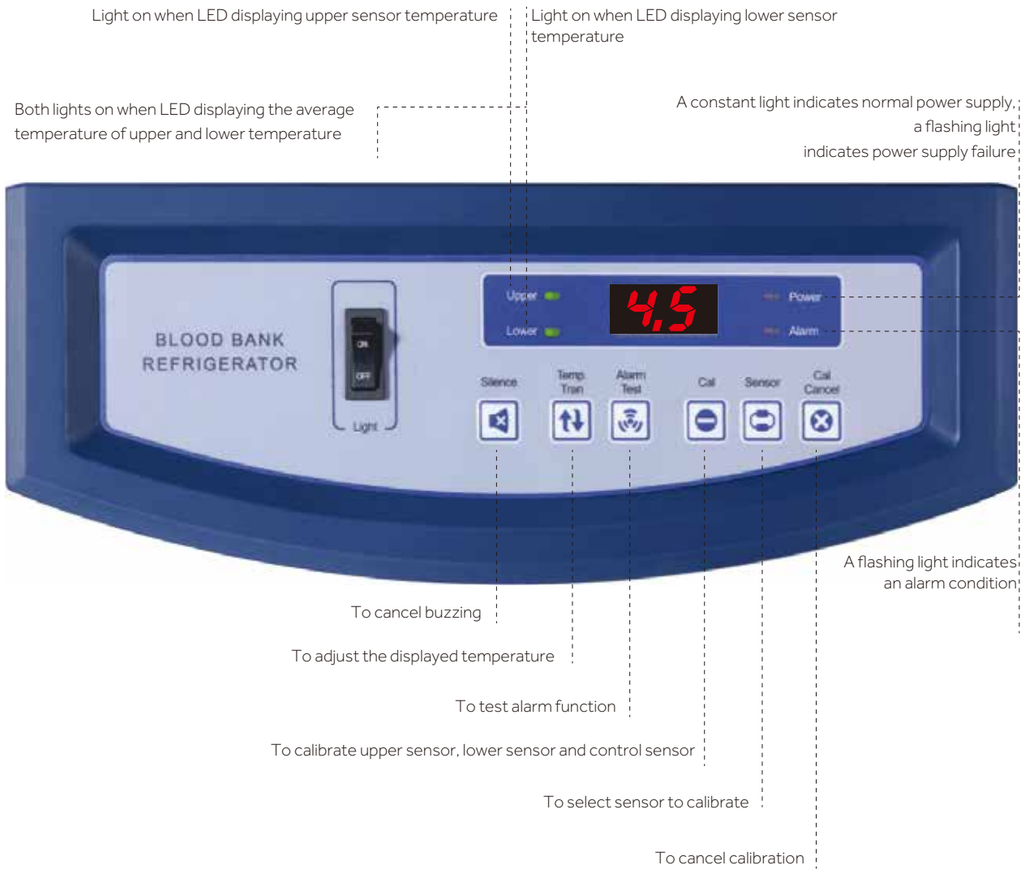
Safety

- 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
- 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
- Optional baskets or stainless steel drawers
- Caster design
- Interior light

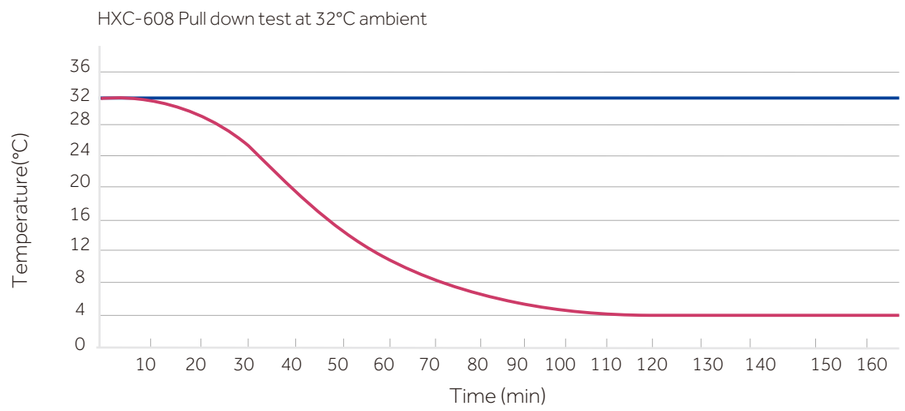
Blood Bank Refrigerator
Standard Blood Bank Refrigerators

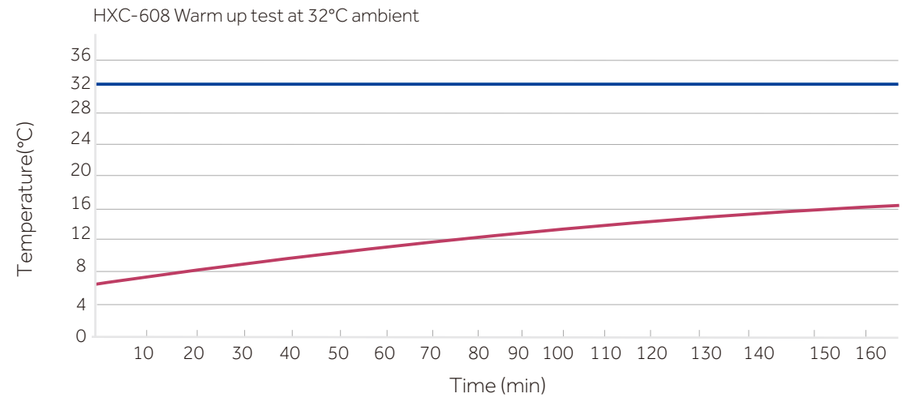


Alarm	Alarm Triggering Condition
High Temperature	Temperature reaches the warm alarm limit
Low Temperature	Temperature reaches the low alarm limit
Power Failure	Equipment loses power
Probe Failure	1.Main cabinet temperature control sensor fails 2.Condenser sensor fails 3.Ambient sensor fails 4.Heat exchanger 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 Blood Bank Refrigerators

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





Blood Bank Refrigerator
Standard Blood Bank Refrigerators

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
Standard Blood Bank Refrigerators

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

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 576*450 ml blood bags. HXC-1308B can hold 720*450 ml blood bags.
- Microprocessor system works with an optimized refrigeration system and controls the temperature within 2°C to 6°C with 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
- Multiple Alarms: 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 in the event of a mains power failure

HXC-1308B

HXC-1308B

Blood Bank Refrigerator

Specifications

	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
Alarms	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
Technical Data	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
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	220~240/50
	Power(W)	350	460	490	850
	Electrical Current(A)	2.6	3	3.5	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	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
Alarms	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	_	_	_	_
	Drawers/Inner doors	4/-	5/-	6/-	12/-
	USB Interface	Optional	Optional	Optional	Y
	Temperature Recorder	Y	Y	Y	Y
Others	Certification	CE	CE	CE	CE

Product appearance and specifications are subject to change without notice

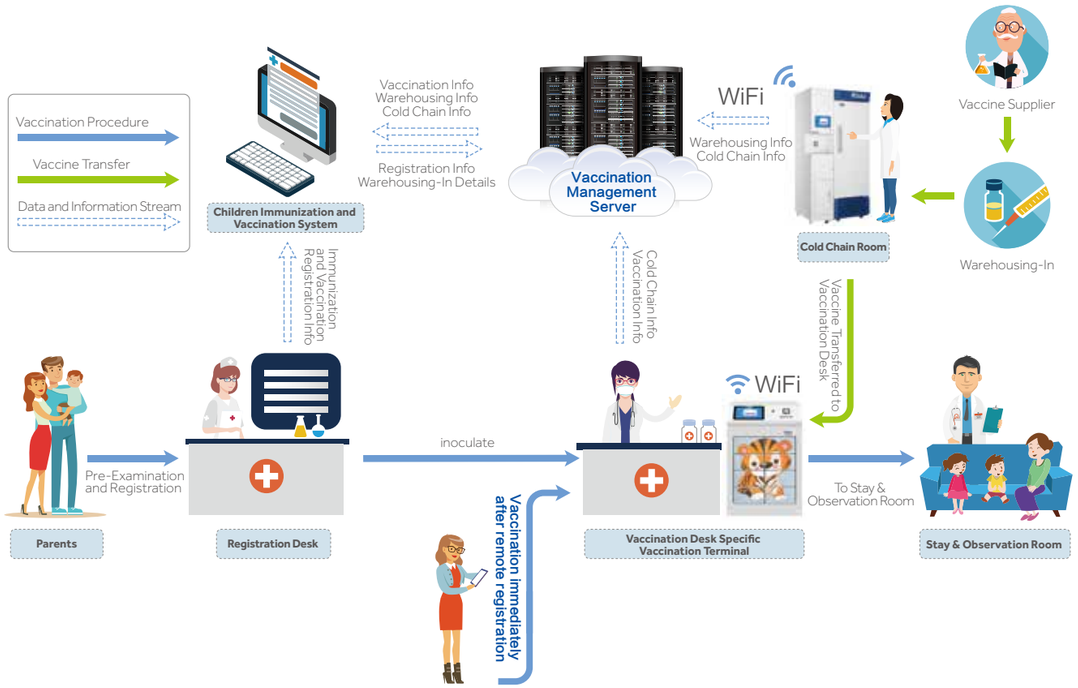
Vaccine Storage Solution

Smart Vaccine Refrigerator

About Haier Smart Vaccine

Haier Biomedical developed the Smart Vaccination Solution, upgrading the conventional vaccination workflow, adopting advanced refrigeration technology, automation and intelligent vaccine delivery by incorporating IoT technologies. By connecting and leveraging the existing digital outpatient service system, the vaccination process can be managed as follows: after the vaccination record is scanned during the vaccination flow, the IoT based vaccination refrigerator will automatically eject the required vaccine, then re-check it by scanning to ensure accurate vaccine dispensing and eliminate any errors in combination with the standardized vaccination procedures. The vaccination records will be uploaded in real-time to the system.

Smart Vaccine Safe Vaccination Solution



Safe, Worry-free and Intelligent Vaccine Management

3 Key Advantages

- Right person: end-to-end visibility and transparent information
- Right vaccine: the vaccines will be ejected automatically and checked many times to ensure that the right ones are used
- Exchange of vaccine, child and vaccination information, end-to-end visibility and transparency, and immediate freezing of vaccines upon expiration or in question, to ensure high reliability of vaccination programme

Smart Vaccine Storage Solution

Vaccine storage management is an essential step to ensure vaccine safety. However, most of the vaccine storage refrigerators used by the vaccination stations are household refrigerators or ordinary medical refrigerators, without storage management functions, making it difficult to operate a first-in-first-out methodology. Haier's intelligent vaccine preservation refrigerator solves the problem of manual (pen and paper) vaccine management, which is time-consuming and laborious.

Smart Vaccine Refrigerator

Smart Vaccine Preservation Refrigerator and Smart Vaccination Refrigerator are provided with a VIMS (Vaccine Information Management System) software to improve the patient experience.

1 Smart Vaccine Preservation Refrigerator can improve the work efficiency of nurses by removing manual inventory-taking and warehouse operations by leveraging the classification based storage, electronic regulatory code based management, data and information stream management.

HYC– 361

Classification based storage

Each standard refrigerator is provided with 21 compartments in 7 layers. Each compartment can distinguish different lots of vaccines by applying specific first-in-first-out rules. Different kinds of vaccines can be stored upon such classification to effectively reduce the errors during the warehousing-in / out operations.

The smallest package units

The warehousing-in/out operations are verified based on the electronic regulatory codes to realize the full digitalization and automation of vaccine management, and guarantee the accuracy and validity of vaccine storage data.

Data and information streams

The data can be exchanged quickly between the cold chain room and the vaccination desk. Vaccination program manager or disease control centre manager utilizes the vaccination management server, to monitor in real-time all vaccines stored by each vaccination station/centre.

2 The Smart Vaccination Refrigerator, used at vaccination stations, can reduce the workload of nurses during the dispensing and checking of vaccines. The automated accurate vaccine dispensing, minimum temperature fluctuation, reconfirmation of vaccine information, electronic information system, integrated nurse station and other functions ensures zero vaccination error.

HYC– 61

Automated accurate vaccine dispensing

The vaccine will be ejected automatically after the Vaccination Record is scanned; The Regulatory Code will be scanned automatically to reconfirm the information of vaccine, including the inventory, expiration dates and cold chain early warnings;
The time of dispensing can be shortened, and the rate of vaccination errors can be reduced effectively.

Reduce temperature fluctuation

The refrigerator is divided into 8 independent chambers, and the small door of each chamber can be opened for taking out the vaccine required as quick as possible, to minimize the door opening time. The internal temperature fluctuation can be minimized to ensure the safe storage of vaccines.

Rechecking of vaccine information

The warehousing-in/out and dispensing of vaccines can be verified by using the electronic regulatory codes. The vaccination can be conducted only after the vaccine to be used is verified by scanning the code.
This function can guarantee the accurate vaccination effectively.

Integrated nurse workstation

The queue management, vaccination management, vaccination information input, real-time cold chain control and authorization management are integrated into the vaccination desk vaccine refrigerator.
Multiple tasks are centralized to streamline the overall management.

Smart Vaccine Refrigerator

Smart Vaccine Refrigerator

Specifications

	Model		HYC-361	HYC-361 Scanner Cabinet	HYC-61
Technical Data	Cabinet Type		upright	upright	upright
	Climate Class		N	N	N
	Cooling Type		Forced Air Cooling	/	Forced Air Cooling
	Defrost Mode		Manual+ Auto defrost	/	Manual+ Auto defrost
	Refrigerant		R600a	/	R600a
	Sound Level(dB(A))		≤40	/	≤35
Performance	Temperature Range(℃)		2~8	/	2~8
	Controller		Microprocessor	/	Microprocessor
Control	Display		/	10.1 inch touch screen	10.1 inch touch screen
Electrical Data	Power Supply(V/Hz)		220-240V/50Hz	/	220-240V/50Hz
	Power(W)		235W	/	205W
	Electrical Current(A)		1.62A	/	1.51A
Dimensions	Capacity(L/Cu.Ft)		361/12.75	/	61/2.15
	Net/Gross Weight(approx)	kg	116/139	36/42	80/90
		lbs	363/435.6	79.4/92.7	176/215.6
	Interior Dimensions(W*D*H)	mm	530*555*1380	/	560*430*630
		in	20.8*21.9*54.3	/	22*16.9*24.8
	Exterior Dimensions(W*D*H)	mm	665*710*1965	315*710*1965	600*600*935
		in	26.2*28*77.4	12.4*28*77.4	23.5*23.6*36.8
	Packing Dimensions(W*D*H)	mm	690*790*2110	420*744*2042	652*660*968
		in	27.2*31.1*83.1	16.5*29.3*80.4	25.7*26.3*38.1
	Container load (20'/40'/40'H)		23/46/46	/	54/102/102
Alarms	High/Low Temperature		Y	/	Y
	Remote Alarm		Y	/	Y
	Power Failure		Y	/	Y
	Sensor Error		Y	/	Y
	Low Battery		Y	/	Y
	Door Ajar		Y	/	/
Accessories	Caster		Y	/	Y
	Foot		Y	/	Y
	Porthole		Y	/	/
	Drawers/Quantity		Y/7	/	Y/8
	USB Interface		Optional	/	/
	Temperature Recorder		/	/	/
Certification			Registeration certification for medical equipment /CE	/	Registeration certification for medical equipment /CE

Product appearance and specifications are subject to change without notice

Solar Direct Drive Combined Refrigerator/Freezer

Display Panel

Lock Catch Designed To Match Padlock

HTCD-160

Handgrip

Storage Security

- The anti-freeze function ensures the internal temperature of the cooling chamber is not lower than 0°C.
- Guarantee safe storage of vaccine even in the event of a power failure. Under ambient temperature of 43 °C, 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.
- The freezing chamber can freeze 2.08kg of ice every day, with storage of 10.68kg in total.
- Solar powered temperature display indicates clearly the internal temperature.
- Lockable catch designed for padlock for added security
- The cooling chamber meets the A level WHO requirements for anti-freezing protection.

Temperature Control

- Microprocessor Control; accurate and precise temperature control

Ergonomic Design

- Equipped with USB charging socket, allows users to charge their mobile phone, etc.
- Eliminate storage battery and only provide solar energy power, which is better for the environment.
- Even when powered off the temperature display screen remains illuminated.
- The refrigerating chamber and freezing chamber both have separate refrigerating systems; the two independent cooling systems ensure safety of the vaccine storage.
- Sensor error alarm.
- Low noise.

Solar Direct Drive Combined Refrigerator/Freezer

Specifications

Model			HTCD-160
Technical Data	Cabinet Type		Upright
	Ambient Temperature(°C)		5~43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Noise(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
	Holdover time at 32°C		230hrs10mins
	Autonomy Time at 43°C		121hrs27mins
	Solar Radiation Reference Period		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	170/197
		lbs	374.8/434.3
	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	890*829*1700
		in	35.1*32.6*66.9
	Packing Dimensions(W*D*H)	mm	985*920*1860
		in	38.8*36.2*73.2
	Solar Panel(L*W*D)	mm	1640*990*35
		in	64.6*39.0*1.4
	Container Load(20'/40'/40'H)		12/24/24
Alarm	High/Low Temperature		N
	Sensor Error		Y
	Low Battery		-
Accessories	Baskets		/
	Shelves		2(Refrigerator Room)
Others	Certificate		CE/WHO/PQS
	Data Logger		Y
	Freezer Protection Level		A
	Freezer Gross Volume (L/Cu.Ft)		40/1.4
	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

The combined refrigerator with freezer can be used to store vaccines, reagents and freeze ice packs. Suitable for remote and sunny regions where power shortages are common.

HTCD-90

Solar Energy Display Panel

Product Features

- The refrigerating chamber and freezing chambers both have separate refrigeration systems; to ensure safe vaccine storage
- Solar direct drive is a greener and environment-friendly technology compared with traditional refrigeration
- Microprocessor control, solar powered display panel shows refrigerator and freezer interior temperature, refrigerator temperature range is 2~8°C, freezer temperature is less than -10°C.
- Patented technology within the cooling chamber maintains the interior temperature, to ensure longer holding times when powered off
- Cooling chamber meets the A level WHO requirements for anti-freezing protection
- Patented technology, better temperature uniformity
- Wide working ambient range will function normally within an ambient range of 5-43°C

Ergonomic Design

- Lockable to ensure unauthorized access
- Equipped with USB charging socket, for charging a mobile phone, etc
- Quick and efficient sample retrieval, equipped with easy-to-reach storage baskets
- Low noise
- Corrosion-resistant and easy to clean aluminium interior
- Equipped with handles on both sides of the cabinet, making it easier to move around

Solar Direct Drive Combined Refrigerator/Freezer

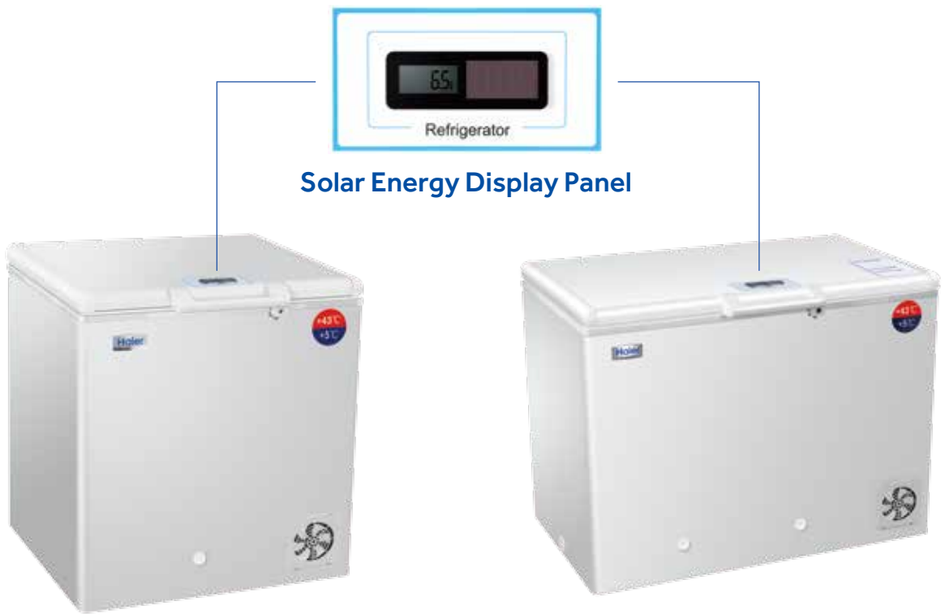
Specifications

	Model		HTCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature(°C)		5~43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Noise(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		137hrs47mins
	Holdover Time at 32°C		169hrs6mins
	Autonomy Time at 43°C		114hrs 56mins
	Solar Radiation Reference Period		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	83/113
		lbs	183.0/250.0
	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*720*875
		in	44.4*28.3*34.3
	Packing Dimensions(W*D*H)	mm	1190*770*1080
		in	46.9*30.3*42.5
	Solar Panel(L*W*D)	mm	1335*990*40
		in	52.6*39.0*1.6
	Container Load(20'/40'/40'H)		26/56/56
Alarms	High/Low Temperature		N
	Sensor Error		Y
	Low Battery		-
Accessories	Baskets		4
	Shelves		-
Others	Certificate		CE/WHO/PQS
	Data Logger		Y
	Freezer Protection Level		A
	Freezer Gross Volume (L/Cu.Ft)		32/1.1
	Waterpack Storage Capacity(kg)		12.52
	Waterpack Freezing Capacity(kg/24h)		2.43

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Refrigerator

This product is designed to store vaccine, reagents, etc. in remote, sunny regions liable to power shortages.



Solar Energy Display Panel

HTC-40

HTC-110/HTC-112

Product Features

- Solar direct drive, a greener and more environment-friendly technology than traditional refrigeration
- Microprocessor control, solar powered display panel shows interior temperature
- Patented technology maintains interior temperature, with longer holding times when power is off
- Cooling chamber meets the A level WHO requirements for anti-freezing protection
- Patented technology ensures better temperature uniformity
- Inner lid configuration offers additional temperature protection
- Wide working ambient range will function normally within an ambient range of 5-43°C

Ergonomic Design

- Lockable to ensure unauthorized access
- Equipped with USB charging socket, for charging a mobile phone, etc
- Quick and efficient sample retrieval, equipped with easy-to-reach storage baskets
- Low noise
- Corrosion-resistant and ease to clean aluminium interior
- Equipped with handles on both sides of the cabinet, making it easier to move around

Solar Direct Drive Vaccine Refrigerator

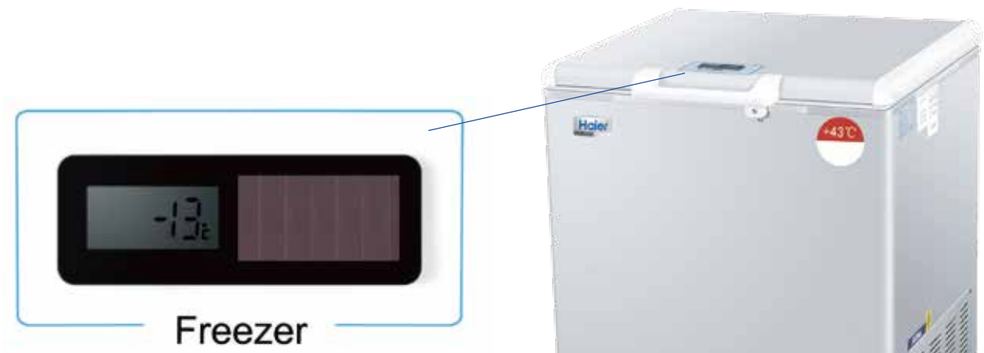
Specifications

	Model		HTC-40	HTC-110	HTC-112
Technical Data	Cabinet Type		Chest	Chest	Chest
	Ambient Temperature(°C)		5~43	5~43	5~43
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		/	/	/
	Refrigerant		CFC-Free	CFC-Free	CFC-Free
	Noise(dB(A))		<30	<30	<30
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)		24	24	24
	Maximal Current(A)		5	5	5
	Energy Consumption: Stable Running(KWh/24h)		0.69	0.58	0.59
	Energy Consumption: Cool Down Test(KWh/24h)		0.71	0.62	0.62
	Holdover Time at 43°C		122hrs18mins	106hrs17mins	–
	Holdover Time at 32°C		163hrs36mins	152hrs28mins	145hrs29mins
	Autonomy Time at 43°C		117hrs18mins	96hrs24mins	92hrs46mins
	Solar Radiation Reference Period		3.5kwh/m²/day	3.5kwh/m²/day	3.5kwh/m²/day
	Voltage of Solar Panel		24V	24V	24V
	Power of Solar Panel		180W *2	180W *2	180W *2
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		22.5/0.8	59/2.08	75/2.65
	Gross Volume(L/Cu.Ft)		40/1.4	110/3.88	110/3.88
	Net/Gross Weight(approx)	kg	57/82	75/105	75/105
		lbs	125.6/180.7	165/231.5	165/231.5
	Interior Dimensions(W*D*H)	mm	200*345*575	545*345*575	545*345*575
		in	7.9*13.6*22.6	21.5*13.6*22.6	21.5*13.6*22.6
	Exterior Dimensions(W*D*H)	mm	788*720*875	1128*720*875	1128*720*875
		in	31.0*28.3*34.4	44.4*28.3*34.4	44.4*28.3*34.4
	Packing Dimensions(W*D*H)	mm	850*770*1080	1190*770*1080	1190*770*1080
		in	33.4*30.3*42.5	46.9*30.3*42.5	46.9*30.3*42.5
	Solar Panel(L*W*D)	mm	1335*990*40	1335*990*40	1335*990*40
		in	52.6*39.0*1.6	52.6*39.0*1.6	52.6*39.0*1.6
	Container Load(20'/40'/40'H)		36/78/78	26/56/56	26/56/56
Alarms	High/Low Temperature		N	N	N
	Sensor Error		Y	Y	Y
	Low Battery		-	-	-
Accessories	Baskets		2	4	4
	Shelves		-	-	-
Others	Certificate		CE/WHO/PQS	CE/WHO/PQS	CE/WHO/PQS
	Data Logger		Y	Y	Y
	Freezer Protection Level		A	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

This product can be used to freeze ice packs in remote and sunny regions where power shortages are common.



Solar Energy Display Panel

HTD-40

Product Features

- Environmentally-friendly solar powered drive system
- Solar-powered display panel
- High performance refrigeration system
- Rated for up to 43°C ambient
- Efficient insulation layer for temperature preservation

Ergonomic Design

- Safety lock for unauthorized access control
- Storage basket for ease of retrieval and archival of samples
- Easy to clean, corrosion proof aluminium interior

Solar Direct Drive Vaccine Freezer

Specifications

Model			HTD-40
Technical Data	Cabinet Type		Chest
	Ambient Temperature(°C)		≤43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Noise(dB(A))		<30
Performance	Temperature Range(°C)		<-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		-
	Solar Radiation Reference Period		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*720*875
		in	31.0*28.3*34.3
	Packing Dimensions(W*D*H)	mm	850*770*1080
		in	33.4*30.3*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
Alarms	High/Low Temperature		N
	Sensor Error		Y
	Low Battery		-
Accessories	Baskets		2
	Shelves		-
Others	Certificate		CE/WHO/PQS
	Data Logger		-
	Freezer Protection Level		/
	Freezer Gross Volume (L/Cu.Ft)		48/1.7
	Waterpack Storage Capacity(kg)		16.8
	Waterpack Freezing Capacity(kg/24h)		2.4

Product appearance and specifications are subject to change without notice

Ice-Lined Refrigerator

The combined refrigerator with freezer can be used to store vaccines, reagents and freeze ice packs.

HBCD-90

Solar Energy Display Panel

Product Features

- The refrigerating chamber and freezing chamber both have the separate refrigeration systems to ensure safe vaccine storage
- Green and environment-friendly
- Microprocessor control, solar powered display panel shows refrigerator and freezer interior temperature, refrigerator temperature range is 2~8°C, freezer temperature is less than -10°C;
- Cooling chamber with water tank maintains interior temperature, extending the holding time when power is off
- Cooling chamber meets the A level WHO requirements for anti-freezing protection
- Patented technology, better temperature uniformity;
- Wide working ambient range, will function normally within an ambient range of 5-43°C

Ergonomic Design

- Safety lock for unauthorized access control ;
- Equipped with storage basket, easy-reach retrieval of sample;
- Low noise;
- Aluminium and stainless steel chamber interior, corrosion-proof and easy to clean;
- Equipped with handles on both sides of the cabinet, easy to move.

Ice-Lined Refrigerator

Specifications

Model			HBCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature(°C)		5~43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		CFC-Free
	Noise(dB(A))		＜40
Performance	Temperature Range(°C)		2～8
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power Supply(V/Hz)		220～240/50
	Power (W)		190
	Electrical Current(A)		1.0
	Power Consumption:Stable Running(KWh/24h)		0.9
	Power Consumption:Cool Down Test(KWh/24h)		1
	Holdover Time at 43°C		63hrs48mins
	Holdover Time at 32°C		132hrs21mins
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		30/1.1
	Gross Volume(L/Cu.Ft)		Refrigerator:42/1.5 Freezer:32/1.1
	Net/Gross Weight(approx)	kg	105/135
		lbs	231/298
	Interior Dimensions(W*D*H)	mm	Refrigerator Chamber:279*273*556 Freezer Chamber:166*366*580
		in	Refrigerator Chamber:11*10.8*21.9 Freezer Chamber:6.5*14.4*22.8
	Exterior Dimensions(W*D*H)	mm	1128*717*872
		in	44.4*28.2*34.3
	Packing Dimensions(W*D*H)	mm	1190*770*1080
		in	47*30*42.5
	Container Load (20'/40'/40'H)		26/56/56
Functions	High/Low Temperature		N
	Power Failure		Y
Accessories	Sensor Error		Y
	Foot/Castor		N
Others	Baskets		4
	Certificate		CE/WHO/PQS
	Data Logger		Y
	Freezer Gross Volume (L/Cu.Ft)		32/1.1
	Waterpack Storage Capacity(kg)		16
	Waterpack Freezing Capacity(kg/24h)		4

Product appearance and specifications are subject to change without notice

Haier Biomedical

Ice-Lined Refrigerator

Refrigeration System

- Optimized refrigeration system design
- Cabinet structure designed specifically to maintain 2°C to 8°C for more than 30 hours at 43°C ambient
- CFC-free high-density foam insulation
- Complies with WHO/UNICEF standards Grade A freeze protection to ensure vaccine never freezes in the storage compartment
- Wide ambient temperature range, from 5°C -43°C

Temperature Control

- Digital Solar powered temperature display
- Internal temperature range is 2°C to 8°C

Ergonomic Design

- Door lock for storage safety
- Indicator light to show whether compressors on or off status
- Independent temperature data logger to monitor,record and manage temperature records
- Operates within wide voltage range,172~264 volts

Solar Energy Display Panel

HBC-80

Specifications

	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
	Defrost Mode		Auto	Auto	Auto
	Refrigerant		CFC-Free	CFC-Free	CFC-Free
	Noise(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)		0.6	0.6	1
	Power Consumption:Cool Down Test(KWh/24h)		0.7	0.7	1.1
	Holdover Time at 43°C		59hrs58mins	60hrs50mins	More than 60hrs
	Holdover Time at 32°C		98hrs26mins	96hrs23mins	117hrs24mins
Dimensions	Vaccine Storage Capacity(L/Cu.Ft)		61/2.2	122/4.3	211/7.4
	Gross Volume(L/Cu.Ft)		80/2.8	150/5.3	260/9.2
	Net/Gross Weight(approx)	kg	85/110	105/140	160/200
	Interior Dimensions(W*D*H)	mm	500*366*560	840*366*560	1359*366*560
		in	19.7*14.4*22	33.1,*14.4*22	53.5*14.4*22
	Exterior Dimensions(W*D*H)	mm	788*717*872	1128*717*872	1647*717*940
		in	31*28.2*34.3	44.4*28.2*34.3	64.8*28.2*37
	Packing Dimensions(W*D*H)	Paper	Paper	Paper	Paper
		mm	850*770*1080	1190*770*1080	1720*770*1080
		in	33.5*30*42.5	47*30*42.5	67.7*30*42.5
	Container Load (20'/40'/40'H)		36/78/78	26/56/56	18/38/38
Functions	High/Low Temperature		N	N	N
	Power Failure		Y	Y	Y
Accessories	Sensor Error		Y	Y	Y
	Foot		N	N	Y
Others	Baskets		1	3	5
	Certificate		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

Vaccine & Icepack Freezer

The refrigerators are designed to store vaccines, freeze icepacks, pharmaceuticals etc and used within epidemic prevention, clinics, hospitals, research institutes etc.

HBD-116

Refrigeration System

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

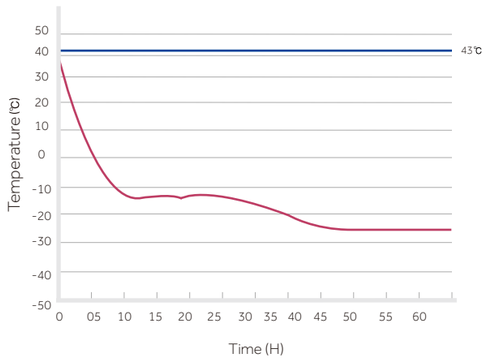
Temperature Control

- Electronic temperature controller with digital display
- Internal temperature range is -15℃ to -25℃

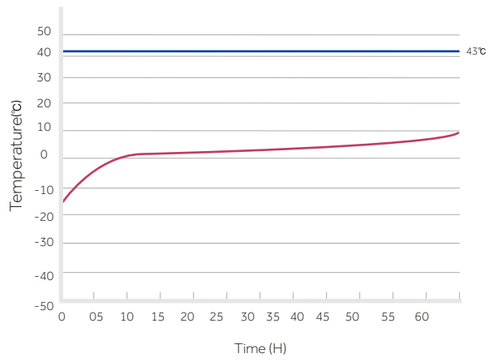
Ergonomic Design

- Safety lock to safeguard against unauthorized access
- Stainless steel interior for ease of cleaning
- Internal configuration suitable for various sizes of storage baskets
- Drainage port for ease of cabinet cleaning
- LCD temperature display

HBD-286 Pull down test at 43 ℃ ambient



HBD-286 Warm up test at 43 ℃ ambient



Vaccine & Icepack Freezer

Specifications

	Model		HBD-116	HBD-286
Technical Data	Cabinet Type		Chest	Chest
	Ambient Temperature(℃)		<43	<43
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual
	Refrigerant		CFC-Free	CFC-Free
	Noise(dB(A))		43	44
Performance	Temperature Range(℃)		-15~-25	-15~-25
Control	Controller		Microprocessor	Microprocessor
	Display		LCD touchscreen	LCD touchscreen
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℃		More than 4hrs(up to -5℃)	More than 5hrs(up to -5℃)
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	Certificate		CE,WHO/PQS	CE,WHO/PQS

Product appearance and specifications are subject to change without notice

Walk-In Cold/Freezer Room

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 to meet designed temperature standards. The units have been installed in India, Guinea, Syria, Pakistan, Burundi, Zimbabwe, etc.

Specifications

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

Integral Cold Store Unit

- The cold room is suitable for a variety of applications; it can be used to freeze or refrigerate samples for health-care, research, agriculture, and biotechnology purposes. In the walk-in cold room (WIC), the interior temperature can be controlled within a range of 2°C to 8°C. In the walk-in freezer (WIF), the temperature is set at -20°C.

Features of the Cold Room

- The set point of the cold room has an adjustable range of 0°C to 10°C (or -15°C to -25°C for the Freezer Room) with a resolution of 0.1°C.
- High-efficiency CFC-free polyurethane insulation foamed into place. With a density of 42kg/m^3, a thickness of 100mm, and an insulation K-value of 0.22 W/(m^2)(K) or better.
- Internal and exterior surfaces are made up of hot-dipped galvanized steel sheet, coated in a white polyester coating. The floor is clad with non-slip material.
- Rooms are equipped with tungsten lighting.
- Rooms are equipped with shelving systems on 3 of their walls.
- Dual refrigeration system – while one system is working, the other one is reserved as a back-up.
- Forced air-cooling system
- Door equipped with a lock and heavy-duty hinges, with an internal safety release.
- CFC-free refrigerant
- Automatic defrosting
- A manual change-over switch is offered as standard, an automatic change-over switch is available as an optional extra.
- Temperature recorder and audible alarm system.

Technical Characteristics of the Refrigerating Unit

- An integrated condenser unit, called Mono block, integrates evaporator, condenser, compressor, electrical control units into one compact body, used for cold storage rooms with temperature control of -5°C~5°C or -15°C~-20°C, in medical, clinical, agricultural and chemical industries where large scale cold storage is needed.
- Small compact structure.
- Comprises of TECUMSEH hermetic compressors, hight efficient, in-grooved copper tube and aluminium fin heat exchangers and leading brand refrigeration parts.
- The electronic control boards manages following parameters-automatic temperature setpoint and control, electric heater defrosting, protection devices for over loading, over-heating, lack of phase, high and low pressure.
- Safe, easy to use and is economical, low cost installation and operation.

Temperature Recorder

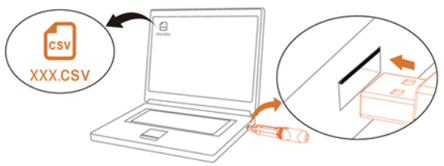
- Upper and lower limits +50°C to -30°C
- Accuracy ±1°C
- Resolution ±0.5°C
- Minimum acceptable recording period between chart changes is 7 days
- USB interface is included

30-Day Eelectronic Temperature Logger

Haier Vaccine Cold Chain Storage Safety Solution
•Continuous, real-time, whole-process traceable monitoring for vaccine safety storage solution
• WHO approved and sourced by WHO procurement.

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
- Designed specifically for 2~8°C vaccine storage, equipped with high/low temperature visual alarm to meet the WHO standard
- Recording capacity is over 30days, recording interval is 6 minutes, outdated data will be overwritten by new one automatically, when the recording volume is full
- LCD screen displays temperature
- Integrated sensor device, dust and water resistant to IP65 protection standard, can be placed in Cold Box or vaccine refrigerator to monitor the temperature
- The logger can be plugged into the USB port 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 included as standard

Specifications

Model	HETL-01
Temperature Range(°C)	-20~+50
Main Material	ABS (Transparent Shield: PC)
Data Interface	USB Interface
Display Medium	LCD touchscreen
Resolution	0.1°C
Accuracy	±0.5°C for -20°C~+40°C ， ±1°C 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

Laboratory Equipment

Biological Safety Cabinet

Main Uses

Specialized local air purifying equipment. These are standard Class II microbiological safety cabinets suitable for basic cell biology, microbiology, biomedicine, biosafety laboratories and other laboratories. It is the most basic protection and isolation equipment for biosafety.

EBM DC fan,energy consumption as low as 112W,low noise to 58dB.

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

HR1200-IIA2-S

With the third generation computer board,the program is more intelligent and the wind speed self-regulation is more sensitive.

Debris screen can prevent paper scraps and other debris entering into and damaging the negative pressure zone.

Optional part:adjustable stand fits customer's need.

Drop-down glass door is easy to clean.

Partitioned workbench is easy to sterilize and clean.

Biological Safety Cabinet

Product Advantages

- HR1200-IIA2-S is the latest biosafety cabinet developed and manufactured to European Standard EN12469.
- With improved energy efficiency the HR1200-IIA2-S is equipped with two EC fans which also lowers noise output.
- A highly efficient HEPA output filter provides protection for the samples, operators and environment.
- Side glass windows allow more natural light, reducing optical stress caused by artificial lighting.
- Additional features include height adjustable stand with wheels and levelling feet, air valve and vacuum valve ports.

Features

- Certified to EN12469.
- Damp-proof, fire-proof glass fibre HEPA filter with a filtering efficiency for ≥0.3μm particulate matter is ≥99.995% provides cleaner air and safer samples.
- Dual EC fans allow for better air flow uniformity and operate with lower noise.
- LCD screen displays various parameters and clear operational conditions.
- UV lamp can be set with one single key to activate/deactivate automatically at specified sterilization intervals from 0min to 24hrs, to minimize the waiting time.
- The product features an interlocking function between the ultraviolet sterilization, fluorescent lamp, front window and fan motor meaning the UV lamp can only come on when the illuminating lamp is off. This failsafe removes the risk of incorrect operation.
- Multiple audible and visual alarms: hardware malfunction alarm, operating parameter overrun alarm, filter/UV lamp lifecycle ending alarm, etc.
- Two patented IP44 rated water-proof sockets with timed on/off function for improved safety and energy conservation.

Ergonomic Design

- 10° angled front window provides a comfortable work space for operators.
- Adjustable height stand with hidden mechanism to avoid contamination.
- Universal castor for convenient moving.
- Drop-down front window design for easier cleaning of the upper edge of glass.
- Removable hand rest reduces arm fatigue and does not interfere with air inflow.
- Optional accessories include water valve (manual/electric), air valve and VHP sterilizer.

Biological Safety Cabinet

Main Uses

Energy efficient Class II microbiological safety cabinet with two EC fans, dual exhaust HEPAs and long lasting LED lights. Suitable for microbiology, biomedicine, biosafety laboratories and other laboratories. It offers three levels of protection – operator, product and environment.

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

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

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

The HR1200-IIA2 double exhaust filtered biological safety cabinet utilises two highly efficient HEPA exhaust filters and one ULPA downflow filter to provide three levels of protection; operator, product and environment. As there is no need for external ducting, this is a cost- effective solution.

The unit is certified to the EN 12469 standard. It uses energy efficient EC fans, as well as LED lights to ensure for optimal performance with a low noise output and reduced energy consumption. The ergonomic design ensures maximum comfort and alleviates operator fatigue.

The units utilise side air design on the upper edge and on both sides of the front window to eliminate 'blind spots'. This prevents crossflow between inside and outside air thus reducing the risk of contamination. The compartmented working surface can easily be removed for sterilization and cleaning purposes.

Features

- E.U. EN12469 Standard Certification.
- The main filter uses a damp-proof, fire-proof glass fibre ULPA filter, the filtering efficiency for ≥0.12μm particulate matter is ≥99.9995% which provides cleaner air and safer samples.
- EC 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 reducing downtime.
- The product features an interlocking function between the ultraviolet sterilization, fluorescent lamp, front window and fan motor meaning the UV lamp can only come on when illuminating lamp is off. This failsafe removes the risk of incorrect operation.
- Multiple alarm functions with clear and easy to understand alarm with visual and sound alert functions. Alarms include filter and UV end-of-life alerts, fan turned-off after door opening alert and door open alarm.
- Two patented IP44 rated waterproof sockets with timed on/off function to improve safety and conserve energy.

Ergonomic Design

- 10° angled front window provides a comfortable work space for operators.
- Adjustable height stands with hidden mechanism to avoid contamination.
- Universal castors with self-levelling feet for convenient moving.
- Drop-down front window design for easier cleaning of the upper edge of glass.
- Removable hand rest reduces arm fatigue and does not interfere with air inflow.
- Optional accessories include water valve (manual/electric), air valve and VHP sterilizer.

Alarm Functions

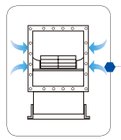
- Fan turn-off alarm after door opening.
- Abnormal door height alarm.
- Door open more than limit.
- Blocked filter alarm.
- Damaged filter alert.
- Filter and UV end-of-life alert.
- Front glass blocks ultraviolet .

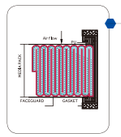
Biological Safety Cabinet

The Haier Biomedical Biological Safety Cabinet is designed to protect the operator, laboratory environment and samples from being exposed to the infective aerosol produced from samples with bacteria strains, diagnostic materials, and other infective substances. It provides the operator with comfortable and safer working conditions. It is widely used in medical health, disease prevention, food safety, biological pharmacy and environment monitoring.

CEN EN 12469

Ultra Low Penetration Air Filter System





Intelligent Constant Air Velocity Patent Technology

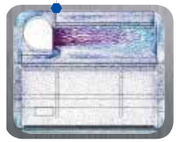
The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity to keep the air speed constant within the safety cabinet by adjustment of the fan speed via the microcomputer system.

304 Stainless Steel Operation Platform and Internal Wall

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

Digital Microprocessor Control System

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



Patented Safe Air Flow Distribution Design

The professional air flow distribution design, provides more uniform airflow,reduced contamination and noise to <62dB(A).

V-shaped Air Inlet Design

Swivel Castor and Self-levelling Feet

HR1200-IIA2

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 maintains a constant velocity by adjustment of the fan speed by microcomputer system.

Low Noise Safety Energy-saving Mode

When the human body sensor module detects under the intelligent mode that the person is outside and away from the operating area for over 15 minutes, the microcomputer program will automatically switch the safety cabinet to Low Noise Safety Energy Conservation mode, which reduces noise, conserves energy and improves the service life of the filter.

Professional Air-flow Distribution Module

Through the professional air flow distribution design, the safety cabinet provides a more uniform airflow, reduced contamination and noise to <62dB(A).

Ultra Low Penetration Air Filter System

American AAF (ULPA) filter is tested to a typical efficiency of > 99.9995% for 0.12 micron particles. ULPA filter provides vertical laminar flow to the worktable to protect samples from pollution .

Patented Air Flow Disruption Technology

The units utilise side air design on the upper edge and on both sides of the front window to eliminate 'blind spots'. This prevents crossflow between inside and outside air, reducing contamination (Patent No. ZL200520125549.X).

Unique Drop-down Front Glass Window

The unique drop-down front glass window can be removed in seconds to enable quick and efficient cleaning of upper sections, limiting downtime.

Removable Arm Rest

Removable arm rest reduces user fatigue and does not interfere with air inflow.

	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

HR40-IIA2

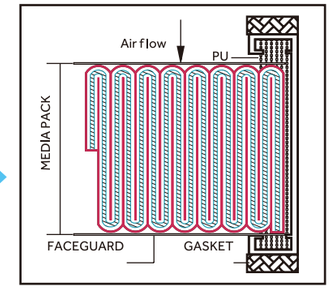
Biological Safety Cabinet

304 Stainless Steel Operation Platform and Internal Wall

- Stainless steel work surface without screws ensures no accumulation of contaminant
- Removable air in-flow plate is easy to clean and disinfect
- Internal wall is constructed of a single piece stainless steel, with 12mm arc angle corners which allows for more effective cleaning
- The volume of liquid tank is over 4L, equipped with outlet valve for convenient cleaning and maintenance
- Concaved work surface, waste liquid easily collected
- Adjustable stand (0-75mm) without exposed screw thread, reduces risk of contamination

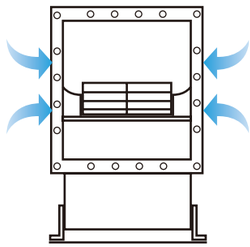
Ultra Low Penetration Air Filtration System

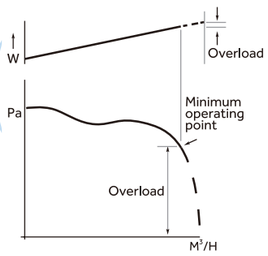
- American AAF ULPA filter
- Tested to a typical efficiency of 99.9995% for 0.12 micron particles
- Provides FED STD 209E class 1 (or ISO14644.1 class 3) clean air to work surface in a stable vertical laminar flow to protect samples
- The exhaust ULPA filter traps biohazard particles acquired from the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

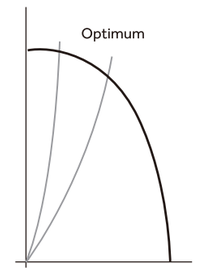


High Efficiency Blower System

- 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

Biological Safety Cabinet

Specifications

Model		HR900-IIA2	HR1200-IIA2	HR1500-IIA2	HR1200-IIA2-D	HR1200-IIA2-S
Working Voltage&Frequency(V/Hz)		220V 50Hz	220V 50Hz	220V 50Hz	220V 50/60Hz	220V 50/60Hz
Power(VA)		1400	1500	1600	1600	1600
Power of Blower(W)		AC-L=330W,M=465W,H=735W	AC-L=330W,M=465W,H=735W	AC 650W	EC 190W, EC 170W	EC 120W,EC 112W
Airflow Circulation		70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust
Main Filter Typical Efficiency		ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um
Exhaust Filter Typical Efficiency		ULPA,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um	TWO HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um
Filter's Brand		AAF	AAF	AAF	AAF	AAF
Downflow Velocity(m/s)		0.33	0.34	0.31	0.30	0.30
Inflow Velocity(m/s)		0.55	0.55	0.55	0.45	0.45
Fluorescent Lamp Intensity(Lux)		≥900	≥900	≥900	≥1000	≥1000
Net/Gross Weight(approx)	kg	270/293	320/339	360/393	320/339	320/339
	lbs	595.3/646	705.5/747.4	793.7/866.4	705.5/747.4	705.5/747.4
Interior Dimensions(W*D*H)	mm	920*620*650	1220*620*650	1520*620*650	1310*620*630	1310*620*630
	in	36.2*24.4*25.6	48.0*24.4*25.6	59.9*24.4*25.6	51.6*24.4*24.8	51.6*24.4*24.8
Exterior Dimensions(W*D*H)	mm	1080*845*2160	1380*845*2160	1680*845*2160	1380*780*2160	1380*780*2160
	in	42.5*33.3*85.0	54.3*33.3*85.0	66.1*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	1755*920*1690	1470*920*1690	1470*920*1690
	in	45.1*36.2*66.5	57.9*36.2*66.5	69.1*36.2*66.5	57.9*36.2*66.5	57.9*36.2*66.5
Supporter		680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height
Container load (20'/40'/40'H)		12/24/24	8/16/16	6/12/12	8/16/16	8/16/16
Alam		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certificate		CFDA,CE,EN12469	CFDA,CE,EN12469	CFDA,CE,EN12469	CE,EN12469	CE,EN12469

Product appearance and specifications are subject to change without notice

Biological Safety Cabinet

Biological Safety Cabinet

Specifications

Model		HR30-IIA2	HR40-IIA2	HR50-IIA2	HR40-IIB2
Working Voltage&Frequency(V/Hz)		220V 50Hz	220V 50/60Hz	220V 50Hz	220V 50/60Hz
Power(VA)		1300	1300	1300	1700
Power of Blower(W)		AC-L=330W,M=465W,H=735W	AC 540/625W	AC 650W	AC 115W
Airflow Circulation		70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	100% Exhaust
Main Filter Typical Efficiency		ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um
Exhaust Filter Typical Efficiency		ULPA ,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um	HEPA,H14,99.995%@0.3um
Filter's Brand		AirePlus	AAF	AirePlus	AAF
Downflow Velocity(m/s)		0.31	0.28	0.28	0.28
Inflow Velocity(m/s)		0.55	0.55	0.55	0.55
Fluorescent Lamp Intensity(Lux)		≥1200	≥1200	≥1100	≥1200
Net/Gross Weight(approx)	kg	235/257	293/316	350/383	252/298
	lbs	518.5/567.1	646.5/697.3	772.3/845.1	555.6/657.5
Interior Dimensions(W*D*H)	mm	900*610*680	1167*610*680	1585*610*680	1167*610*680
	in	35.4*24.0*26.8	45.9*24.0*26.8	62.4*24.0*26.8	45.9*24.0*26.8
Exterior Dimensions(W*D*H)	mm	1100*790*2200	1360*790*2200	1780*790*2200	1360*790*2400
	in	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	1155*905*1720	1415*905*1720	1835*905*1720	1415*905*1910
	in	45.5*35.6*67.7	55.7*35.6*67.7	72.2*35.6*67.7	55.7*35.6*75.2
Supporter		680	680	680	680
Container load (20'/40'/40'H)		10/20/20	8/16/16	6/12/12	8/16/16
Alam		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certificate		CFDA	CFDA,CE,EN12469	CFDA	CFDA,CE ,EN12469

Product appearance and specifications are subject to change without notice

Clean Bench

Main Uses

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

HCB-1300H

Clean Bench

Product Advantages

- Use efficient damp-proof and fire-proof glass fibre HEPA filter, typical efficiency of ≥99.99%. for ≥0.3μm particulate.
- ISO14644.1 Class 5 Standard, air cleanliness 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/product protection.
- UV lamp start-up delay time prevents operators from being exposed to potentially harmful ultraviolet light. The pre-set function for the ultraviolet sterilization improves user's operation efficiency.

Features

- Recessed internal lighting reduces eye fatigue.
- One-touch UV lamp operation, Ultraviolet light can be set with one single key to automate on/off time and sterilisation time interval from 0 to 24 hours, reducing downtime. Audible and visual alarms remind users to leave, protecting them from UV injury.
- 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 fluorescent light is on, the ultraviolet light is powered off immediately to minimize any risks.

Ergonomic Design

- The working surface is 800mm above the floor and suitable for an operator to stand or sit , allowing for flexible working through the day to reduce operator fatigue and make operations comfortable.
- The delay to start function of the ultraviolet sterilization prevents operators exposure to harmful lighting. When ultraviolet light is switched on, the sound and light alarms will notify operators to leave immediately. The light will come on after 10 seconds to prevent operators from being harmed by the ultraviolet light.
- The pre-set sterilization function improves productivity. The product has a ultraviolet sterilization pre-set timer function which provides more rest to users and improves work efficiency.
- The detachable chassis makes installation and moving convenient. It is equipped with universal casters and adjustable stand with levelling feet for convenient moving and cabinet placement.

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

High-Efficiency Filter HEPA

High-efficiency HEPA filter with efficiency of 99.99%@0.3μm, provides ISO14644.1 Class V standard clean air, safer and reliable clean air.

304 Stainless Work Surface

The durable and corrosion-resistant 304 stainless steel work table without fixing screws reduces the accumulation of dirt, reducing the risk of contamination.

Ergonomic Design

Recessed internal lighting reduces eye fatigue.

Patented Technology

- Patented UV sterilization start-up delay technology prevents injury by UV light. After the UV lamp switch is pressed down, the audible and visual alarm will be activated to remind the operator to leave in time;
- Pre-set function: This technology includes a pre-set UV sterilization start-up delay function to provide improved working efficiency.

Interlocking Function

There is an interlocking function between illuminating lamp and UV lamp, the UV lamp only works when the illuminating lamp is off. If the UV lamp is on, it can be turned off by pressing the daylight lamp, reducing the risk of incorrect operation.

Memory Function

The UV lamp start-up delay time, sterilization duration, pre-set start time, fan position can be set and saved by user on request for the convenient and quick cabinet start-up.

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 pre-set, when pressing the UV lamp, the pre-set lamp will light to remind user that the sterilization pre-set function has been activated and that the sterilization pre-set can be conducted.

Pre-cleaning Function

The pre-cleaning function can further improve the protection of samples.

Clean Bench

Specifications

Model		HCB-900V	HCB-1300V	HCB-1300H	HCB-1600H
Flow Type		Vertical	Vertical	Horizontal	Horizontal
Voltage/Frequency		220/50	220/50	220/50/60	220/50/60
Power(W)		1200	1200	350	350
Vibration Amplitude (UM)		2	2	2	2
Exhaust Filter Typical Efficiency		H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um
Average Velocity (M/S)		0.2-0.4	0.2-0.4	0.2-0.4	0.2-0.4
Fluorescent Lamp Intensity(Lux)		≥300	≥300	≥1000	≥1000
Net/Gross Weight(approx)	kg	115/145	145/171	145/175	165/214
	lbs	254/319	320/376	319/385	363.7/471
Sound Level(dB(A))		58	58	61	61
Internal Dimension(W*D*H)	mm	900*530*520	1300*530*520	1310*550*750	1710*550*750
	in	35.4*20.9*20.5	51.2*20.9*20.5	51.6*21.7*29.6	67.3*21.7*29.6
External Dimesion (W*D*H)	mm	970*630*1730	1370*630*1730	1380*792*1960	1780*790*1960
	in	38.2*24.8*68.1	53.9*24.8*68.1	54.4*31.2*77.2	70.1*31.1*77.2
Packing Dimensions(W*D*H)	mm	1105*745*1280	1505*745*1280	1465*940*1350	1865*940*1370
	in	43.5*29.3*50.4	59.3*29.3*50.4	57.7*37*53.2	73.4*37.0*53.9
Supporter		755mm high chassis	755mm high chassis	765mm high chassis	765mm high chassis
Cleanliness Classification		ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5
Container Load(20'40'40'H)		15/33/33	10/25/25	8/16/16	6/12/12
Certification		CE,CFDA	CE,CFDA	CE	CE,CFDA

Product appearance and specifications are subject to change without notice

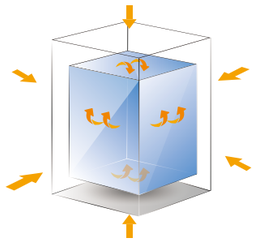
Clean Bench

CO_2 Incubator

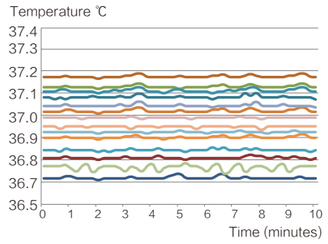
CO_2 Incubator

Concise Test Results with Accurate Temperature Control

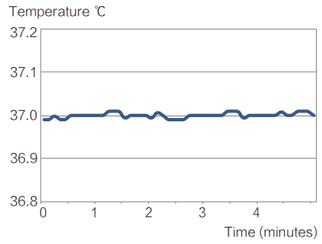
Precise temperature control within the fluctuation range of ±0.1°C, with six-sided heating based on fuzzy PID control principles ensures the normal growth of cells throughout their life cycle.



6–sided heating sketch



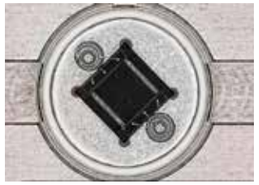
Uniformity of 27 measuring points < ± 0.3℃



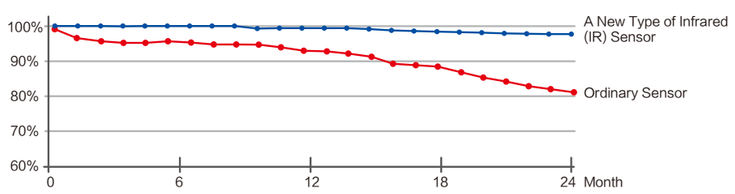
Central point volatility < ± 0.1℃

New IR Sensor Control Technology for Precise CO_2 Concentration

New type IR sensor technology, using NDIR measurement principles, can withstand high temperature up to 190 °C. The silicon MEMS transmitter can withstand more than 300 dry heat sterilization cycles with a service life of 15 years. Built-in temperature and humidity compensation technology reduces the impact of changes of humidity and temperature without the need for calibration after high temperature sterilization. Five-point calibration yields a higher measuring accuracy and sensitivity with less drift.



Silicon–based mems transmitter



Sketch of drift less than 0.3%

Quick Environment Recovery System in the Incubator

Adopting active air flow control technology, based on the fuzzy PID control principle, the parameters can be restored without overshoot. For example, with the door open for 30 seconds, the temperature and CO_2 concentration is quickly restored within 4 minutes. Even if multiple users share a CO_2 incubator and frequently open and close the door, the stability and uniformity of the incubator can be ensured.

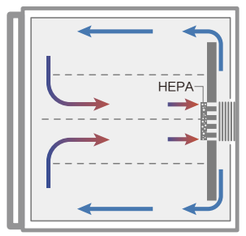
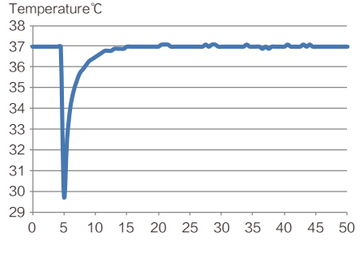
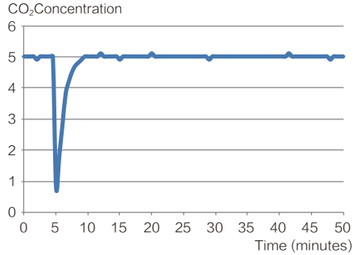


Illustration of purified airflow



Temperature recovery curve (door open for 30s)

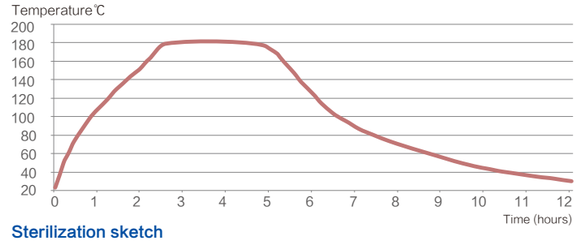


CO_2 concentration recovery curve (door open for 30s)

CO_2 Incubator

180°C Dry-Heat Sterilization Technology

Effective sterilization of biological contaminants including microorganisms and fungal spores with strong resistance. Easy one-step 180°C High temperature, dry-heat sterilization (without the need for consumables), simply press the "sterilization key" to activate 12 hours sterilization process. The sterility level of all surfaces in the working chamber meets WS/T367-2012 requirements. During the sterilization process, all the internal components (including CO_2) sensors are not disassembled with no need for separate sterilization to effectively avoid secondary contamination.



Sterilization sketch

Forty–seven points were tested in the working chamber, including glass inner doors and partitions. All regions reached 180℃ and maintained for 2 hours.

Comparison of Cell Environment Disinfection vs Dry-Heat Sterilization

Ultraviolet disinfection of ordinary CO_2 incubator
Cells exposed to bacterial environment

90℃ hygrothermal disinfection of ordinary CO_2 incubator
Cells exposed to bacterial environment

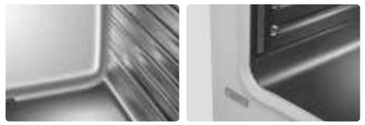
180℃ dry–heat sterilization of haier CO_2 incubator
Pollution–free cell growth environment

High Efficiency in Bacteria Filtration with High Efficiency Microbial Filter

The CO_2 inlet is equipped with a high-efficiency microbial filter, with a filtration efficiency of 99.99% for particles larger than or equal to 0.2 micron in diameter. It can effectively filter bacteria and dust particles in CO_2 gas inline to ensure the safety of experimental results.

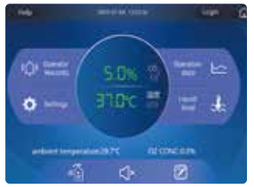
Easy to Clean Interior

The working chamber is manufactured with stainless steel, utilizing a laser seamless welding and a plasma electropolishing process, to create large arc angled corners which with the bracket-less design, means the unit is easy to clean.



Intelligent Interactive and Easy Touch Operation

Touchscreen controller, sensitive to touch, even when you are wearing rubber gloves. Normal operation parameters are displayed in green, while abnormal operation parameters are in red, with data shown at a glance. When the liquid level is low, a buzzing alarm will also be activated alongside the visual red warning display.



Home screen red warning example

Real-time display of operation data real-time display of temperature, CO_2 concentration and O_2 concentration, and the data during the culture cycle can be viewed at any time

Announcement function designed for multiple users of the same incubator, makes important information clear to all users

Operation mode with clear management authority: three-levels of authority to ensure the security of data

CO_2 Incubator

Monitor the Incubator In Realtime

The Configuration of IoT module with multi-screen interaction provides real-time data on the set parameters, actual operation parameters, operation curves, records, and event records through the IoT cloud platform. The operation of incubator can be monitored at anytime and anywhere through mobile App or any web enabled device. The alarm function and service function are available through simple one touch button.

Anti-condensation Heating System Reduced Contamination Risk

The door on the CO_2 incubator can radiate heat to the inner glass door, effectively preventing the glass door from forming condensation. This eliminates the possibility of microbial contamination caused by any condensation.

Intelligent Control of Circulating Air to Maintain Uniformity

The air flow for circulation can be adjusted automatically. The air flow is optimized to avoid evaporation of test samples and to ensure proper uniformity throughout the chamber.

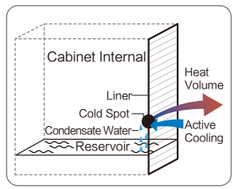
Comprehensive Alarm System

The incubator ensures the safety of experiments and processes by an independent temperature alarm system including a sound, light and remote reminder. Other alarms include CO_2 concentration, door ajar, and water level.

Thoughtful Design with Attention to Details

Anti-slip and anti-slide design of integral partition

Convenient drainage design, clean and convenient



Active heat pipe condensation technology with condensate water directly return to reservoir

Data traceable for 15 years with large storage capacity, and data exportable through USB

CO_2 Incubator

Specifications

Model			HCP-168
Type			Air Jacket
Construction	Chamber Volume(L)		170
	Interior Chamber		Stainless Steel
	Exterior Chamber		Cold-rolled Steel Powder Coated
	Access Port		35mm Diameter
	Data Outputs		Remote Alarm Contacts, Usb, and Optional 4-20ma
Dimensions	Net/Gross Weight(approx)	kg	110/140
		lbs	242.7/308.9
	Interior Dimensions(W*D*H)	mm	490*560*650
		in	19.3*22*25.6·
	Exterior Dimensions(W*D*H)	mm	707*812*887
		in	27.8*32*34.9
	Packing Dimensions(W*D*H)	mm	760*840*1050
		in	29.9*33.1*41.3
Shelves	Dimensions(W*d)	mm	473*434
	Number Standard/Maximum		3/11
	Max.load Per Shelf/Total Load	kg	10/30
	Construction		Perforated, Adjustable
Electrical	Rated Voltage Power Supply(V/Hz)		220/50
	Nominal Consumption (kw) (Steri-run)		0.095(0.85)
Control	Controller		Microprocessor
	Display		7 " Lcd Screen
CO_2	Control		±0.1%
	Range		1-20%
	Alarm Range		±0.5%
	Inlet Pressure		12-15Psi(0.8-1.0 Bar)
	Gas Purity	%	Min.99.5 or Medical Quality
	Sensor		IR
	Recovery Time at 5vol.-%/CO_2 For a 30 Second Door Opening *		4min
	CO_2 Inlet Filter		<0.2μm
Alarms	High/Low Temperature		Y
	Remote Alarm		Y
	Excessive CO_2 Concentration		Y
	Water Shortage		Y
	Door Ajar		Y
Temperature Parameter	Control		±0.1°C
	Range		Range 3°C above Ambient to 55°C
	Uniformity		±0.3°C
	Ambient Range		18-34°C
	Sensor		Pt1000
	Recovery Time at 37°C For a 30 Second Door Opening*		4min
Sterilization Cycle	Cycle Temperature		180°C on Internal Surfaces
	Cycle Duration		Under 12 Hours
Humidity	Rh		Setting 37°C ≥90%
	Humidity Reservoir		Max.3l, Min. 0.5l
Optional	Hepa Filter		Y
	Regulator		Y
	Rs485		Y
	4-20ma		Y
	The Cylinder Switch		Y
Certification			CE

Product appearance and specifications are subject to change without notice

Liquid Nitrogen Storage Solutions

Haier Biomedical

Smart Series

Introduction

For ultimate sample safety our Smart LN_2 biological storage containers cooled by liquid nitrogen, coupled with our IoT and cloud management solution, ensures simultaneous monitoring of temperature and fluid level. Storage temperature and LN_2 fluid level are automatically and independently monitored with a high-precision controller providing accurate and real-time information on these two critical parameters. Manual measurement with rulers and manual temperature device is no longer needed saving time and improving sample safety.

Key Features

- 5 models from 2400 to 6000 cryovial capacity
- 5-year vacuum warranty
- Durable aluminium construction
- Real time monitoring of temperature and fluid level
- Cloud data storage for traceability
- Low consumption rate and high-performance stability
- Lock designed to assure sample security

Product Advantages

Colour-coded racking handles

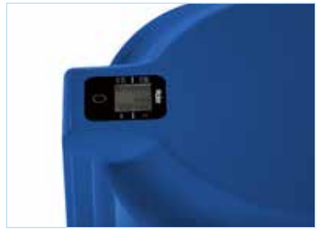
The handles of the racking systems are colour-coded allowing customers to separate storage zones and manage their samples more easily.

New lock design

Special and dedicated lock design is to assure sample safety.

Dual temperature and liquid level monitoring

Storage temperature and liquid level are automatically monitored by a high-precision controller.
Accurate and real-time information on the two parameters are available to ensure sample safety.



Multilayer protection for extreme safety

Temperature and fluid level are monitored in real-time to safeguard the storage environment. Alarms can be transmitted through email, IM and messaging apps such as WeChat.

Cloud data storage for traceability

Temperature and fluid level data can be transmitted to Haier's IoT platform for permanent data storage and traceability.

Low consumption rate and high-performance stability

High-quality automated manufacturing process ensures a high quality and a high vacuum to achieve reliable, stable performance and a low LN_2 consumption rate.

Specifications

Model	YDS-65-216-FZ	YDS-95-216-FZ	YDS-115-216-FZ	YDS-145-216-FZ	YDS-175-216-FZ
Maximum Storage Volume					
No. of canister	6	6	6	6	6
2ML storage vials (100/box)	2400	3000	3600	4800	6000
Layers in pickup barrel	4	5	6	8	10
5MLstorage vials (81/box)	972	972	1458	1944	2430
Layers in pickup barrel	2	2	3	4	5
Function					
Liquid Nitrogen volume (L)	65	95	115	140	175
Static evaporation rate (%/d)	0.78	0.81	0.83	0.87	0.87
Effective volume (L)	55	85	105	130	165
Duration of normal operation (day)	44	66	80	94	126
Dimensions					
Mouth (MM)	216	216	216	216	216
Overall height (MM)	765	790	870	960	1060
Overall Diameter (MM)	681	681	681	681	681
Empty container weight (KG)	38.5	41.3	42.3	48.9	53.8
Full container weight (KG)	80.8	112.4	132.8	157.3	198.5

Note: Static evaporation rate is a theoretical LN2 loss rate. Actual evaporation rate and duration of operation will depend on the usage condition and ambient. The duration of normal operation is a reference number for a typical usage of a container system at normal conditions. The actual duration varies with loading, ambient and age of the equipment.

Liquid Nitrogen Container

Haier Liquid Nitrogen Storage System Biobank Series for Large Scale Storage

The Biobank Series are 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 areas which are clearly labelled. Each storage area is easily rotated to the opening of the tank for convenient sample access.

Designed for Both Liquid and Vapour Phase Storage

Each model of Biobank Series is designed for both liquid and vapour phase storage. For vapour 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 temperature uniformity and storage safety while reducing the consumption of liquid nitrogen. The temperature difference of the entire storage area does not exceed 10°C even in vapour phase storage and temperature near the top of the rack can be as low as -190°C.

Cryosmart Intelligent Liquid Nitrogen Control System

Haier Biobank Series of Liquid Nitrogen storage systems features Cryosmart, a monitoring and controlling solution. High-precision temperature and liquid level sensors are used to ensure accuracy. All data and samples are protected by a secure access control system.

Features

- Large scale storage capacity from 13000 to 94875 *2ml Vials.
- Vapour phase storage is the only guaranteed method to prevent cross-contamination
- Vapour phase storage temperature -190°C.
- 5-year vacuum warranty
- One-touch de-fogging for easier access.
- LN_2 splash proof make the operation more secure.
- Biobank storage compatible.

Liquid Nitrogen Container

Product Details

Top of the Container

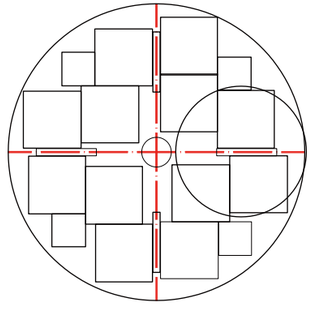
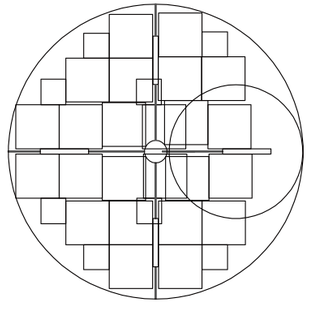
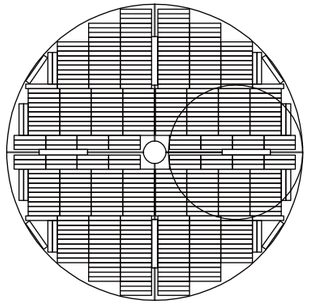
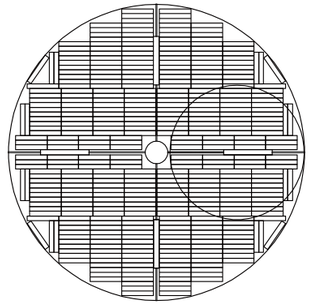
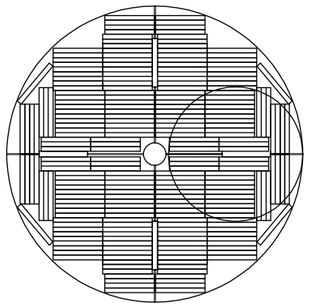
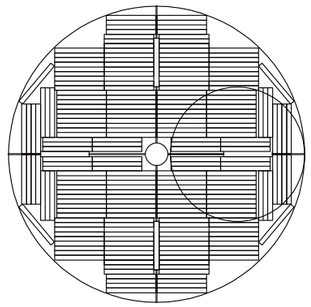
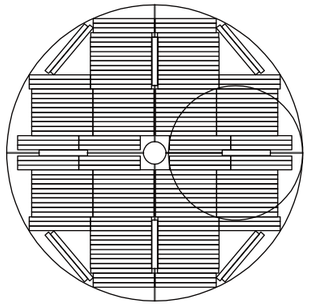
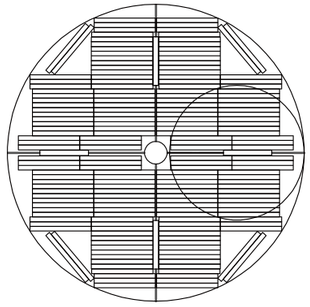
Lid Open

A Low-temperature Hose Connects the Inlet and Liquid Nitrogen Tank. A Silencer Reduces the Noise of Nitrogen Emission, Creating A Quieter Environment.

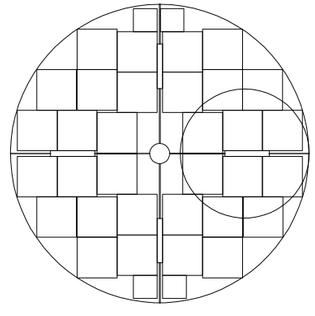
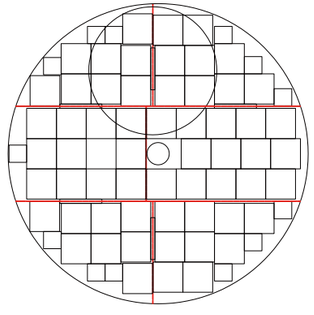
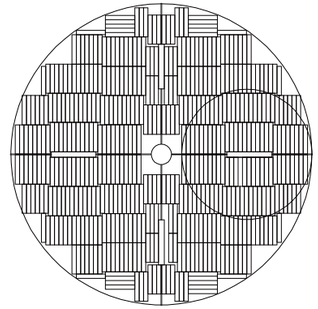
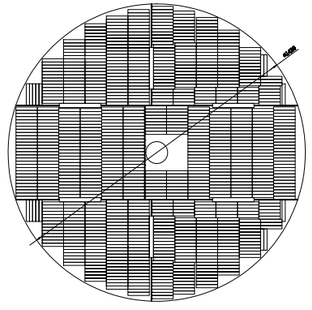
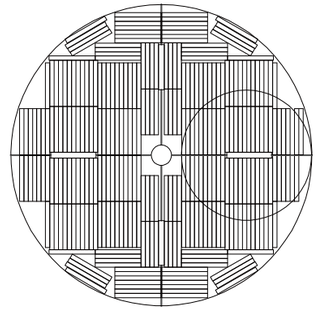
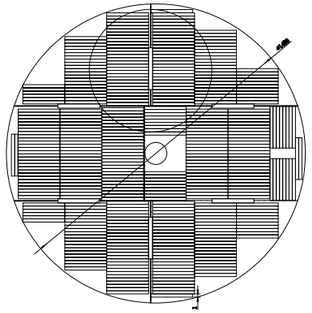
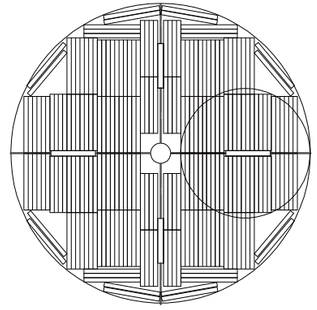
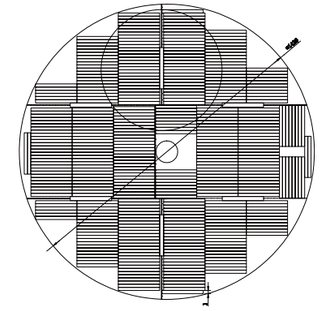
Vapour Condensation Near the Container Opening is Controlled.

Small Self-pressurized Liquid Nitrogen Supply Systems are Available and Suitable for Those Dealing with Fewer Samples.

Liquid Nitrogen Container

	YDD-350-326	YDD-550-445
Holders		
25 ml Racks		
50 ml Racks		
250 ml Racks		

Liquid Nitrogen Container

	YDD-850-465	YDD-1800-635
Holders		
25 ml Racks		
50 ml Racks		
250 ml Racks		

Liquid Nitrogen Container

Specifications

Model	YDD-350-326	YDD-550-445	YDD-750-445	YDD-850-465	YDD-1000-465	YDD-1300-635	YDD-1600-635	YDD-1800-635
Maximum Storage Capacity								
2 ml Vials (Internal Thread)	13000	26000	36400	42900	49500	58500	76050	94875
Freeze Rack (100 wells)	12	24	24	32	32	54	54	60
Freeze Rack (25 wells)	4	8	8	4	4	18	18	13
Layers of each rack	10	10	14	13	15	10	13	15
0.5 ml Vials (Internal Thread)	16900	33800	49400	56100	66000	81900	99450	126500
Freeze Rack (100 wells)	12	24	24	32	32	54	54	60
Freeze Rack (25 wells)	4	8	8	4	4	18	18	13
Layers of each rack	13	13	19	17	20	14	18	20
Performance								
Volume of LN_2 (L)	350	587	783	890	1014	1340	1660	1880
Volume of LN_2 under the tray (L)	55	80	80	135	135	265	300	320
Static Evaporation(L/Day)	≤4	≤8	≤9	≤8	≤8	≤8	≤10.5	≤12.5
Dimensions								
Inside Neck Diameter(MM)	326	445	445	465	465	635	635	635
Height(MM)	1180	1266	1591	1559	1704	1398	1589	1883
Operating Height(MM)	1200	1321	1216	980	950	997	967	1097
Outside Diameter(MM)	875	1104	1104	1190	1190	1565	1565	1565
Door Width Requirement(MM)	1000	1124	1124	1210	1210	1585	1585	1585
Empty Weight(KG)	219	328	372	441	495	851	914	984
Gross Weight(KG)	490	802	1005	1160	1314	1934	2255	2504

Blood bag capacity

Model	YDD-350-326			YDD-550-445			YDD-750-445			YDD-850-465			YDD-1000-465			YDD-1300-635			YDD-1600-635			YDD-1800-635		
	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	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks
25 ml	1296	7	216	2376	6	396	3168	8	396	3360	7	480	4320	9	480	4716	6	786	5502	7	786	7758	9	862
50 ml	792	7	132	1416	6	236	1888	8	236	2072	7	296	2664	9	296	2916	6	486	3402	7	486	4905	9	545
250 ml	300	4	100	552	3	184	920	5	184	944	4	236	1180	5	236	1170	3	390	1950	5	390	2095	5	419
500 ml(df200)	168	4	56	336	3	112	560	5	112	544	4	136	680	5	136	666	3	222	888	4	222	1290	5	258
500 ml(4r9955)	192	4	64	408	3	136	680	5	136	640	4	160	800	5	160	828	3	276	1380	5	276	1520	5	304
700 ml	96	4	32	204	3	68	272	4	68	320	4	80	400	5	80	396	3	132	528	4	132	775	5	155

Haier Biomedical

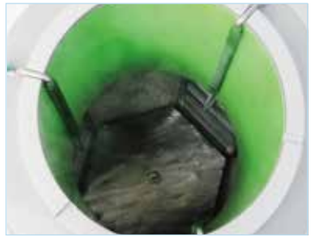
Liquid Nitrogen Container

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 LN_2 Evaporation

Freezer racks are in the ultra-low temperature environment with extremely low LN_2 evaporation. Storage temperature is maintained over the long term, even in vapour phase the temperature is below -190°.

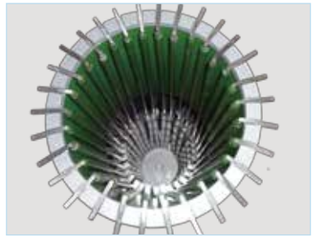


Advanced Vacuum Technology and Superinsulation Technology

Advanced vacuum and insulation technologies ensures cryopreservation under normal operation for up to four months.

Compatible for Blood Bag Storage

According to users' needs, this range can be adapted for temporary storage of blood bags before transfer to a larger scale LN_2 storage tank.



Auto-Refill System

Auto-refill system is particularly suitable for vapor phase storage. For liquid phase storage, it can also facilitate operations by avoiding frequent refills.

The auto-refill system continuously monitors the inside temperature through the ZTC-100B/100C Level Monitor, and automatically controls the 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.
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 storage options
- High thermal efficiency
- 5-year vacuum warranty
- Ultra-low evaporative losses

Liquid Nitrogen Container

Specifications

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 Duration of Normal**	55	85	105	130	165
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

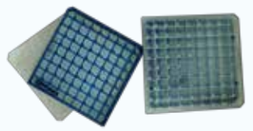
* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.
** Duration of normal operation is for reference only to estimate container performance under normal operating conditions.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

Accessories:

Trolley

Holders

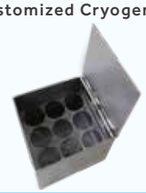
Cryogenic Boxes



216 Diameter Lock Cap

5 ml Customized Holder

5 ml Customized Cryogenic Box



Models Line-up

Cryo Freezer

DW-150W200

-86°C ULT Freezer

DW-86L578S DW-86L728S | DW-86L578ST DW-86L728ST | DW-86L579BP/729BP DW-86L829BP/959BP | DW-86L579BPT/729BPT DW-86L829BPT/959BPT | DW-86L338J DW-86L338JA | DW-86L388J | DW-86L490J DW-86L490JA | DW-86L578J DW-86L578JA | DW-86L728J DW-86L728JA

Slim / Upright / Chest

DW-86L828J DW-86L828JA | DW-86L338 DW-86L338A | DW-86L388A | DW-86L486E | DW-86L628 DW-86L628E | DW-86L728D | DW-86L828D | DW-86W100/100J | DW-86W420J DW-86W420JA

ULT Water Cooling

DW-86W828W | DW-86W959W

-60°C Freezer

DW-60W138 DW-60W258 DW-60W388

-40°C Biomedical Freezer

Upright / Chest / Double Door

DW-40L92 | DW-40L262 | DW-40L278 | DW-40W100 | DW-40W255 | DW-40W380 | DW-40W348 | DW-40L508

-30°C Biomedical Freezer

DW-30L420F | DW-30L278 | DW-30L508 | DW-30L818BP

-25°C Biomedical Freezer

Upright

DW-25L92 | DW-25L262

Combined Refrigerator and Freezer

HYCD-282 | HYCD-282A

Pharmacy Refrigerator

New Generation / RFID Refrigerator

HYC-1099 | HYC-1099T | HYC-1099F | HYC-1099TF | HYC-509 | HYC-509T | HYC-509F | HYC-509TF | HYC-390R

Pharmacy Refrigerator

Blood/Fluid Warming Cabinet / Pharmacy Refrigerator with Tec / Under-counter Pharmacy Refrigerator

HYC-111 HYC-351 | HYC-51BF | HYC-290 | HYC-390/390 (basic) | HYC-390F | HYC-610 | HYC-940 | HYC-940F | HYC-1378 | HYC-68 | HYC-68A | HYC-118 | HYC-118A

Models Line-up

Spark Free Freezer/Refrigerator

DW-25L 92SF/FL | DW-30L 278SF/FL | HLR-118SF/FL | HLR-310SF/FL

Laboratory Refrigerator

HLR-198F/310F

Smart Vaccine Refrigerator

HYC-361 | HYC-61

Vaccine &Icepack Freezer

HBD-116 | HBD-286

SDD Vaccine Refrigerator

HTCD-160 | HTCD-90

Ice-lined Refrigerator

HTC-40 | HTC-110 HTC-112 | HTD-40

HBCD-90 | HBC-80 | HBC-150 | HBC-260

Blood Bank Refrigerator

New Generation

HXC-149R | HXC-429R | HXC-629R

Blood Bank Refrigerator

Baskets

HXC-149 | HXC-429 | HXC-629 | HXC-1369 | HXC-149T | HXC-429T | HXC-629T | HXC-1369T | HXC-158 | HXC-358 | HXC-608 | HXC-1308

Transport Cooler

Drawers

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

HZY-8Z | HZY-15Z | HZY-8ZA

Clean Bench

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

Biological Safety Cabinet

TYPE A2 / New Generation / TYPE B2

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

Liquid Nitrogen Container

CO_2 Incubator

Consumables

Walk-in Cold Room