



Your Haier Biomedical Partner

# Blood Management Solutions

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



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# Automated Blood Management Network

IoT Management; Bedside Blood Usage; Immediate Access on Demand.

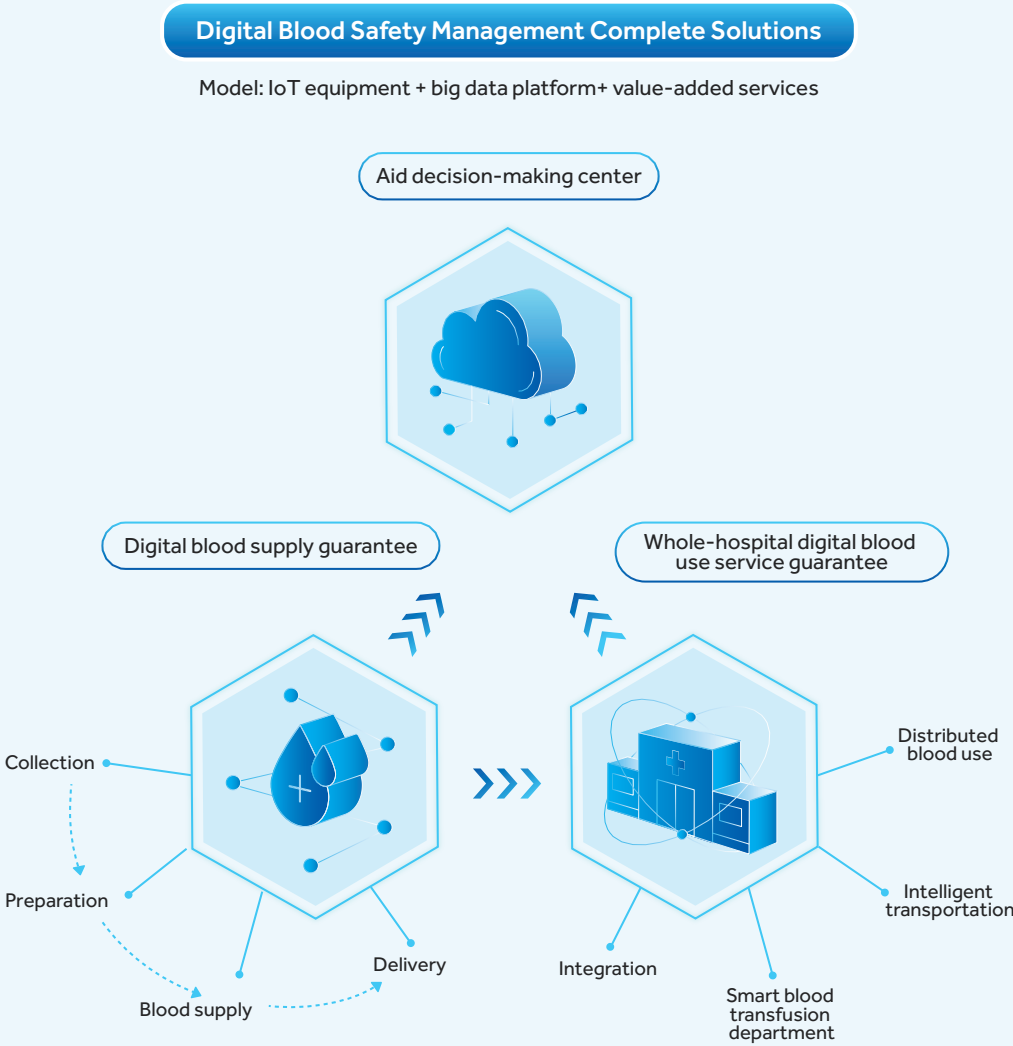


Haier Biomedical is a manufacturer and provider for a complete line of reliable blood management chain products including blood collection vehicle, plasmapheresis machine, blood bag, -86/-40/-30°C freezer, plasma blast freezer, blood bank refrigerator (electrical or solar powered), cold room , transport cooler, plasma platelet, centrifuge, etc.

Blood Network Introduction

The Haier Biomedical Blood Network creates a complete set of digital blood safety solutions and a new blood management model through the integration of devices, a big data platform, and services, thereby achieving efficient blood management and allocation.

Based on the IoT hardware architecture of the digital blood collection and supply scenario and the hospital blood transfusion department scenario, the system builds an aid decision-making platform to enable the quality control and emergency scheduling of blood and the blood collection based on supply, etc., intelligently creating smart blood management for connecting with the smart management operating system to contribute to the Company's vision to "Make Life Better" through the intelligent protection of life science.



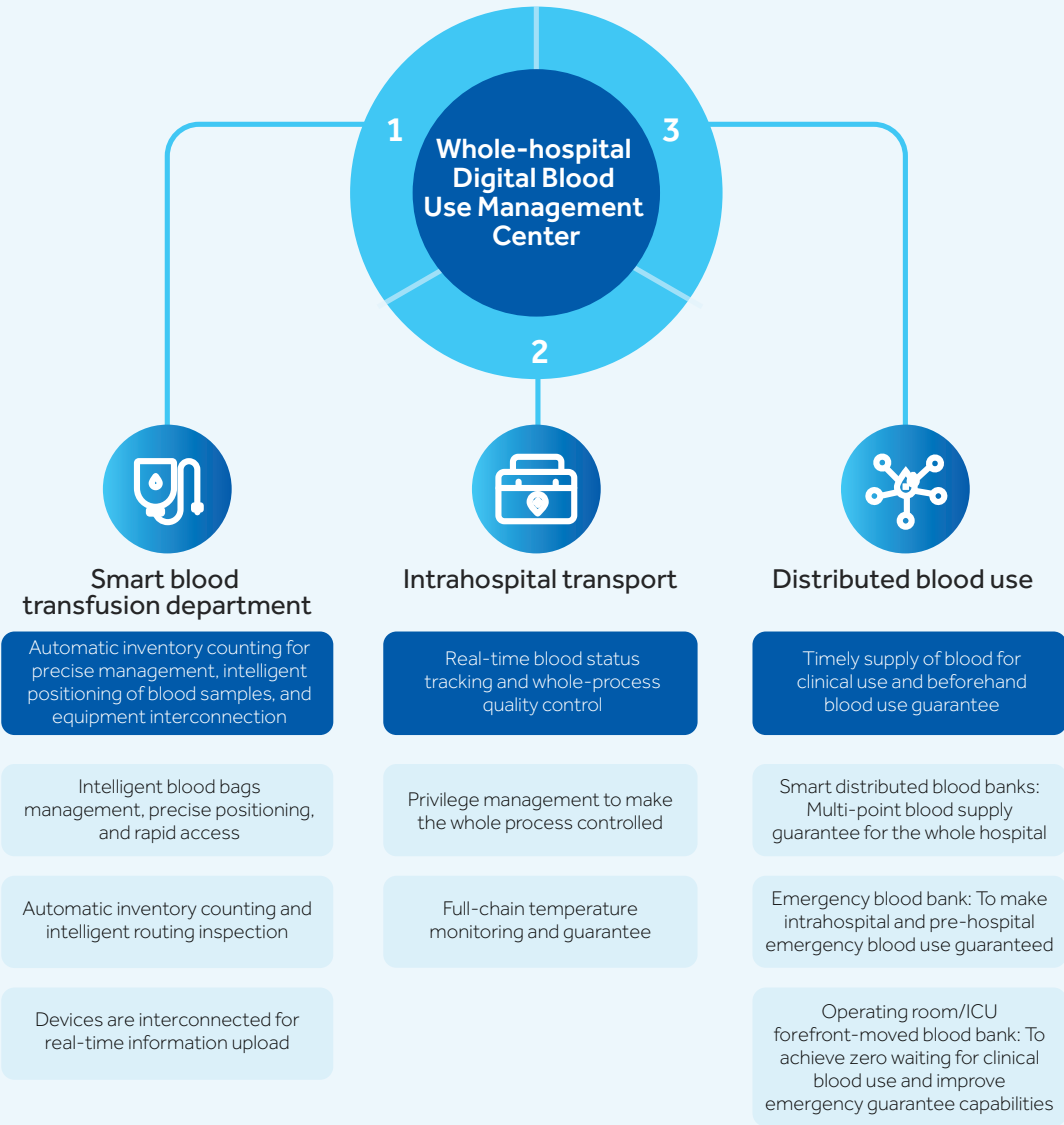
Overview of Blood Network Scenarios

The blood network scenarios are mainly set up around three segments: Digital blood station blood collection and supply scenario, digital hospital blood use scenario, and the data integration platform based on the two digital scenarios.

Complete-hospital Digital Blood Supply Service Platform Centralized Scheme

A Complete-hospital Digital Blood Supply Service Guarantee Platform

Based on the hospital data platform, the blood network builds a complete-hospital digital blood supply service guarantee platform and coverage to support the upgrade from centralized blood supply to distributed blood use, extend the accessibility of blood supply services, and further improve the blood supply guarantee of the whole hospital.





# Smart Blood Transfusion Department



## Red Blood Cell Management



- **RFID radio frequency**  
Precise management, one-key inventory counting, and quick information query
- **All under control and whole-process information traceable**  
The blood intelligent management system makes the whole-process blood information from stock-in to stock-out controllable, queryable, and traceable

## Plasma Management



- **RFID radio frequency**  
Precise management, automatic inventory counting, and quick query
- **Whole-process cold chain monitoring for safety guarantee**  
Whole-process accurate temperature storage and tracking to ensure the safety of each bag of blood

## Platelet Management

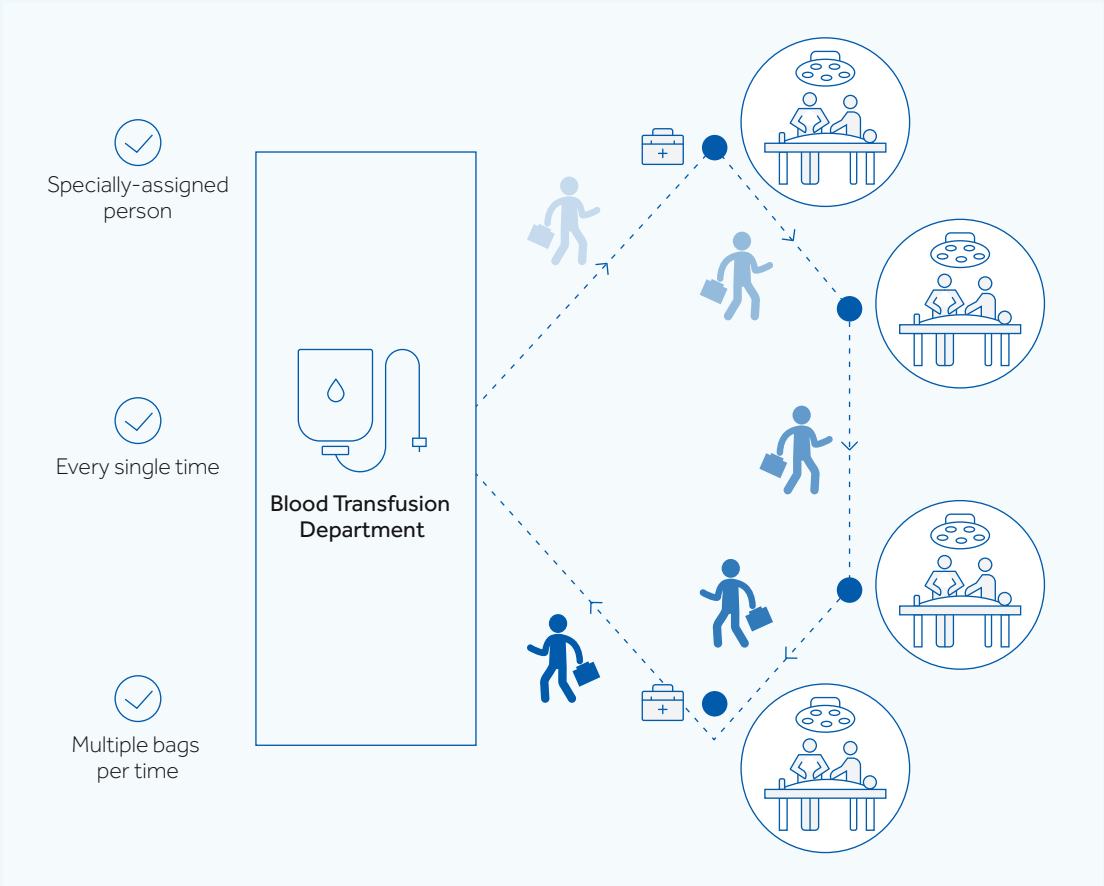


- **Precise and accurate temperature control**  
Semiconductor refrigeration and intelligent temperature control
- **Intelligent IoT and data upload**  
Real-time data information upload to facilitate traceability

# Intrahospital Transport

## Orderly Blood Distribution Mode

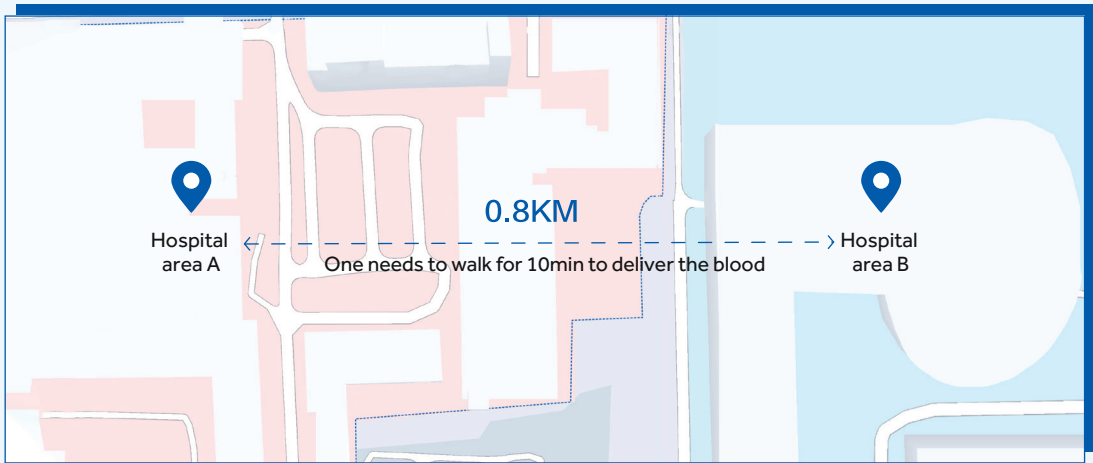
Number of persons required by the blood distribution window≈0  
Full-time blood delivery personnel\*(1~2)  
Special blood collection box\*N





# Distributed Blood Bank

## 1 Distributed blood use - Smart distributed blood banks

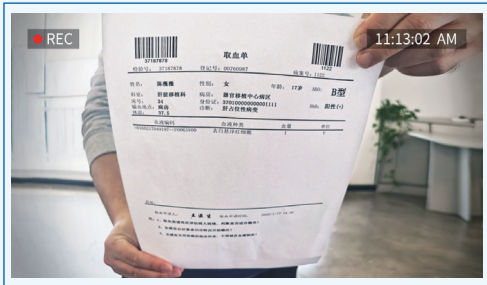


Hospital area distributed blood bank mode: Autonomous blood distribution to ensure the safety of blood use



Video Surveillance

Transfusion department handover (optional)



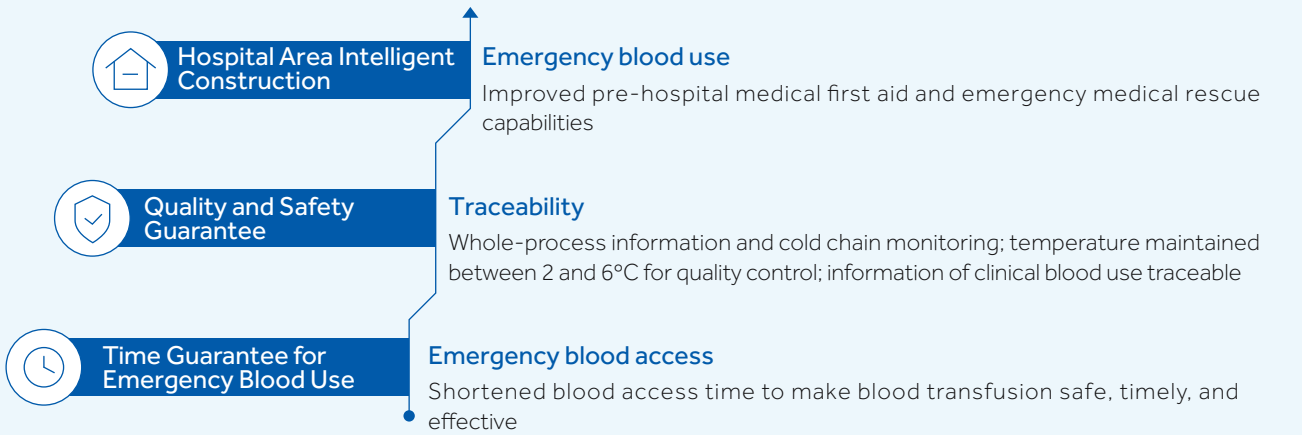
Confirmation by Video Call

- **Improving and refining the management and efficiency of blood banks**  
The management efficiency of the blood transfusion department can be improved. The stock-in and stock-out, equipment monitoring, temperature monitoring, and personnel management of the whole blood bank are IoT-based to enable the complete-process, traceability and monitoring without any need for additional labor.
- **The upgrade from centralized blood supply to distributed blood use extends the accessibility of blood supply services and further improves the blood supply guarantee of the whole hospital**

## 2 Distributed blood use - Emergency/Operation/ICU blood use



Blood storage refrigerators are placed in the clinical blood using departments, including the emergency department, operating rooms, and ICUs, and connected to the blood transfusion management system for temporary blood storage. Before infusion, the clinical staff will collect the blood by bag as needed, and the unused blood can be allocated within the hospital under the whole-process cold chain monitoring condition.



Distributed Blood Bank

Clinical Blood Use

Blood is available immediately to make blood transfusion safe, timely, and effective

Nursing Department

Logistics time is reduced to reduce workload while improving blood use guarantee capabilities; emergency blood use is fully guaranteed

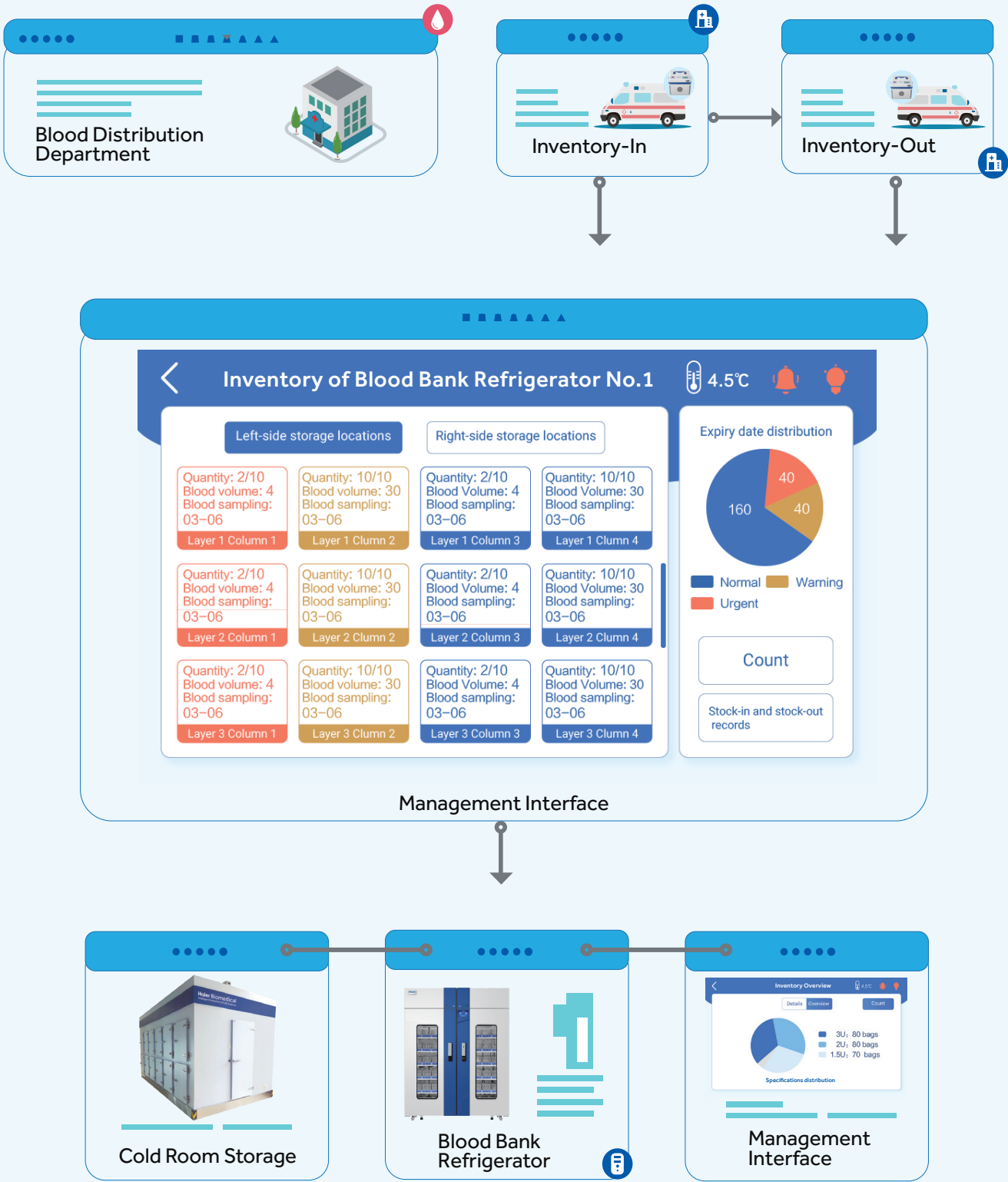
Blood Transfusion Department

Both blood quality and patient safety are guaranteed

Blood Station Working Solution Synopsis

By adding RFID tags to blood bags and either scanning or writing the information, this program ensures accurate positioning of blood products with the intelligent IoT information management system. Through batch verification, quality information control, batch storage accuracy, transport of blood from collection to clinical transfusion, this system enhances the blood quality and safety across the entire health network.

The main aim of the scheme is to strengthen the blood information management from collection to clinical infusion, enhancing blood quality and safety. It is achieved by using an RFID read-write device, RFID detector, RFID walk-in cold room, transfer boxes and blood bank refrigerators which feed data into an IoT blood solution ecosystem. Information such as, blood products batch scanning, batch check information, quality control information, batch stock-in and stock-out, quick inventory count, accurate positioning, information statistics, cold chain storage information, transport information and blood bank product movements can be assimilated to provide a complete picture of an organization's blood management and supply network.





## Blood Station Product Overview

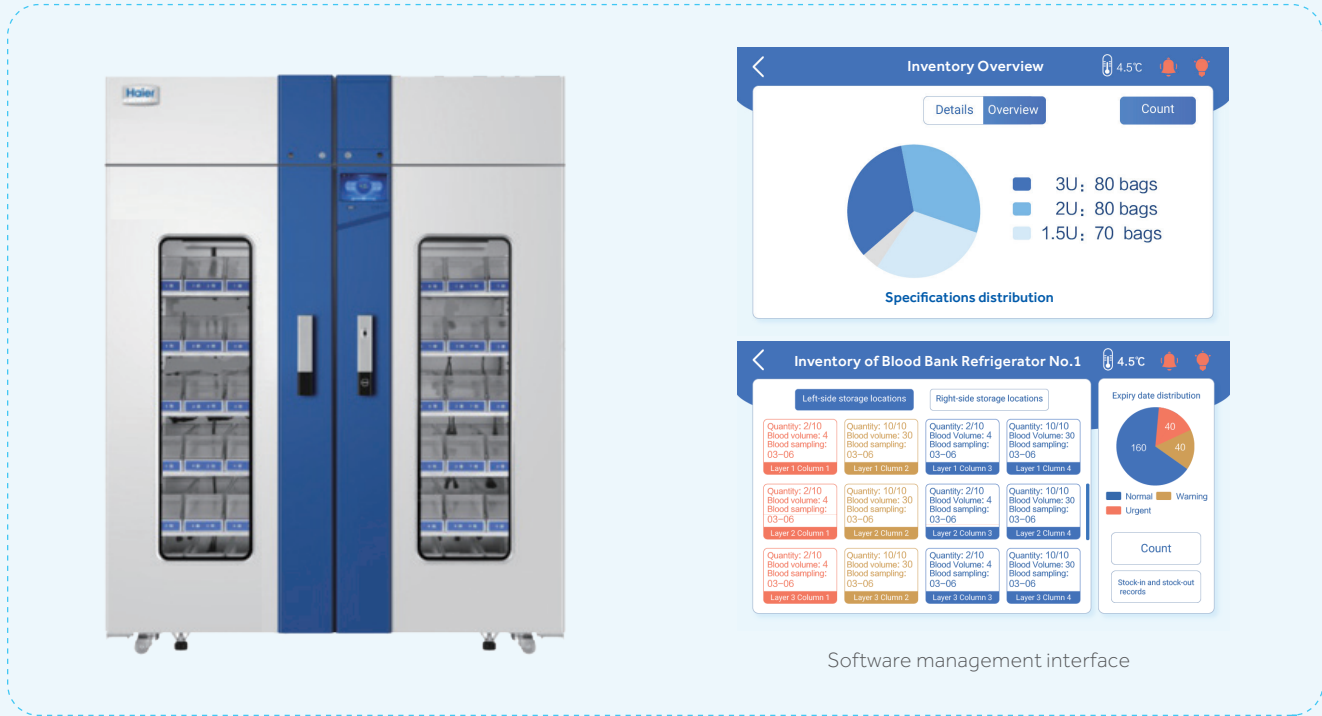
### Cold Room Storage



#### Product Features

- Large 10-inch screen PLC intelligent control system provides users with clear display of storage conditions
- PLC intelligent control system with self-diagnostics alerts users in the event of a malfunction
- Cold air leakage is reduced as the air cooling fan stops when the door is opened and it is equipped with door open sensor and alarm
- Dual refrigeration system switches automatically in case of fault of one system and the laminar air flow supply device within the unit ensures the temperature uniformity of  $\pm 2^{\circ}\text{C}$
- Energy-saving liquid self-cooling technology cools the liquid by more than  $5^{\circ}\text{C}$  through the use of melted ice and reduces energy consumption by 5%
- Certified ISO 13485 medical device quality management system
- Complies with the WHO/PQS quality and safety certification

### Blood Bank Refrigerator



#### Product Features

- **Smart IoT scientific and intelligent inventory management:**  
The blood inventory management App ensures accurate, real-time and automatic management of stock-in and stock-out information
- **RFID precise positioning and visual management:**  
Automatic RFID identification ensures intelligent and dynamic positioning of the blood bags, guides users precisely for accurate and swift blood bag identification and removal
- **Intelligent and fully interactive visual blood bank management:**  
With the touch of one button, or via the refrigerator App, view statistics and query of the blood donation code, product code, blood type, blood volume, expiry date and other information of the blood bags in stock. Clearly displaying the storage location of the blood with the closest expiry date to ensure first-in first-out management practices
- **The refrigerator or freezer has a built-in RFID read-write device:**  
To ensure state of the art inventory count using a simple one-button protocol, the inventory information is displayed in real-time to fast track the bag from the blood bank to the required location
- **Accurate positioning:**  
Users can quickly query and find the location of any blood bag stored at the blood bank
- **Information is accurate and reliable:**  
The blood information stored in the RFID tag is encrypted with read-only information to ensure that such information cannot be deleted or tampered with, and thus is safe, secure and reliable

Hospital Solution Summary

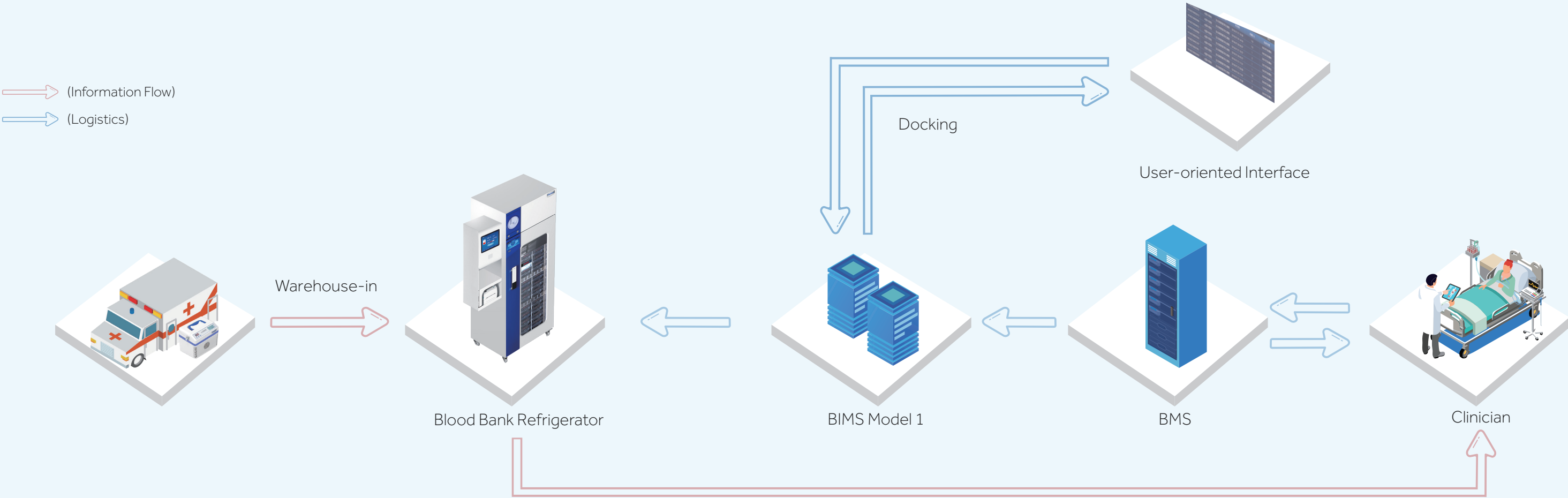
Solution Introduction

Connected to the blood bank refrigerator, the RFID tag reader and the server can also download the blood bank refrigerator and control data to the App through the network. The blood transfusion information management system and electronic blood matching system are connected with the hospital's intranet. The blood bank refrigerator can be moved to the operating room, ICU or emergency room.

The RFID tag reader can determine the positions of blood bags, and the App LCD screen can control the storage and removal of the blood bags and check the quantity and status of the blood bags. Using the server data, the user can also download control commands to the blood bank refrigerator App through the network to operate the refrigerator remotely. The intelligent operation of clinical blood matching, blood usage and safety are guaranteed.

Technological Advantage

Following extensive research and proven implementation, the UBlood solution allows a hospital via control and tracking protocols within the system, to effectively manage blood throughout the entire hospital. With this system, the hospital can allocate and track the blood product usage, record the blood product transfusion in real time, ensure accurate transfusion of the blood to the right patient, at the right time and in the right dose. The result is best practice and quality clinical transfusion improves the efficiency of blood management and the blood use safety for blood recipients.





# Hospital Blood Department Products

## Blood Bank Refrigerator



Software management interface

### Product Features

- The system ensures accurate blood positioning and one-stop blood access to reduce the door opening duration of the blood bank refrigerator, guaranteeing the blood storage environment and ensuring blood quality and safety
- No need for manual count; on each occasion when the blood bank refrigerator is closed, the automatic inventory counting mechanism will be activated to automatically count and update the inventory levels
- Intelligent inventory management follows the first-in-first-out principle to improve the efficacy of blood transfusions; the blood delivery process goes through three checks to ensure the security of the blood transfusion
- The blood bank is accessible within the operating room ensuring priority to blood matching from the blood bank refrigerator within the operating area, ensuring immediate blood collection and zero wastage

## Transport Cooler

The transport cooler is a specially designed transport temperature/humidity controlled storage device with integral wireless monitoring to transport blood products and biological samples.

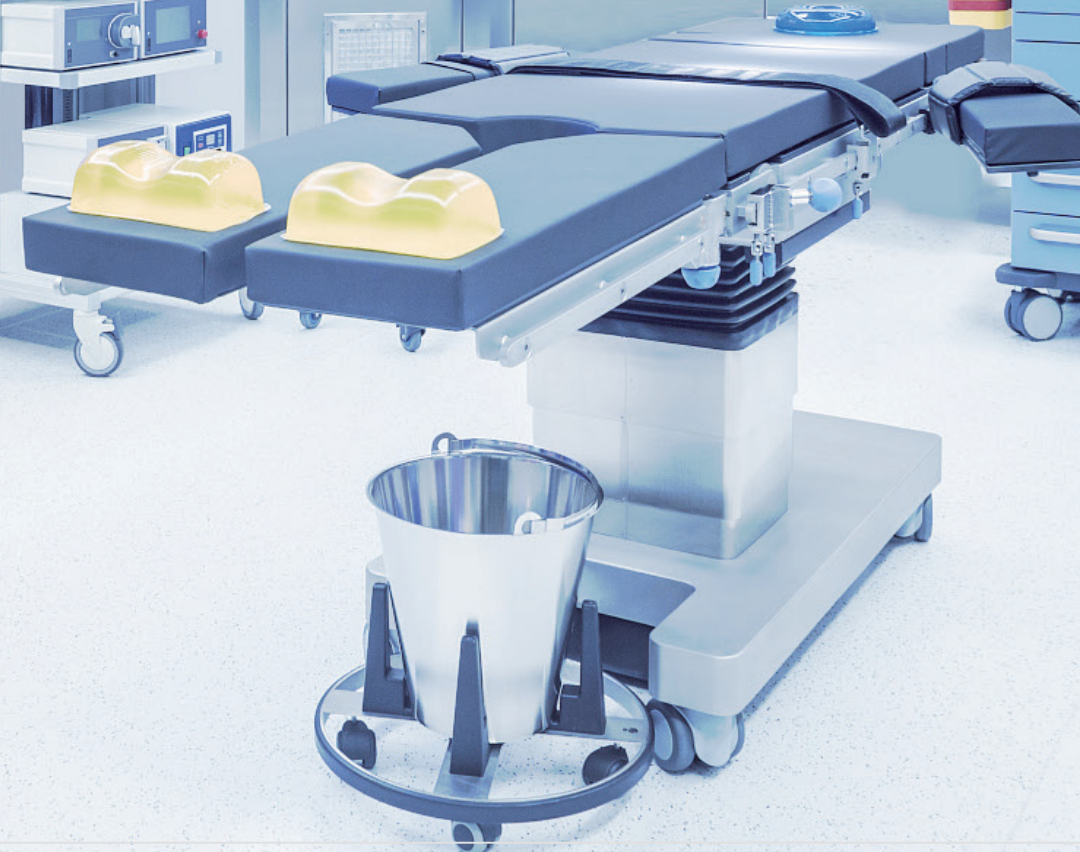


### Product Features

- Equipped with cold chain monitoring module for temperature and humidity: Displays data in real-time and information is uploaded to the cloud platform for query through the 4G module  
GPS positioning allows users to query the movement and track the transport cooler in real time  
Camera monitoring to automatically identify whether there are stored items in the cooler to prevent stored items being left in error.
- Storage temperature is maintained at 2~6°C once the cooler is fully charged; the transfer temperature can be maintained at 2~10°C with no power
- Storage security is enhanced with an NFC swipe card module, lock/unlock status information is uploaded in real-time
- 12V and 100-240V power supply for in-vehicle operation
- Energy-efficient optimized semi-conductor refrigeration technology



# Blood Bank Refrigerators & Freezers





# Automated Blood Management Refrigerator



## Product Advantages



**Microcomputer Control**  
The temperature inside the unit is controlled within 4±1°C with temperature control accuracy of 0.1°C, and the large high-definition LCD touch screen display makes it convenient to observe



**Multiple Fault Alarms**  
High/low temperature alarm, power failure alarm, door ajar alarm, sensor error alarm, and low battery alarm. It is configured with remote alarm interface with two alarm modes (sound buzzer alarm and light flashing alarm)



**Three-layer Glass Foam Door**  
With large viewing three-layer glass foam door design, surface glass with LOW-E film to reduce heat transfer efficiency with no condensation at 25°C, and 85% humidity environment



**Speed Control Condenser Fan**  
High efficiency and energy saving, low noise and long service life



**Double Protection of Door Mechanical Lock and Electromagnetic Lock**  
Electromagnetic lock can realize NFC card punching unlocking and fingerprint unlocking function



**Inverter Compressor**  
High efficiency and energy saving, low noise and long service life

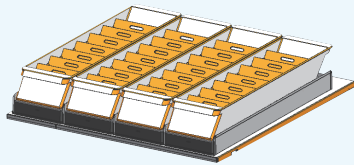


**Standard USB Port**  
With optional chart temperature recorder

## Information Flow



Place the blood bag with RFID tag in blood basket



Using built-in RFID read& write board of the refrigerator to read blood bag information



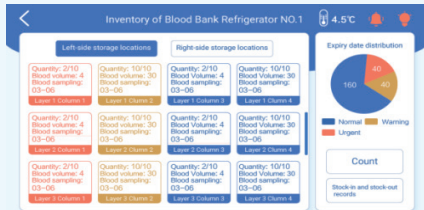
RFID Tag Information



Server



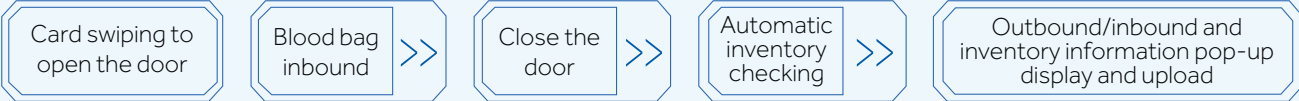
RFID Tag Information



Refrigerator screen APP

## Operation Instructions

### Blood Bag Inbound:



### Blood Bag Outbound:



Automated Blood Management Refrigerator

Specifications

Model			HXC-629TR	HXC-1369TR
Technical Data	Type		Basket-Type	Basket-Type
	Climate Class		N	N
	Cooling Type		Forced Air Cooling	Forced Air Cooling
	Defrost Mode		Auto	Auto
	Refrigerant		R600a	R600a
	Sound Level (dB(A))		40	41
Performance	Temperature Range (°C)		4±1	4±1
	Ambient Temperature (°C)		16-32	16-32
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LCD
Electrical Data	Power Supply (V/Hz)		220-50/60	220-50/60
	Power (W)		255	320
	Electrical Current (A)		1.5	2
Dimensions	Capacity (L/Cu.Ft)		629	1369
	Blood Storage Capacity (400ml Blood Bags)		192	384
	Net/Gross Weight (approx)	kg	252/292	430/495
		lbs	556/644	948/1091
	Interior Dimensions (W*D*H)	mm	645*680*1455	1425*680*1455
		in	25.2*26.5*56.7	55.6*26.5*56.7
	Exterior Dimensions (W*D*H)	mm	765*940*1980	1545*940*1980
		in	29.8*36.7*77.2	60.3*36.7*77.2
	Packing Dimensions (W*D*H)	mm	880*1010*2090	1678*1044*2085
		in	34.6*39.8*82.3	66.1*41.1*82.1
Container Load (20'/40'/40'H)		12/26/26	7/14/14	
Alarms	High/Low Temperature		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	Door Ajar		Y	Y
	Alarm of Dirty Condenser		Y	Y
	Remote Alarm		Y	Y
Accessories	Caster		4	4
	Foot		2	2
	Porthole		Y	Y
	Baskets		24	48
	Shelves/Drawers		6/0	12/0
	Inner Doors		N	N
	USB Interface		Y	Y
	Temperature Recorder		Y	Y
Others	Certification		N	N

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.



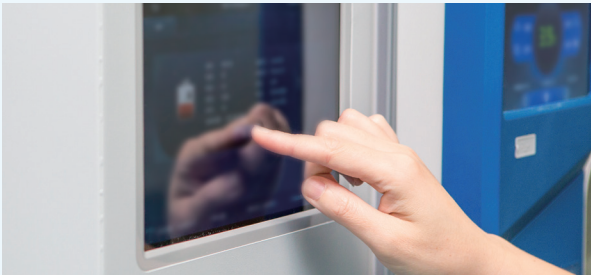
Reduce Waste and Improve Efficiency

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.



## Automated Blood Management Refrigerator

### 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		LCD		LCD	
Electrical Data	Power Supply (V/Hz)	220~240/50	230~ 50/60	220~240/50	230~ 50/60	220~240/50	230~ 50/60
	Power (W)	250		280		300	
	Electrical Current (A)	1.5		1.8		1.9	
Dimensions	Capacity (L/Cu.Ft)		149/5.3	429/15.1	629/22.2		
	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		
Alarms	Container Load (20'/40'/40'H)		18/36/36	18/35/35	12/26/26		
	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		
Accessories	Remote Alarm		Y	Y	Y		
	Caster		4	4	4		
	Foot		2	2	2		
	Porthole		Y	Y	Y		
	Drawers		9	30	44		
	USB Interface		Y	Y	Y		
Others	Temperature Recorder		Y	Y	Y		
	Certification	CE, MDR	UL	CE, MDR	UL	CE, MDR	UL

## Unattended Self-service Blood Distribution Refrigerator

Suitable for blood transfusion departments, operating rooms, and emergency rooms



HXC-429RV/629RV

### Product Advantages



#### Reduce Waste and Improve Efficiency

Rapid, electronic cross matching, the RFID electronic tagged blood bag's position illuminates for quick retrieval. Request blood at bedside, allocate, collect and transfer whilst monitoring the temperature across the whole process.



#### Multi-mode Operation

- Blood transfusion department mode: write the blood bag information into the RFID tag, read the tag information through the antenna board, and view the blood type, expiration date and other information
- Forward mode: operating room, emergency, ICU and other scenes
- Temporary storage mode: surgical blood preparation is temporarily stored. It can be re stored if it is not used up



#### 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.



#### 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



#### Safe and Security

Each drawer is equipped with an independent electronic lock to ensure that only the unique and correct blood bag can be taken out in each blood collection operation

### Ergonomic Design



#### Ozone Sterilization

Standard ozone module, according to the actual need to set regular disinfection time, without manual disinfection



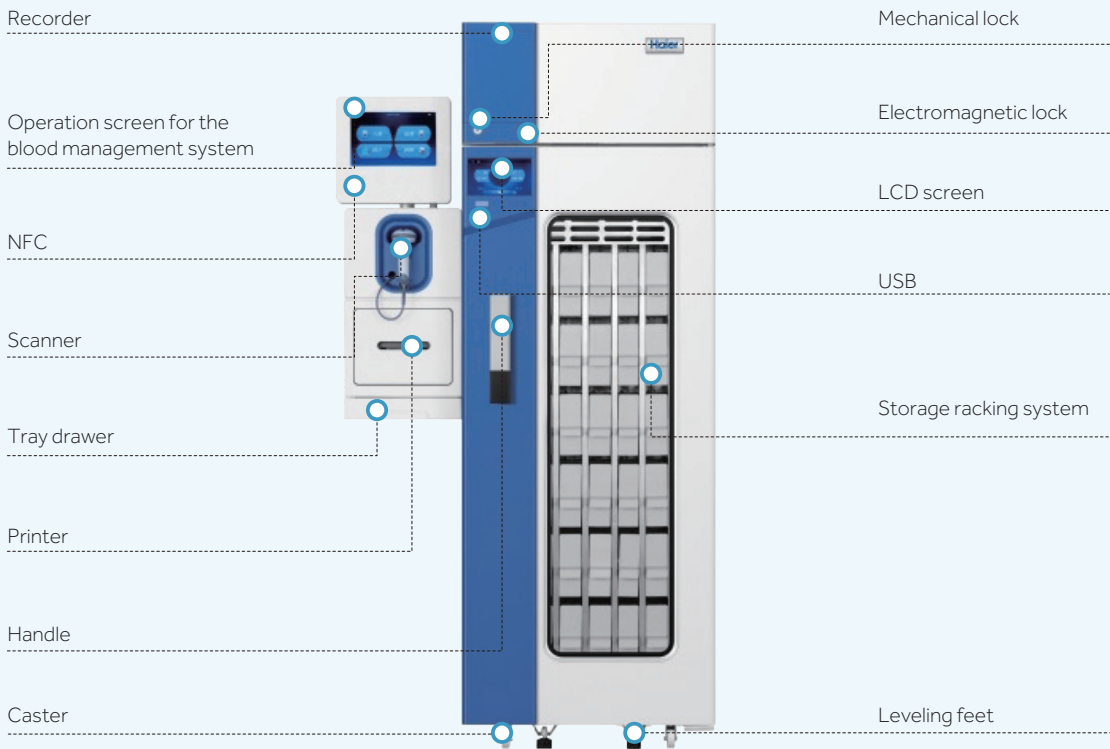
#### Automatic Inventory

Automatic inventory and blood bag information at a glance

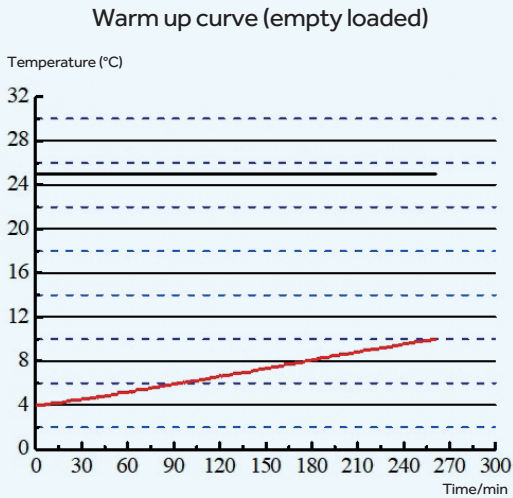
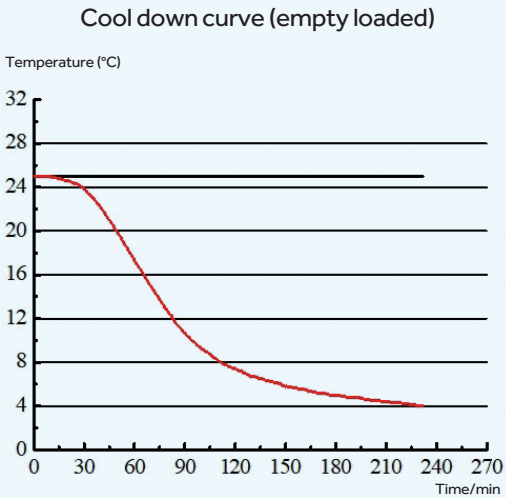


Unattended Self-service Blood Distribution Refrigerator

Specifications



Product Performance



Model			HXC-429RV	HXC-629RV
Technical Data	Type		Drawer-Type	Drawer-Type
	Climate Class		N	N
	Cooling Type		Forced Air Cooling	Forced Air Cooling
	Defrost Mode		Auto	Auto
	Refrigerant		R600a	R600a
	Sound Level (dB(A))		41	41
Performance	Temperature Range (°C)		4±1	4±1
	Ambient Temperature (°C)		16-32	16-32
Control	Controller		Microprocessor	Microprocessor
	Display		LCD	LCD
Electrical Data	Power Supply (V/Hz)		220-240/50	220-240/50
	Power (W)		280	300
	Electrical Current (A)		1.8	1.9
Dimensions	Capacity (L/Cu.Ft)		429/15.1	629/22.2
	Blood Storage Capacity (450ml blood bags)		36	48
	Net/Gross Weight (approx)	kg	245/280	295/335
		lbs	539/616	649/737
	Interior Dimensions (W*D*H)	mm	505*680*1315	645*680*1455
		in	19.7*26.5*51.3	25.2*26.5*56.7
	Exterior Dimensions (W*D*H)	mm	925*940*1830	1065*940*1980
		in	36.1*36.7*71.4	41.5*36.7*77.2
	Packing Dimensions (W*D*H)	mm	725*985*1940	875*995*2090
		in	28.3*38.4*75.7	34.1*38.8*81.5
Container Load (20'/40'/40'H)			18/35/35	12/26/26
Alarms	High/Low Temperature		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	Door Ajar		Y	Y
	Remote Alarm		Y	Y
Accessories	Caster		4	4
	Foot		2	2
	Porthole		Y	Y
	Drawers		36	48
	USB Interface		Y	Y
	Temperature Recorder		Y	Y
Others	Certification		CE, MDR	CE, MDR



# Unattended Self-help Blood Distribution Refrigerator

## Smart IoT and self-help blood distribution



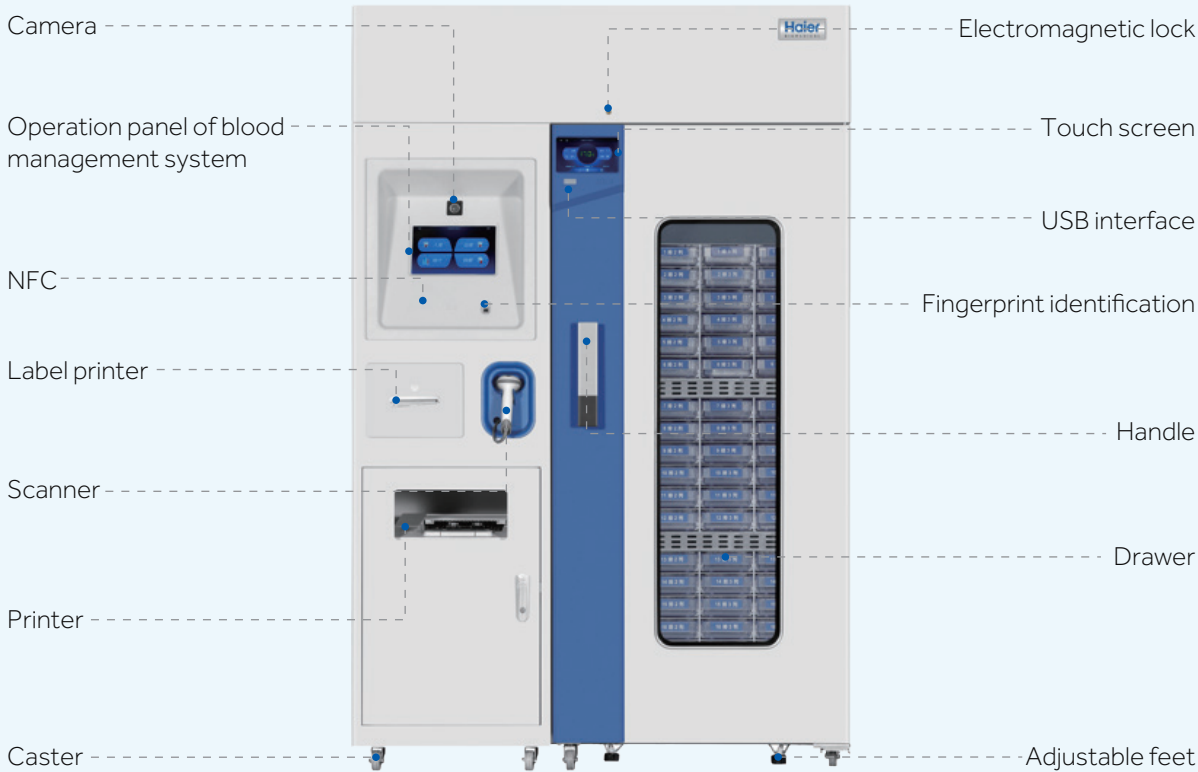
HXC-629ZZ

### Self-help blood distribution of blood transfusion departments

After blood cross matching is completed for the blood bags, specified blood collection permissions will be allocated to the different blood using departments to achieve self-help blood distribution; self-help blood collection at night can save labor costs and improve efficiency

### Mobile blood storage points set up by blood stations

The refrigerators may be used as mobile blood storage points in hospitals to guarantee the applications of emergency blood use, achieve zero waiting for blood use, and guarantee the timely blood use of patients



HXC-629ZZ

## Product Advantages



### Electronic Checking and Bar Code Management

- Blood bag inventory management (in/out) is achieved by scanning the bags' blood donation codes and product codes
- The system ensures error-free blood bag collection by accurately checking blood bag and operator information



### Real-time Control to Avoid Freezing Temperature

Six high-precision sensors and a mechanical thermostat accurately control the temperature in real-time to maintain the refrigerator temperature at  $4 \pm 1^{\circ}\text{C}$



### Ergonomic Design

- The intelligent, dual-screen LCDs have been designed for better user-machine interactions
- Users can print Blood Collection Sheets for Blood Transfusion and Blood Distribution Records after blood check-out



### Visual and Clear Management via User Interface

- The intelligent blood management system can display the blood donation codes, product codes, blood types, blood quantities, expiry dates and other information of the stored blood bags in real time, realizing one-key query of the stock blood information
- It can clearly show the storage location of the blood bag with the closest expiry date and follow the first-in-first-out management practices



### Safe, Reliable and Traceable

- Designed with fingerprint and NFC access modules providing dual permission modes to open the electromagnetic lock
- Each drawer is equipped with an independent electronic lock to ensure that only the unique and correct blood bag can be taken out in each blood collection operation
- The camera module can take photos of the operators automatically and transmit them to the platform to achieve operation information traceability



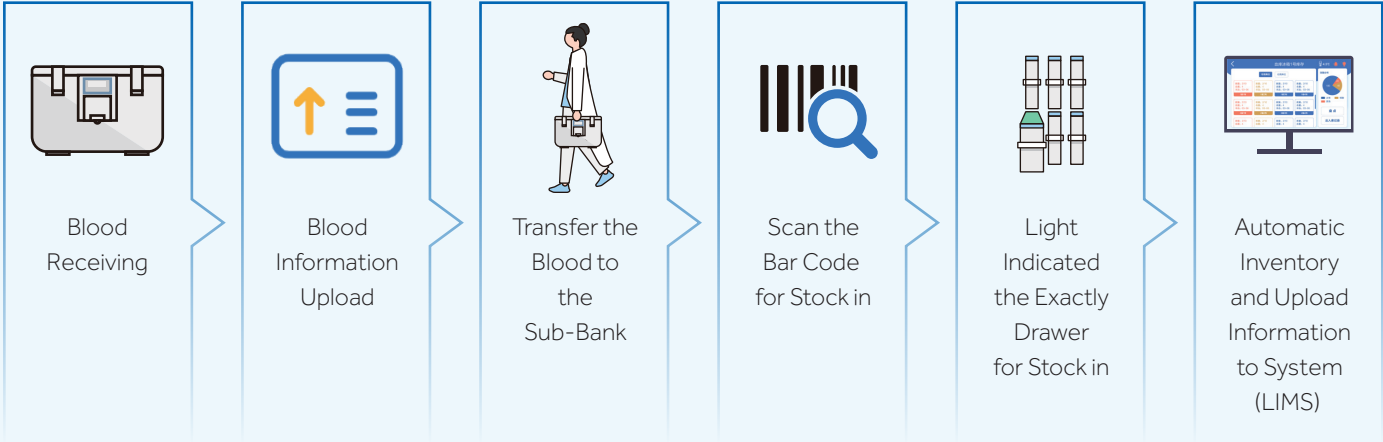
Self-service printing



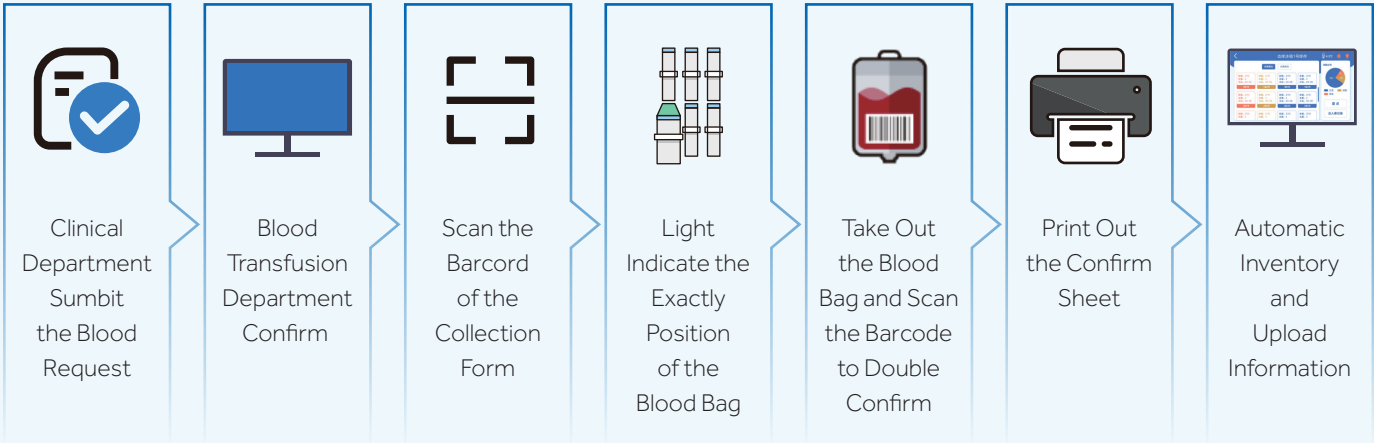
A drawer corresponds to a lock


# Unattended Self-help Blood Distribution Refrigerator

## Stock-in Work Flow



## Stock-out Work Flow





### How does the Haier Intelligent Blood Management system interact with Haier refrigerator and with Hosptial system (LIMS)

- ☐ Self-service blood distribution: self-service operation through the blood collection form
- ☐ Realize real-time management of Stock-in and Stock-out blood;
- ☐ Quick and accurate positioning management of target blood;
- ☐ Multiple protection: Security management, electromagnetic lock, camera, NFC authorization card
- ☐ Real-time monitoring and management of refrigerator temperature



- The refrigerator is placed on the front line of blood use, and can be used on demand (need to apply in advance).
- Emergency blood support (Type O blood and other emergency blood guarantee at the first time).



- Only the blood that has been applied for can be taken each time, and all the others are locked to ensure safety.
- Real-time monitoring of the entire refrigerator and blood collection environment.

### The following improvements were experienced by individual hospitals after implementing the Unattended Self-service Blood Distribution Refrigerator& Haier Blood Management System

- Blood collection time reduced from 20 minutes to 2 minutes
- Blood waste rate reduced to 0
- 85% reduction in blood bank staff time
- 80% reduction in clinical staff time



- The refrigerator is linked to the blood transfusion department in real time, and the blood crossmatching process and blood handover can all be realized through intelligent equipment;
- Unattended design, can realize 7×24h self-service management.

Unattended Self-help Blood Distribution Refrigerator

Specifications

Model		HXC-629ZZ	
Technical Data	Type	Drawer-Type	
	Climate Class	N	
	Cooling Type	Forced Air Cooling	
	Defrost Mode	Auto	
	Refrigerant	R600a	
	Sound Level (dB(A))	41	
Performance	Temperature Range (°C)	4±1	
	Ambient Temperature (°C)	16-32	
Control	Controller	Microprocessor	
	Display	LCD	
Electrical Data	Power Supply (V/Hz)	220-240-50/60	
	Power (W)	300	
	Electrical Current (A)	1.9	
Dimensions	Capacity (L/Cu.Ft)	629/22.2	
	Blood Storage Capacity (450ml Blood Bags)		72
	Net/Gross Weight (approx)	kg	305/350
		lbs	671/770
	Interior Dimensions (W*D*H)	mm	645*680*1455
		in	25.2*26.5*56.7
	Exterior Dimensions (W*D*H)	mm	1290*940*1980
		in	50.3*36.7*77.2
	Packing Dimensions (W*D*H)	mm	1454*1058*2131
		in	57.2*41.65*83.89
Alarms	Container Load (20'/40'/40'H)	8/16/16	
	High/Low Temperature	Y	
	Power Failure	Y	
	Sensor Error	Y	
	Low Battery	Y	
	Door Ajar	Y	
Accessories	Remote Alarm	Y	
	Caster	6	
	Foot	2	
	Porthole	Y	
	Shelves/Drawers	0/72	
	USB Interface	Y	
	Temperature Recorder	N	
Others	Certification	CE, MDR	

Self-service blood bank refrigerator suitable for blood stations, haematology departments and other hospital areas to provide secure and convenient access to blood.



HXC-149ZZ

Product Advantages



Reduce Waste and Improve Efficiency

- Blood bag inventory management (in/out) is achieved by scanning the bags' blood donation codes and product codes
- The system ensures error-free blood bag collection by accurately checking blood bag and operator information



Ergonomic Design

- The intelligent, dual-screen LCDs have been designed for better user-machine interactions
- Users can print Blood Collection Sheets for Blood Transfusion and Blood Distribution Records after blood check-out



Visual and Clear Management Via User Interface

- The intelligent blood management system can display the blood donation codes, product codes, blood types, blood quantities, expiry dates and other information of the stored blood bags in real time, realizing one-key query of the stock blood information
- It can clearly show the storage location of the blood bag with the closest expiry date and follow the first-in-first-out management practices



Real-time Control of Freezer Temperature

Six high-precision sensors and a mechanical thermostat accurately control the temperature in real-time to maintain the refrigerator temperature at 4 ±1°C



Safe, Reliable and Traceable

- Equipped with fingerprint and NFC access modules providing dual permission modes to open the electromagnetic lock
- Each drawer is equipped with an independent electronic lock to ensure that only the unique and correct blood bag can be taken out in each blood collection operation
- The camera module can take photos of the operators automatically and transmit them to the platform to achieve operation information trace- ability



A drawer corresponds to a lock

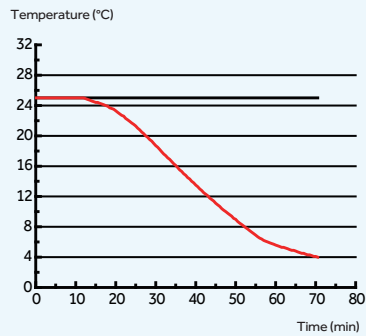


Unattended Self-help Blood Distribution Refrigerator

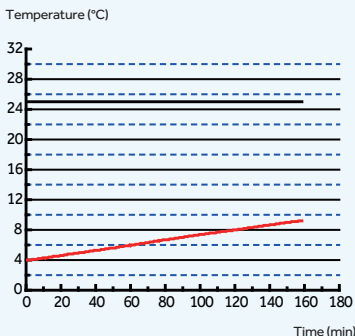


Product Performance

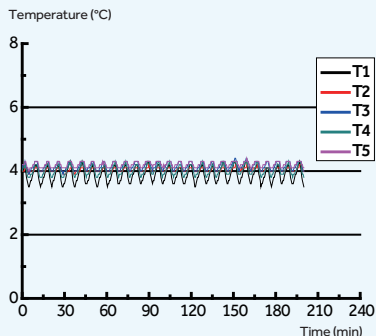
Cool down curve (empty loaded)



Warm up curve (empty loaded)



Stable operating curve (empty loaded)

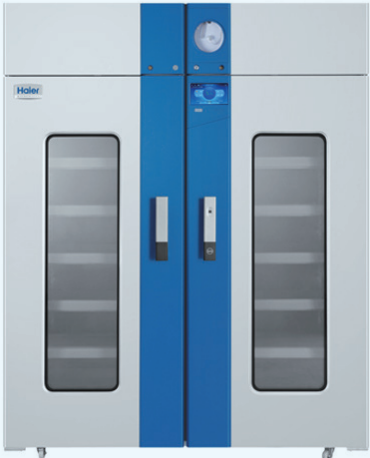


Specifications

Model		HXC-149ZZ	
Technical Data	Type	Drawer-Type	
	Climate Class	N	
	Cooling Type	Forced Air Cooling	
	Defrost Mode	Auto	
	Refrigerant	R600a	
Performance	Sound Level (dB(A))	40	
	Temperature Range (°C)	4±1	
Control	Ambient Temperature (°C)	16-32	
	Controller	Microprocessor	
Electrical Data	Display	LCD	
	Power Supply (V/Hz)	220-240-50	
	Power (W)	240	
Dimensions	Electrical Current (A)	1.4	
	Capacity (L/Cu.Ft)	149/5.26	
	Blood Storage Capacity (450ml Blood Bags)	12	
	Net/Gross Weight (approx)	kg	129/179
		lbs	283.8/ 393.8
	Interior Dimensions (W*D*H)	mm	505*560*610
		in	19.7*32.3*23.8
	Exterior Dimensions (W*D*H)	mm	625*820*1425
		in	24.4*30.2*55.6
	Packing Dimensions (W*D*H)	mm	748*958*1610
		in	29.44*37.72*63.38
Alarms	Container Load (20'/40'/40'H)	18/36/36	
	High/Low Temperature	Y	
	Power Failure	Y	
	Sensor Error	Y	
	Low Battery	Y	
	Door Ajar	Y	
Accessories	Remote Alarm	Y	
	Caster	4	
	Foot	2	
	Porthole	Y	
	Shelves/Drawers	0/12	
	USB Interface	Y	
Others	Temperature Recorder	Optional	
	Certification	CE, MDR	

Automated Blood Management Refrigerator with Touchscreen

Product Features



HXC-1369T



Control Interface

The intuitive high-definition LCD touch screen can display temperature graph, working status, events and alarm records



Microcomputer Control

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

Information Statistics

Real-time control and monitoring of blood information in the cabinet is possible via built-in smart blood management APP and cloud network connection. Blood product information and temperature are available in large LCD display



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 error, 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 power failure. Fingerprint and standard NFC swipe card module are optional



Multiple storage partitions are provided. Management of blood products by types and expiration dates is easy and efficient

Specifications

Model		HXC-149T	HXC-279T	HXC-429T	HXC-629T	HXC-1369T
Technical Data	Type	Drawer-Type		Drawer-Type	Drawer-Type	Drawer-Type
	Climate Class	N		N	N	N
	Cooling Type	Forced Air Cooling		Forced Air Cooling	Forced Air Cooling	Forced Air Cooling
	Defrost Mode	Auto		Auto	Auto	Auto
	Refrigerant	R600a		R600a	R600a	R600a
	Sound Level (dB(A))	39		39	40	41
Performance	Temperature Range (°C)	4±1		4±1	4±1	4±1
	Ambient Temperature (°C)	16-32		16-32	16-32	16-32
Control	Controller	Microprocessor		Microprocessor	Microprocessor	Microprocessor
	Display	LCD		LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)	220-240/50	230-50/60	220-240/50	230-50/60	220-240/50
	Power (W)	240		295	245	255
	Electrical Current (A)	1.4		1.5	1.5	2
Dimensions	Capacity (L/Cu.Ft)	149/5.3		279/9.85	429/15.15	629/22.21
	Blood Storage Capacity (450ml Blood Bags)	60		48.34577874	195	312
	Net/Gross Weight (approx)	kg	108/136	113/130	182/217	212/252
		lbs	237.6/299.2	249/286.6	400.4/477.4	466.4/554.4
	Interior Dimensions (W*D*H)	mm	505*560*610	505*410*1315	505*680*1315	645*680*1455
		in	19.7*32.3*23.8	19.9*16.1*51.8	19.7*26.5*51.3	25.2*26.5*56.7
	Exterior Dimensions (W*D*H)	mm	625*820*1150	630*705*1750	625*940*1830	765*940*1980
		in	24.4*30.2*44.9	24.8*27.8*68.9	24.4*36.7*71.4	29.8*36.7*77.2
	Packing Dimensions (W*D*H)	mm	730*926*1236	748*777*1881	749*1008*1960	880*1010*2090
		in	28.7*36.5*48.7	29.4*30.6*74.1	29.5*39.7*77.2	34.7*39.8*82.3
Alarms	Container load (20'/40'/40'H)	18/38/76		14/45/45	18/35/35	12/26/26
	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	4		4	4	4
	Foot	2		2	2	2
	Porthole	Y		Y	Y	Y
	Baskets	6		15	15	24
	Shelves/Drawers	0/2		5/0	0/5	0/6
	Inner doors	0		5	0	0
	USB Interface	Y		Y	Y	Y
	Temperature Recorder	Y		/	Y	Y
Others	Certification	CE, MDR	UL	CE, MDR	CE, MDR	CE, MDR

Blood Management Refrigerator with LED Display

Product Features



HXC-429

Dual Temperature Control Technology

Refrigeration system is designed with an inverter compressor and dual-speed fans, providing an optimal temperature performance of 4± 1°C inside the cabinet to safeguard stored products

Standard USB Interface

- Ability to record temperature data for ten years by using the USB
- Interface, disc temperature recorder is also available



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 7 high-precision sensors and a mechanical thermostat which enables more accurate air cooling and temperature control to ensure the uniform temperature inside the unit is 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.
- 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 ajar, sensor error, 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 power failure
- NFC swipe card module, with safer storage management



NFC Rights Management

NFC rights management system is designed with an electromagnetic lock with controllable, checkable and traceable flow direction, providing safer blood management

Specifications

Model		HXC-149		HXC-279 (Vehicle Mounted)	HXC-429	HXC-629	HXC-629B	HXC-1369
Technical Data	Type	Basket-Type		Drawer-Type	Basket-Type	Basket-Type	Basket-Type	Basket-Type
	Climate Class	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
	Defrost Mode	Auto		Auto	Auto	Auto	Auto	Auto
	Refrigerant	R600a		R134a	R600a	R600a	R600a	R600a
	Sound Level (dB(A))	39		39	40	40	41	41
Performance	Temperature Range (°C)	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
Control	Controller	Microprocessor		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED		LCD	LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)	220-240/50	230-50/60	230-50	220-240/50	230-50/60	115/60	220-240/50
	Power (W)	240		400	245	255	255	400
	Electrical Current (A)	1.4		1.5	1.5	1.5	3	2
Dimensions	Capacity (L/Cu.Ft)	149/5.3		279/9.85	429/15.15	629/22.21	629/22.21	1369/48.35
	Blood Storage Capacity (450ml Blood Bags)	60		135	195	312	312	624
	Net/Gross Weight (approx)	kg	97/125	113/130	169/204	187/217	187/217	345/410
		lbs	213.4/ 275	249/286.6	371.8/448.8	411.4/477.4	411.4/477.4	759/902
	Interior Dimensions (W*D*H)	mm	505*560*610	505*410*1315	505*680*1315	645*680*1455	645*680*1455	1425*680*1455
		in	19.7*32.3*23.8	19.9*16.1*51.8	19.7*26.5*51.3	25.2*26.5*56.7	25.2*26.5*56.7	55.6*26.5*56.7
	Exterior Dimensions (W*D*H)	mm	625*820*1150	660*705*1750	625*940*1830	765*940*1980	765*940*1980	1545*940*1980
		in	24.4*30.2*44.9	25.98*27.8*68.9	24.4*36.7*71.4	29.8*36.7*77.2	29.8*36.7*77.2	60.3*36.7*77.2
	Packing Dimensions (W*D*H)	mm	730*926*1236	748*777*1881	749*1008*1960	880*1010*2090	880*1010*2090	1678*1044*2085
		in	28.7*36.5*48.7	29.4*30.6*74.1	29.5*39.7*77.2	34.7*39.8*82.3	34.7*39.8*82.3	66.1*41.1*82.1
Alarms	Container load (20'/40'/40'H)	18/38/76		14/45/45	18/35/35	12/26/26	12/26/26	7/14/14
	High/Low Temperature	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
	Remote Alarm	Y		Y	Y	Y	Y	Y
Accessories	Caster	4		4	4	4	4	4
	Foot	2		2	2	2	2	2
	Porthole	Y		Y	Y	Y	Y	Y
	Baskets	6		15	15	24	24	48
	Shelves/Drawers	2/0		5/0	5/0	6/0	6/0	12/0
	Inner doors	2		5	5	6	6	12
	USB Interface	Y		Y	Y	Y	Y	Y
	Temperature Recorder	Y		/	Y	Y	Y	Y
Others	Certification	CE, MDR	UL	/	CE, MDR	UL	CE, MDR	UL



Standard Blood Bank Refrigerator

Haier Biomedical's 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.

Product Features

- Constant cabinet temperature at 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

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
- Dual displays of operational parameter (temperature recorder display)
- 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



HXC-158B



Specifications

Model		HXC-158	HXC-158B
Technical Data	Type	Basket-Type	Drawer-Type
	Climate Class	ST	ST
	Cooling Type	Forced Air Cooling	Forced Air Cooling
	Defrost Mode	Auto	Auto
	Refrigerant	HC	HC
	Sound Level (dB(A))	42	42
Performance	Temperature Range (°C)	4±1	4±1
	Ambient Temperature (°C)	10~38	10~38
Control	Controller	Microprocessor	Microprocessor
	Display	LED	LED
Electrical Data	Power Supply (V/Hz)	220~240/50 /60	220~240/50 /60
	Power (W)	320	320
	Electrical Current (A)	1.9	1.9
Dimensions	Capacity (L/Cu.Ft)	158/5.6	158/5.6
	Blood Storage Capacity (450ml Blood Bags)		84
	Net/Gross Weight (approx)	kg	107/120
		lbs	235.9/264.6
	Interior Dimensions (W*D*H)	mm	460*370*950
		in	18.1*14.6*37.4
	Exterior Dimensions (W*D*H)	mm	560*570*1530
		in	22.0*22.4*60.2
	Packing Dimensions (W*D*H)	mm	645*675*1680
		in	25.4*26.6*66.1
Alarms	Container Load (20'/40'/40'H)	27/54/54	27/54/54
	High/Low Temperature	Y	Y
	Remote Alarm	Y	Y
	Power Failure	Y	Y
	Sensor Error	Y	Y
	Low Battery	Y	Y
	Door Ajar	Y	Y
Accessories	Caster	Y	Y
	Foot	Y	Y
	Porthole	Y	Y
	Shelves/Baskets	4/4	-
	Drawers/Inner Doors	-/2	4/-
	USB Interface	Optional	Optional
	Temperature Recorder	Optional	Y
Others	Certificate	CE, MDR	CE, MDR

# 4°C Blood Bank Refrigerator

Haier Biomedical's 4°C Medical Blood Bank Refrigerator: High efficiency, energy - saving, safe and reliable, smart control.

## Product Advantages



### Automatic Evaporation of Condensed Water after Collection

Avoid the trouble of manual treatment of condensed water



### Air Cooling Design

The temperature in all corners of the cabinet is maintained within the calibrated temperature range, and the test hole design is added to meet the actual needs of the user



### Microprocessor Control System

The temperature range is  $4\pm1^{\circ}\text{C}$ , with temperature accuracy of  $0.1^{\circ}\text{C}$



### Multiple Protection

Startup delay protection, stop interval protection, display panel password protection, power failure memory data protection, sensor error protection



### Multiple Fault Alarms

High and low temperature alarm, power failure alarm, door ajar alarm, sensor error alarm, low battery with a remote alarm interface, two alarm modes (sound beeping alarm and light flashing alarm)



### Remote Alarm Function

The alarm can be connected to other rooms to achieve remote alarm functionality

## Product Features

### Door design

Vertical single door design, double layer electric heated glass door and self-closing function

### Materials

The shell and inner liner are sprayed with steel plate, which is anticorrosive and bacteriostatic

### Compressor

Deeply optimized refrigeration system, international brand compressor, energy saving, low noise, long service life



HXC-106

## Product Parts

### Interior lighting:

The cabinet is equipped with LED lights and external independent light switches

### Door lock and door lock alarm:

Prevent random door opening

### Door handle:

Easy to open

### Foot:

Stable and adjustable

### LED digital display:

The internal temperature is  $2-6^{\circ}\text{C}$ , digital display of upper and lower temperature, the average temperature display and the resolution of  $0.1^{\circ}\text{C}$

### Air cooling design:

Ensure that the temperature in any corner of the box is maintained within the calibration temperature range

The temperature measuring box is used to monitor the temperature in the cabinet in real time

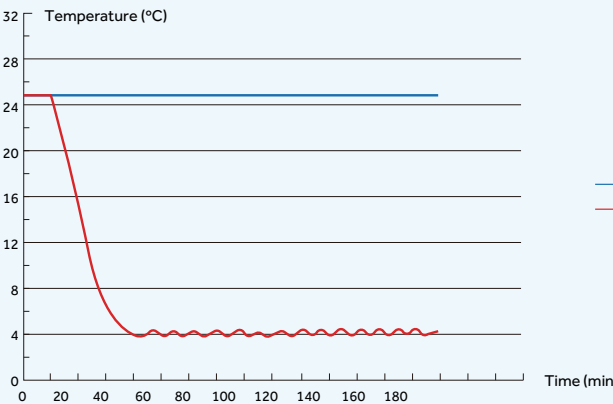
3 shelves, 4 blood baskets, blood basket with a label slot, easy to label. Capable of storing 54 bags of 400ml blood totally



HXC-106

## Cooling Down Curve

### Temperature drop and insulation curve






Solar Direct Drive Blood Refrigerator


Specifications


Model		HXC-106	
Technical Data	Type	Basket-Type	
	Climate Class	N	
	Cooling Type	Forced Air Cooling	
	Defrost Mode	Auto	
	Refrigerant	R600a	
	Noise Lever (dB(A))	41	
Performance	Temperature Range (°C)	4±1	
	Ambient Temperature (°C)	16-32	
Control	Controller	Microprocessor	
	Display	LED	
Electrical Data	Power Supply (V/Hz)	220-240~50/60	
	Power (W)	253	
	Electrical Current (A)	1.6	
Dimensions	Capacity (L/Cu.Ft)	106	
	Blood Storage Capacity (400ml Blood Bags)	54	
	Net/Gross Weight (approx)	kg	49/52
		lbs	108.03/114.64
	Interior Dimensions (W*D*H)	mm	430*350*830
		in	16.93*13.78*32.68
	Exterior Dimensions (W*D*H)	mm	500*514*1055
		in	19.69*20.34*41.54
	Packing Dimensions (W*D*H)	mm	565*615*1145
		in	22.24*24.21*45.08
Alarms	Container Load (20'/40'/40'H)	36/72/72	
	High/Low Temperature	Y	
	Power Failure	Y	
	Sensor Error	Y	
	Low Battery	Y	
	Door Ajar	Y	
	Remote Alarm	Y	
Accessories	Caster	0	
	Foot	4	
	Porthole Hole	1	
	Shelves/Baskets	3/4	
	Inner doors	0	
	USB Interface	N	
Others	Temperature Recorder	N	
	Certificate	CE, MDR	


Applicable for storing wholeblood, medicines, biological products and other laboratory products that need to be stored at 4°C. Suitable for the storage of blood and blood supplies in areas where the power shortage is common.

Product Advantages

- 

It is equipped with 16 blood baskets, each basket can hold 12 blood bags, and a total of 192 blood bags can be stored (350ml blood bags)
- 

Excellent autonomy time ensures the safety of blood
- 


Electronic temperature controller, digital temperature display, the display precision is 0.1°C and the control range is 2°C-8°C
- 


Broad working ambient temperature range of 5~43°C





HTXC-240

Product Features

- 

Solar direct drive refrigerator without battery
- 

Vertical structure, first-in first-out, easy operation
- 

Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA
- 

Automatic drainage design

Product Parts



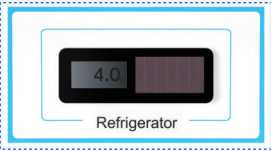
Lock Catch Designed to Match Padlock



Handgrip



HTXC-240



Display Panel

Solar Direct Drive Blood Refrigerator

-30°C Plasma Freezer

IoT Cryogenic Solution

Specifications

Model			HTXC-120	HTXC-240
Technical Data	Cabinet Type		Upright	Upright
	Ambient Temperature (°C)		≤43	≤43
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		No Electric Heating Defrost	No Electric Heating Defrost
	Refrigerant		HC	HC
	Sound Level (dB(A))		≤43	≤43
Performance	Temperature Range (°C)		2~8	2~8
	Freezer Protection Level		A	A
Electrical Data	Controller		Microprocessor	Microprocessor
	Display		Solar LED Temperature Display	Solar LED Temperature Display
Electrical Data	Power Supply (V)		24	24
	Maximal Current (A)		5	5
	Energy Consumption: Stable Running (kWh/24h)		0.44	0.35
	Energy Consumption: Cool Down Test (kWh/24h)		0.48	0.54
	Autonomy Time at 43°C		11hrs24mins	95hrs23mins
	Autonomy Time at 32°C		183hrs20mins	151hrs10mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5	3.5
Construction	Blood Storage Capacity (350ml Blood Bags)		108	192
	Gross Volume (L/Cu.Ft)		120/4.2	240/8.5
	Net/Gross Weight (approx)	kg	130/160	150/185
		lbs	286/352	330/407.9
	Interior Dimensions (W*D*H)	mm	530*500*530	530*500*960
		in	20.9*19.7*20.9	20.9*19.7*37.8
	Exterior Dimensions (W*D*H)	mm	865*825*1422	890*825*1815
		in	34*32*56	35*32*71
	Packing Dimensions (W*D*H)	mm	980*920*1585	985*920*1980
		in	38.6*36.2*62.4	38.8*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24	12/24/24
Alarms	High/Low Temperature		Y	Y
	Sensor Error		Y	Y
Accessories	Shelves		3	4
	Data Logger		Y	Y
	Remote Temperature Monitoring Device (RTMD)		Optional	Optional
Certifications	CE		N	N
	WHO/PQS		N	N



DW-30L1280FT (Intelligent)

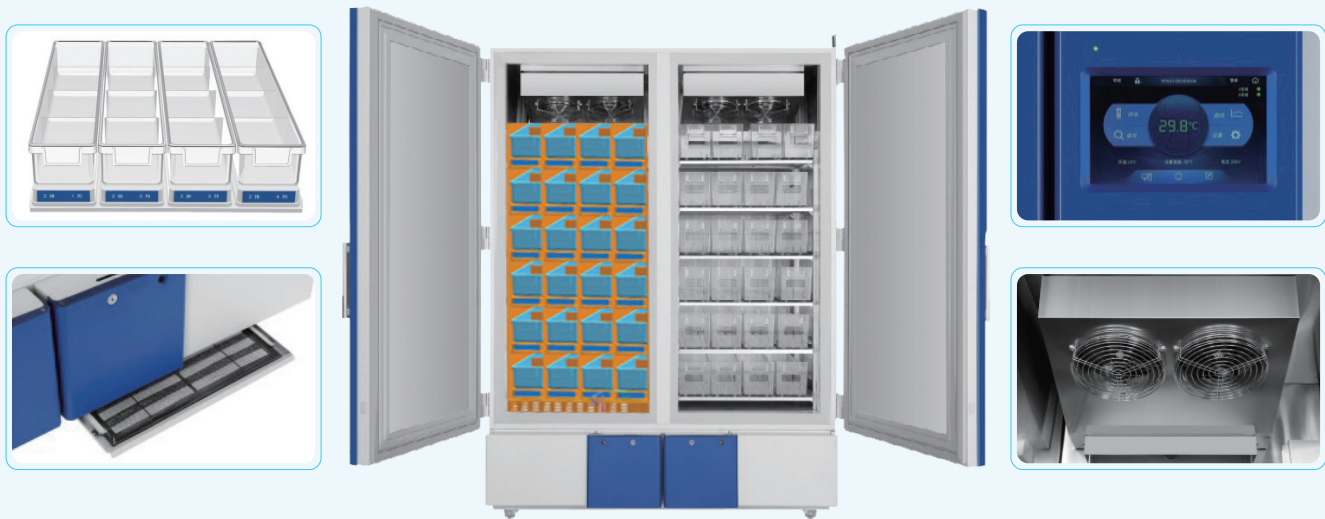
Product Features

- RFID radio frequency, accurate management of plasma information, with automatic inventory and quick inquiry function
- Hydrocarbon refrigeration, efficient and quick
- Multiple alarms, safe and reliable
- 10-inch large screen, easy to operate and more intuitive display
- NFC permission management system combined with an electromagnetic lock, controllable flow direction and traceable information



-30°C Plasma Freezer

Product Parts



10-inch Large Touch Screen, Easy to Operate, Intuitive Display

The 10-inch large touch screen ensures an easier operating experience. Capable of displaying interior real-time temperature, ambient temperature, setting temperature, input voltage, network status, user logging status,temperature curve and new message/notebook, etc. Query interface can display plasma donation code, product code, blood type, blood volume, period of validity, etc

Bottom Air Inlet System, Low Noise

Equipped with a special filter net, ensuring the cleanliness and safety of interior air

Dual Cooling System, Frost Free

Equipped with dual cooling system, if one system fails, the other system can maintain the interior temperature at -25°C for an extended period, safe and reliable RFID read-write board can read plasma label information, providing inventory plasma information statistics. Supports automatic inventory, one-key inventory and plasma in-out stock storage information

Multistage Plasma Storage Basket

Multistage plasma storage basket design, streamlines plasma storage and placement, easy to access

Specifications

Model		DW-30L1280FT (Intelligent)	
Technical Data	Cabinet Type	Upright	
	Climate Class	N	
	Cooling Type	Forced Air Cooling	
	Defrost Mode	Automatic Defrost	
	Refrigerant	R290	
	Sound Level (dB(A))	46	
Performance	Cooling Performance (°C)	-30	
	Temperature Range(°C)	-10~-30	
Control	Controller	Microprocessor	
	Display	LCD	
Electrical Data	Power Supply (V/Hz)	220/50	
	Power (W)	900	
	Electrical Current (A)	5	
Dimensions	Capacity (L/Cu.Ft)	1280/45.2	
	Net/Gross Weight (approx)	kg	620/680
		lbs	1366/1499
	Interior Dimensions (W*D*H)	mm	1320*752*1260
		in	52*29.6*49.6
	Exterior Dimensions (W*D*H)	mm	1520*1065*1996
		in	59.8*41.9*78.6
	Packing Dimensions (W*D*H)	mm	1580*1100*2100
		in	62.2*43.3*82.7
Alarms	Container Load (20'/40'/40'H)	6/14/14	
	High/Low Temperature	Y	
	Remote Alarm	Y	
	Power Failure	Y	
	Sensor Error	Y	
	Low Battery	Y	
	High Ambient Temperature	Y	
	Door Ajar	Y	
Accessories	Caster	Y	
	Foot	Y	
	Porthole	Y	
	Drawers/Inner Doors	N	
	Temperature Recorder	Y	
	USB Interface	Y	
	RS485	Y	
Others	Certification	/	

# -30°C Plasma Freezer

Applicable for blood stations, hospitals, CDCs, scientific research institutes, electronics, chemical industry and other related industries, Haier Biomedical's product can cryopreserve plasma, biological products, components, materials and other items that need to be kept at low temperature



DW-30L1280F

## Product Advantages



### Dual independent refrigeration systems: Superior safety

Auto defrosting system+constant refrigeration system, has successfully solved the industries problem that inside temperatures rise sharply when fan cooling refrigerators defrost; If one system fails, the other one would reach -25°C quickly, which doubles the safety of the sample; With air cooling technology, the inside uniformity can reach  $\pm 3^{\circ}\text{C}$  ( $\pm 5^{\circ}\text{C}$  during the defrosting period).



### Advanced defrosting technology eradicates the hidden danger of electric leakage

Haier Biomedical applies full-automatic hot gas defrosting technology throughout the whole unit. Compared with heater wire defrosting technology, Haier Biomedical's technology eliminates the risk of electric leakage occurring due to wire aging, providing extra security and safety.



### Intelligent defrosting: prolongs the defrosting cycle, safeguarding the stability of the storage temperature

Compared with traditional timed defrosting, the intelligent defrosting technology reduces the defrosting frequency by half, effectively draws down the temperature fluctuation caused by defrosting during the sample storage cycle by intelligently identifying the amount of frost on the evaporator.



### Hydrocarbon energy saving: green and environmentally friendly

Using green and eco-friendly hydrocarbon refrigeration system, based on the principle of zero damage to the ozone layer with zero greenhouse effect, while reducing energy consumption to 8kW/24H.

-30°C Plasma Freezer

Product Parts

Supersized double outer doors, 70mm insulation layer

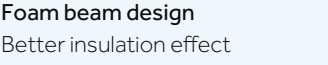





**Safe lock**  
Electronic mortise lock design, with NFC clocking-in function (fingerprint optional)

**Casters and feet**  
4 omnidirectional casters + 2 level legs, easy to move, lock and level

**Insulation design of refrigeration unit**  
Subtle temperature rise during defrosting

**Shelves**  
Equipped with 12 stainless steel shelves of 6 layers, which are adjustable to meet different requirements of users

Optional: Blood baskets (48 units), and the capacity is 900\*200ml blood bags



Microcomputer control, LED digital temperature display with inside temperature accuracy of 0.1°C

**Standard USB port**  
Capable of storing more than 15 years of data

**Low noise**  
Optimal system and engine noise reduction design, the temperature can cool down to -30°C within 3 hours

**Bottom strainer drawable design**  
Easy to clean

**Intelligent hot gas defrosting**  
Prolongs the defrosting cycle, eradicates the hidden danger of electric leakage

**Foam beam design**  
Better insulation effect

Specifications

Model		DW-30L1280F	
Technical Data	Cabinet Type	Upright	
	Climate Class	N	
	Cooling Type	Forced Air Cooling	
	Defrost Mode	Automatic Defrost	
	Refrigerant	HC	
	Sound Level (dB(A))	46	
Performance	Cooling Performance (°C)	-30	
	Temperature Range (°C)	-10~-30	
Control	Controller	Microprocessor	
	Display	LED	
Electrical Data	Power Supply (V/Hz)	220-240/50	
	Power (W)	900	
	Electrical Current (A)	5	
Dimensions	Capacity (L/Cu.Ft)	1280/45.2	
	Net/Gross Weight (approx)	kg	420/480
		lbs	925/1057
	Interior Dimensions (W*D*H)	mm	1320*752*1260
		in	52*29.6*49.6
	Exterior Dimensions (W*D*H)	mm	1520*1065*1996
		in	59.8*41.9*78.6
	Packing Dimensions (W*D*H)	mm	1580*1100*2100
		in	62.2*43.3*82.7
Alarms	Container Load (20'/40'/40'H)	6/14/14	
	Audible and Visual	Y	
	High/Low Temperature	Y	
	Remote Alarm	Y	
	Power Failure	Y	
	Sensor Error	Y	
	Low Battery	Y	
	High Ambient Temperature	Y	
	Dirty Condenser	Y	
	Door Ajar	Y	
Accessories	Caster	Y	
	Foot	Y	
	Porthole	Y, 1 Left Side, 1 Right Side, (25mm)Diameter	
	Drawers/Inner Doors	Optional/	
	USB Interface	Y	
	RS485	Y	
	NFC	Y	
Others	Temperature Recorder	/	
	Certification	CE, MDR	



Plasma Apheresis System

Process is completely traceable with intelligent interconnection methods, this design improves the safety and security for the donor.



Identity Recognition

Built-in intelligent identity recognition system can identify a person immediately and accurately through multiple sources, such as face, ID card and fingerprint as key examples.

Intelligent identification, safe and effective error prevention system

Precise control and accurate identification of the anticoagulant bags, improved safety, reliability and security.

Smart IoT

Intelligent interconnection with the management system, data at a glance, clear and convenient.

Ergonomic

Suitable for plasma stations and mobile collections with limited space.

Ergonomic Design



Intelligent connectivity which ensures automatic data collection and processing.



The unit is small in size, movable and easy to use, which reduces the burden of users.



Large color touch screen, easy to operate.



Optimized system and structural noise reduction design, low operating noise.



The whole process of blood component (plasma) separation is traceable

- The whole process can be automatically monitored and managed.
- Automatic recording and uploading data.
- Precise control of data is immediate.



Data and identity protection system

The separator can collect information in multiple dimensions including ID card, face, fingerprint and bar code. Then the system will recognize the accurate information from the database, ensuring no inaccuracy of donor or recipient information being contaminated.



A messenger who automatically processes data information

The separator can record and upload consumables and collect data automatically and intelligently without manpower, this improves efficiency and prevents errors, which saves medical staff precious time and reduces stress.



The monitor prevents manual process errors

The separator will emit an alarm sound and corresponding text prompt when there is any mishanging of anticoagulant. If this occurs the system is unable to carry out the next operation, which completely eliminates the risk of infusion error, and avoids any accident that endangers the safety of the plasma donor.



Comprehensive monitoring surveillance system

All-directional multi-angle monitoring plasma collection process. Exclusive design of blood pump and anticoagulation pump. Adaptive compensation function is more compatible with consumables from different manufacturers. No wearing parts. Stable flow. Accurate control of blood cell access ratio. Multi-level alarm system can find any errors.



The pioneer to maintain blood activity perfectly

Centrifuge cup adopts new patented technology to gently protect blood activity so that blood is safer.



Compatible with accurate capacity optimization

It can be used with 160ml anticoagulant bags to accurately match actual needs, which means cost reduction and environmentally friendly improvements. Consumables are versatile and compatible with multiple models.

Specifications

Model	Power Supply (V/Hz)	Exterior Dimensions (W*D*H) (mm)	Gross Weight (kg)
XJ-III	110-240-50/60	540*510*770	29

Parameters	Amount Collected Per Cycle (g)	Total Plasma Collection (g)	Pump Speed (ml/min)	Return Speed (ml/min)	Anticoagulant (Citrate) to Whole Blood Ratio	Centrifuge Speed (r/mim)
Range	0-300	0-1000	20-100	20-100	1:12-1:16	7000
Preset	230	600	80	80	1:16	7000
Precision	1	1	≤2	≤2	<1	≤2.5%

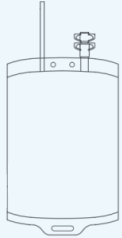
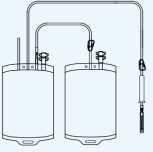
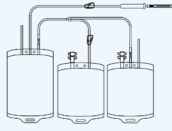
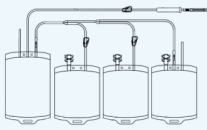
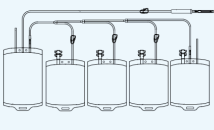
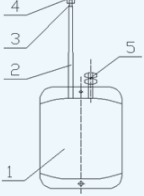
This product is composed of a mainframe (Centrifuge, blood pump, anticoagulant pump, weighing scale, display screen, air detector, pressure detector, control panel) and a pressure cuff, excluding the matching disposable pipe consumables.

Disposable Plastic Blood Bags

Blood Bags Body Specifications

- Disposable plastic blood bags (referred to as "blood bags") are divided into single bag (S), double bags (D), triple bags (T), quadruple bags (Q), anentagram bags (P) and transfer bag (Tr)
- Blood bags body can be divided into 50ml, 100ml, 160ml, 180ml, 200ml, 250ml, 300ml, 350ml, 400ml, 450ml, 500ml, 600ml, 800ml, and 1000ml according to the volume of blood collected, transferred, and stored anticoagulant/preservative solution

The specifications of blood bag body

Description	Specification	Schematic Diagram	Anticoagulant
Single Blood Bag	S-50		ACDB/CPDA
	S-100		
	S-200		
	S-250		
	S-300		
	S-350		
	S-400		
	S-450		
	S-500		
	S-600		
Double Blood Bags with NPD	S-800		ACDB/CPDA
	S-1000		
	D-100		
	D-200		
	D-250		
	D-300		
Triple Blood Bags with NPD	D-350		ACDB/CPDA+MAP
	D-400		
	D-450		
	T-200		
	T-250		
Quadruple Blood Bags (with PDS and NPD)	T-300		ACDB/CPDA+MAP
	T-350		
	T-400		
	T-450		
	Q-200		
Pentagram Blood Bags (with NPD)	Q-250		ACDB/CPDA+MAP
	Q-300		
	Q-350		
	Q-400		
	Q-450		
Transfer Empty Bag (Tr)	P-200		/
	P-250		
	P-300		
	P-350		
	P-400		
	P-450		
	Tr-50		
	Tr-100		
	Tr-160		
	Tr-180		
	Tr-200		
	Tr-250		
	Tr-300		
	Tr-400		

Note:

- 1.The above products can be made of blow molding film and calendered film,calendered film is available in 200/400ml two specifications (excluding five bags),and can be optional Pre-donation sampling device (PDS) and needle stick protection device (NPD) .
- 2.The meanings of the English abbreviation of description are :Blood Preservation Solution II(ACDB), Blood Preservation Solution III (CPDA), Red Blood cell Preservation Solution (MAP).

The Composition and Naming Rules of Blood Bags

The composition of blood bags

Disposable plastic blood bags consist of blood collection bag, blood-taking needle, protective sleeve, tube (including blood collection and transfer tube), connector, clamp, transfer bag, or (blood preservative solution, needle sticek protection device, collection sample device, platelet storage bag, optional)

Naming of blood bag components

- Blood bags body: S represents single bag, D represents double bags, T represents triple bags, Q represents quadruple bags, Tr represents transfer bag, P represents pentagram bags;

- Blood-taking needle: The specifications of blood-taking needle are 16G and 17G, with 6 representing 16G and 7 representing 17G;

- Blood preservative solution:

A) Anticoagulation Solution II (referred to as: ACD-B) consists of sodium citrate, citrate and glucose. The shelf life of stored blood is 21 days, and 25ml ACD-B should be added for every 100ml of blood;

B) Anticoagulation Solution III (referred to as: CPDA-1) consists of sodium citrate, citric acid, glucose, sodium dihydrogen phosphate and adenine. The shelf life of stored blood is 35 days, and 14ml CPDA-1 should be added for every 100ml of blood;

C) Red Cell Storing Solution (referred to as: MAP) consists of sodium citrate, citric acid, glucose, sodium dihydrogen phosphate, adenine, sodium chloride and mannitol. The shelf life of stored red blood cells is 35 days, and 25ml MAP should be added for every 100ml red blood cells.

D) There are two specifications available for blood preservative solution: CPDA represents CPDA-1, AMP represents (ACD-B+MAP).

- Optional devices include: needle sticek protection device, collection sample device, platelet storage bag; N represents needle sticek protection device, S represents collection sample device, Prepresents platelet storage bag.

Sterilization

- Disposable plastic blood bags (single bag, double bags, triple bags, quadruple bags, transfer bag, P represents pentagram bags) containing anticoagulant/preservative solution shall be sterilized by moist heat and packaged in plastic bags
- Transfer bag without anticoagulant/preservative solution is packaged in plastic bags and dialysis paper, sterilized with ethylene oxide and valid for 2 years

## Transport Cooler

### Temperature Range 0~10°C

#### Active Cooling Solution



HZY-8Z/8ZA



HZY-15Z/15ZA

- Accurate control of the temperature between 2-6°C
- PCM ice raft
- Constant temperature range (4±1°C)
- Complete process with cold chain monitoring
- Replace the traditional Insulation method with haier's transport cooler for transport
- Blood from blood transfusion department to clinical blood transfusion point



#### Low Noise

The ultra-quiet fan is equipped with air outlets on both sides, noise level less than 34 dB providing a more comfortable environment.



Air Duct Structure



#### Easy to Clean

The inner liner adopts aluminium oxidation process to make it smooth inside and easy to clean.



Internal Structure

#### Product Features

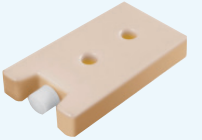
#### Semiconductor for active cooling, energy saving and environmental protection.

Connect to power to cool unit to temperature, during transportation (without power) the unit will hold temperature. Small and easy to carry.

**2~6°C precise temperature control, suitable for storage of biological products such as blood, medicines and reagents etc.**

Temporary blood storage to ensure blood safety at clinical blood stations.

Embedded with 4°C phase change PCM ice pack for cold storage, providing long insulation after power off to ensure blood safety during the transportation.



4 °C PCM Ice Pack

- The PCM ice pack uses a 4°C phase change material with a freezing point greater than 2°C to ensure the low temperature preservation of blood and other biological samples.
- At 25 °C under no load, the time for temperature inside the box rises to 10 °C is more than 1 hour.
- At 25 °C under full load, the time for temperature inside the box rises to 10 °C is more than 2 hour.

#### Multiple fault alarms, making it safer to use.

High/low temperature alarm, power failure alarm, and sensor error alarm.

#### The power supply is configured with cigarette lighter plug, easy for vehicle transportation.

The power supply is configured to fit the vehicles internal power plug, easy for vehicle transportation.

#### Passive Cooling Solution

- Multi-function handle with casters for easy transportation
- Multi dimensional binding of orders and blood, and whole process with cold chain monitoring
- From blood collection vehicle/blood donation house to blood center/blood station from blood center/blood station to hospital

#### Product Features

- LCD screen, real-time display of inside temperature, battery level and other information.
- Electromagnetic lock as standard, ability to scan QR code to open the unit, safeguarding the stored items.
- 4°C ice pack ensures cool storage temperatures with zero freezing to keep blood within safe storage temperature guidelines during transportation.



HZY-5B



HZY-35B

- Real-time display of inside temperature.
- Integrated cold storage ice pack box, easy to access ice pack.
- Rotational moulding shell, anti-knocking, easy to carry.
- Multifunctional handle, sided casters, easy to be transported on flat road.



Transport Cooler

Specifications



Model		HZY-8ZA	HZY-15ZA	HZY-35B
Technical Data	Storage Temperature (°C)	2~6	2~6	/
	Operating Temperature	2~10	2~10	2~10
Electrical Data	Power Supply (V/Hz)	100~240 50/60	100~240 50/60	/
	Capacity (L/Cu.Ft)	5.5/0.19	11.6/0.41	30.8/1.09
	Exterior Dimensions (W*D*H)(mm)	320*265*260	520*300*270	550*328*370
	Interior Dimensions (W*D*H)(mm)	230*140*170	430*150*180	450*232*295
	Packing Dimensions (W*D*H)(mm)	400*370*370	595*384*418	674*455*490
	Net Weight	4	6	10.5
	Gross Weight (kg)	5	7	12
	Blood Bag Capacity	8	15	35
Alarms	Container Load (20'/40'/40'H)	450/900/900	260/520/520	160/320/320
	Cold Chain Monitoring	With	With	Without
	RFID Identification	Without	Without	Without
	NFC Unlock	Without	With	Without
	Foam Material	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
	Coolinng Way	Semiconductor Active Refrigeration	Semiconductor Active Refrigeration	Passive Cooling
	Fan	DC 12V	DC 12V	Without
	Protection	I	I	I
	Hold Over Time (Warm Up Time)	2 Hours (25°C Ring Temperature Load Situation)	2 Hours (25°C Ring Temperature Load Situation)	6 Hours (43°C Ring Temperature Load Situation)
	Shell/Liner	ABS/Aluminium Plate	ABS/Aluminium Plate	HDPE/HDPE
	Alarm	High Temperature/Sensor Error/Power Off	High Temperature/Sensor Error/Power Off	/
	Battery	Rechargeable Lithium Batteries	Rechargeable Lithium Batteries	Button Battery
Others	Certification	/	/	CE

Transport Cooler

Specifications



Model		HZY-5B	HZY-8Z	HZY-15Z
Technical Data	Storage Temperature (°C)	/	2~6	2~6
	Operating Temperature	2~10	2~10	2~10
Electrical Data	Power Supply (V/Hz)	/	100~240 50/60	100~240 50/60
	Capacity (L/Cu.Ft)	3.2/0.11	5.5/0.19	11.6/0.41
	Exterior Dimensions (W*D*H)(mm)	285*186*200	320*265*260	520*300*270
	Interior Dimensions (W*D*H)(mm)	220*118*126	230*140*170	430*150*180
	Packing Dimensions (W*D*H)(mm)	357*277*287	400*370*370	595*384*418
	Net Weight	2	4	6
	Gross Weight (kg)	3	5kg	7
	Blood Bag Capacity	5	8	15
	Container Load (20'/40'/40'H)	850/1700/1700	450/900/900	260/520/520
Alarms	Cold Chain Monitoring	Without	Without	Without
	RFID Identification	Without	Without	Without
	NFC Unlock	Without	Without	Without
	Foam Material	High Density Foam	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
	Coolinng Way	Passive Cooling	Semiconductor Active Refrigeration	Semiconductor Active Refrigeration
	Fan	Without	DC 12V	DC 12V
	Protection	I	I	I
	Hold Over Time (Warm Up Time)	3 Hours (in 32°C Ring Temperature Load Situation)	2 Hours (25°C Ring Temperature Load Situation)	2 Hours (25°C Ring Temperature Load Situation)
	Shell/Liner	ABS/ABS	ABS/Aluminium Plate	ABS/Aluminium plate
	Alarm	Low Battery	High Temperature /Sensor Error/Power Off	High Temperature/Sensor Error/Power Off
	Battery	Lithium Batteries	Rechargeable Lithium Batteries	Rechargeable Lithium Batteries
Others	Certification	/	CE	CE

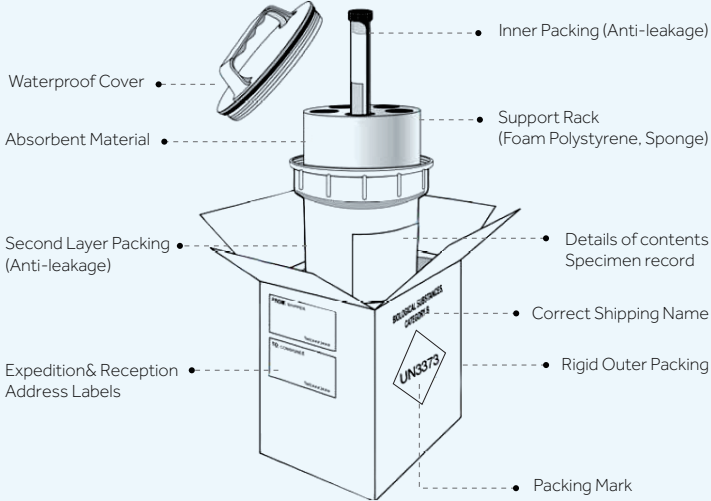
## Transport Cooler for the Infectious Material

The virus is high-risk specimen, and if there is collision during the transportation or transmission, there will be a risk of leakage and re-infection. A solution is urgently needed to ensure the viability of the samples and the safety of transport personnel, Haier Biomedical has the solution!

### Product Features

#### Three-layer packaging

- Main container**  
Test tube with cap (user configures according to business)
- Auxiliary container**  
≥95kPa pressure sealed tank (EPS or EPE bracket for fixing test tube, 16 hole D10 test tube and 2 hole D15 test tube)
- Outer packaging**  
Transfer box (ice row, foam used to fix sealed container, activated carbon and other adsorbed substances, sample labeling)



### Active Cooling



HZY-8Z (Specimen)



HZY-15Z (Specimen)

### Product Advantages



**The power supply is equipped with a vehicle power plug, which is convenient for vehicle transport**

The power supply can support 12V and 220V conversion, so the container can be put into the car to plug in and transfer



**Built-in, 4°C phase change PCM, ice row cooling, long-term insulation after power failure, to ensure the safety of specimen**

Under the condition of no load at 25°C, the temperature of the air in the box rising to 10°C takes 1 hour; Under the loading condition of 25°C, the air temperature in the box rising to 10°C takes 2 hours



**Precise temperature control**

Precise temperature control at 2°C ~ 6°C is suitable for the temporary storage of biological products such as serum and blood specimens



**Active semiconductor cooling, energy saving and environment-friendly**

Active semiconductor cooling, energy saving and environmental protection, built-in cooling function, cooling after power on



**Multiple fault alarms, safer to use**

High and low temperature alarm, power failure alarm, sensor error alarm

### Auxiliary Container



HZY-8Z (Specimen)



HZY-15Z (Specimen)

**Pressure sealed tank (EPS or EPE holder for fixing test tubes, 16-hole D10 test tube and 2-hole D15 test tube)**

The pressure-sealed tank remains intact at the temperature of the refrigerant used, as well as the temperature and pressure that may occur after loss of refrigeration.

Under the condition of no leakage, it can withstand the internal pressure of 95kPa, and can ensure that it will not be damaged in the temperature range of -40°C to + 55°C





Transport Cooler for the Infectious Material

Passive Cooling



UN2814 transport cooler  
HZY-10B (P620)

Product Advantages



Passive cooling, long heat preservation time, suitable for air transportation

At 32°C ambient temperature, the temperature inside the box (pre-cooled in advance) rising to 10° C takes 7 hours (P650) and 8 hours (P620) separately



PCM ice row, frozen at 4° C, to ensure the safety of specimen storage

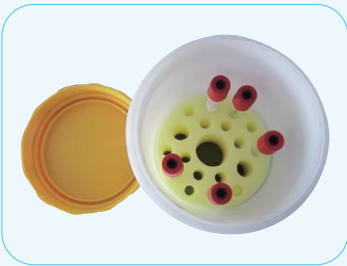


The shell is made of aluminum-magnesium alloy, with high strength; Meeting the P620 packaging requirements of Class A infectious substances (HZY-10B) and the P650 packaging requirements of Class B infectious substances (HZY-10B) separately

Auxiliary Container

Pressure sealed tank (EPS or EPE holder for fixing test tubes, 16-hole D10 test tube and 2-hole D15 test tube)

The pressure-sealed tank remains intact at the temperature of the refrigerant used, as well as the temperature and pressure that may occur after loss of refrigeration.  
Under the condition of no leakage, it can withstand the internal pressure of 95kPa, and can ensure that it will not be damaged in the temperature range of -40°C to + 55°C



Specifications

Model	HZY-10B (P620)
Type	Passive Cooling
Internal Dimensions (W*D*H)(mm)	345*225*182
External Dimensions (W*D*H)(mm)	430*312*272
Loading Quantity	2 Transport Tanks
Effective Volume	14L with 2 Built-in Specimen Sealed Tanks
Specimen Sealed tank Size (mm)	H160*D130
Number of Test Tubes (Single Tank)	16 Test Tubes D10 (Small), 2 Test Tubes D15 (Large)
Net Weight (kg)	8
Transport Temperature (°C)	2-10
Thermal Insulation Time (32°C Full Load) (h)	8
Cabinet Material	Aluminum Magnesium Alloy Box Shell
Thermal Insulation Material	EPP Foam Liner
Cool Storage Mode	PCM Ice Pack Cold Storage



# Plasma Blast Freezer





# Plasma Blast Freezer



XSD-24FL



XSD-24WFL



XSD-48WFL

Mainly intended for the quick-frozen treatment of blood plasma or biological samples to a core below -30°C in blood stations or medical institutions

## Product Advantages



### Low rapid-freezing temperature

Rapid-freezing temperature can be reduced to -60°C, superior performance



### Data is printable and the information traceable

Plasma storage data and corresponding curves can be exported via USB, which is convenient for information traceability



### Efficient core components, energy saving

High efficiency compressor and dual-cooling system, better performance; Hydrocarbon refrigerant, energy saving and environmental protection



### Plate rapid-freezing, efficient cooling

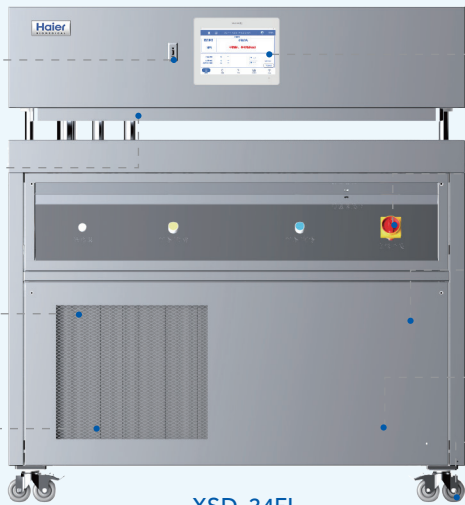
The central temperature of full-load plasma can be quickly frozen to below -30°C within 45 minutes, which effectively guarantees the activity of factor VIII



### Precise temperature control, control precision 1°C

PLC control module, the system is stable and reliable, temperature control precision 1°C, to ensure the safety of plasma

## Product Parts



XSD-24FL

USB interface, easy to export data

Direct contact refrigeration, improve the heat transfer rate

Finned condenser, suitable for frequency conversion fan, better performance

Frequency conversion fan, energy saving and environmental protection

Intelligent screen allows to adjust the parameters according to requirements

Power switch, emergency power off in special circumstances

Double stage refrigeration compressor, better refrigeration performance

PLC control, stable and reliable

Universal caster, easy to move, front caster with locking device, easy to fix

Three phase fan, with more air volume and better performance

Direct contact refrigeration, improve the heat transfer rate

PLC control, stable and reliable



XSD-48WFL

V-type condenser, high condensation efficiency

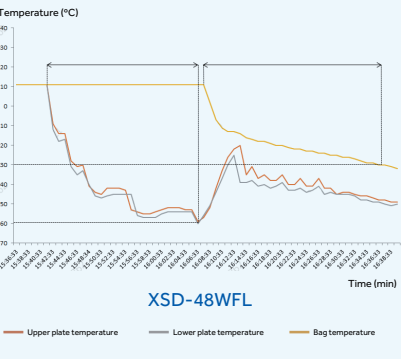
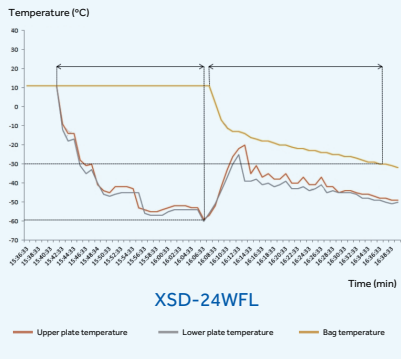
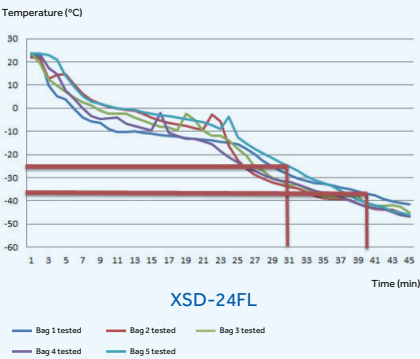
Intelligent 10 inch screen allows to adjust the parameters according to requirements

Double stage refrigeration compressor, better refrigeration performance

Universal caster, easy to move, front caster with locking device, easy to fix

## Cooling Down Curve

### Cooling Down Curve





Plasma Blast Freezer

Specifications



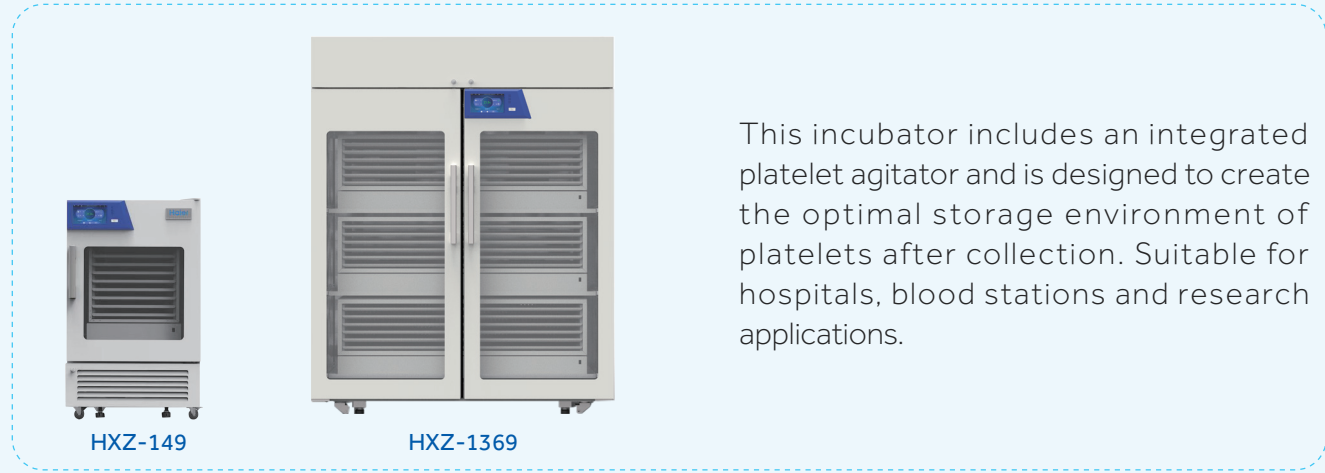
Model	XSD-24FL	XSD-24WFL	XSD-48WFL
Freezing Capacity (Plasma Bag)	16 at 1000ml /24 at 400ml /40 at 200ml	16 at 1000ml /24 at 400ml /40 at 200ml	32 at 1000ml /48 at 400ml /80 at 200ml
Freezing Plate Temperature (°C)	-59	-59	-59
Storage Temperature (°C)	Manual Adjustment Between -30° to -50°	Manual Adjustment Between -30° to -50°	Manual Adjustment Between -30° to -50°
Freezing Time to Core Temperature of -30 °C	24 unit (450ML) ±30min 16 unit (1000ML) ±45min	24 unit (450ML) ±30min 16 unit (1000ML) ±45min	48 unit (450ML) ±30min 32 unit (1000ML) ±45min
Defrosting	Integrated thermal defrosting, defrosting delay time about 10 minutes; Defrost for 15 minutes.	Integrated thermal defrosting, defrosting delay time about 10 minutes; Defrost for 15 minutes.	Integrated thermal defrosting, defrosting delay time about 10 minutes; Defrost for 15 minutes.
Noise Level (db(A))	≤56	≤40	≤40
Refrigerant Type	R507	R507	R507
Cooling Type	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling
Operating Voltage Range	3~380V~400V/50Hz(60Hz)	3~380V/50Hz(60Hz)	3~380V/50Hz(60Hz)
Power (KW)	7	7	14
Dimension of Indoor Machine (W*D*H)(mm)	Open Status: 1455*915*1665 Close Status: 1455*915*1465	Open Status: 1455*915*1665 Close Status: 1455*915*1465	2040*880*1895mm
Pakcing Demension of Indoor Machine (W*D*H)(mm)	1570*1000*1620	1570*1000*1620	2205*1105*2100
Dimension of Outside Machine (W*D*H)(mm)	/	1340*760*1640	1340*760*1640
Packing Demension of Outdoor Machine (W*D*H)(mm)	/	1595*910*1998	1595*910*1998
Net Weight of Indoor Machine(kg)/Gross Weight	480/540	320/380	640/720
Net Weight of Outside Machine(kg)/Gross Weight	/	360/410	360*2/410*2
GWP	3985	3985	3985

# Platelet Incubator with Agitator







Platelet Incubator with Agitator




Product Advantages

- 


**Data Traceability**

  - Real-time temperature monitoring, records and stores historical data, alarm records and events
  - USB interface, convenient and safe data transfer
- 


**Energy Saving**

Peltier technology, PID algorithm adjustment, energy saving 13% than the traditional compressor
- 


**Multiple Alarms**

Multiple alarms including high and low temperature alarm, power failure alarm, sensor failure alarm, door ajar alarm, low battery alarm, abnormal alarm of oscillating motor, remote alarm ensures maximum safety
- 


**Superior Insulation Performance**

60mm thickened foam layer. In the event of a power failure within a 25°C ambient and a full load, the warm up time from 22°C to 24°C in the center of the chamber is more than 4 hours
- 


**Reliable Oscillation**

The agitator mechanism is equipped with an alarm and calibration device to ensure platelet quality
- 


**Peltier Technology**

Semiconductor temperature control, internal temperature is maintained at 22°C±1°C
- 


**Low Noise**

Semiconductor and EBM oscillating motor provide a quiet working environment
- 

**Ultraviolet Disinfection**

The UV disinfection function helps maintain a sterile environment
- 

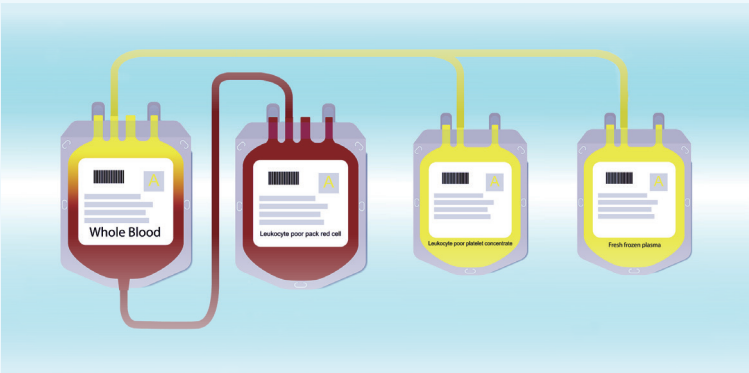
**Variable Agitation Speed control from Touch Screen**

Adjust Oscillation Frequency (30-100 cycles/minute) to meet the customer needs
- 

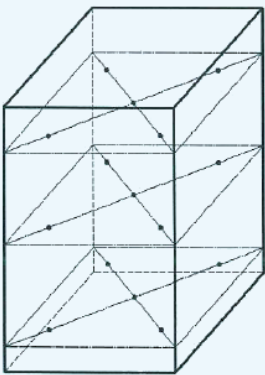
**Robust Structure**

Internal material is stainless steel 304 and External material is powder coated cold-roll steel sheets without sharp edges, easy to disinfect.

Product Parts

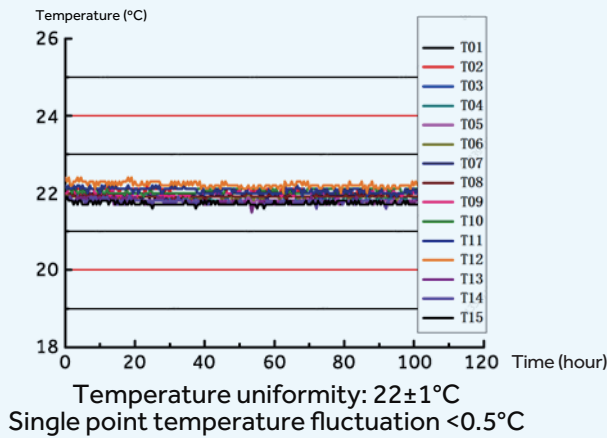


Cooling Down Curve



HXZ-149 15 test points

HXZ-149 Running temperature curve (Empty loaded)





Platelet Incubator with Agitator

Specifications

Model			HXZ-149	HXZ-1369
Performance	Temperature Range (°C)		20-24	20-24
	Ambient Temperature (°C)		10-32	10-32
	Amplitude		50±5mm Amplitude	50±5mm Amplitude
	Display Accuracy (°C)		0.1	0.1
	Noise		50	55
	Variable Agitation Speed (cycles/min)		30-80	30-80
Control	Controller		Microprocessor	Microprocessor
	System Temperature Control		Peltier Technology (Semi-Conductor Heating and Cooling)	Peltier Technology (Semi-Conductor Heating and Cooling)
	Display		LCD	LCD
Electrical Data	Power Supply (V/Hz)		200-240/50	200-240/50
	Power (W)		300	1500
Dimensions	Capacity (L/Cu.Ft)		149/5.26	1369/48.35
	Blood Storage Capacity (300ml Blood Bags)		36	216
	Net/Gross Weight (approx)	kg	94/122	412/480
		lbs	207/269	908/1058
	Interior Dimensions (W*D*H)	mm	505*560*610	1425*680*1455
		in	19.8*22*24	56.1*26.8*57.3
	Exterior Dimensions (W*D*H)	mm	625*795*1050	1545*915*1945
		in	24.6*31.3*41.3	60.8*36*76.6
	Packing Dimensions (W*D*H)	mm	718*815*1228	1610*995*2090
		in	28.3*36.2*48	63.4*39.2*82.08
Container Load (20'/40'/40'H)			18/38/76	7/14/14
Alarms	High/Low Temperature		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
	Low Battery		Y	Y
	Door Ajar		Y	Y
	Remote Alarm		Y	Y
	Abnormal Oscillation Motor Alarm		Y	Y
Accessories	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y	Y
	Baskets		N	N
	Shelves/Drawers		8	18
	Inner Doors		N	N
	USB Interface		Y	Y
	IoT Function		Optional	Optional
Others	Certification		CE	CE

Haier Biomedical Blood Banking Centrifuge



LX-75L2400R

Advanced Centrifugation Solutions for Modern Blood Banking

Step into a realm of unmatched convenience with the Haier Biomedical LX-75L2400R Blood Banking Centrifuge, tailored to exceed the demanding needs of blood bank centrifugation. Redefine efficiency as the LX-75L2400R effortlessly accommodates up to 16 x 500 ml blood bags or 6 x 2400 ml centrifuge bottles, delivering optimal sedimentation results with each run.

Elevate your laboratory's capabilities with the LX-75L2400R's extensive rotor options, its formidable motor, and user-friendly control panel, all complemented by a robust refrigeration system and an array of versatile accessories.

Crafted for excellence, the LX-75L2400R is the centrifuge of choice for blood banks and transfusion centers. Its superior design also finds extensive application in the forefront of biopharmaceuticals, cell therapy, biological culture, vaccine production, and academic research, making it a pivotal tool in diverse scientific fields.

# Haier Biomedical Blood Banking Centrifuge

## Excellent Performance

Unlock the full potential of your blood processing center with the LX-75L2400R's expansive capacity and cutting-edge selection of rotors, carriers, and adapters, masterfully designed to handle a diverse array of high-capacity applications. This powerhouse is the epitome of versatility, perfect for sophisticated bioprocessing, clinical diagnostics, and comprehensive blood sample preparation.

Quiet yet powerful, the LX-75L2400R redefines operational convenience, setting a new standard in the industry. At its heart lies a microprocessor-controlled frequency motor, delivering robust torque and rapid acceleration, all while ensuring an extended motor lifespan. Achieve peak performance with speeds soaring up to 7,500 rpm and forces reaching 13,376 x g, propelling your research to new heights with unmatched precision and reliability



### Expansive Memory

Maximize efficiency with over 1000 program memories, ready to streamline your workflow.



### Precise Control

Tailor your operations with 15 acceleration and 16 deceleration stages for unparalleled precision.



### Rapid Cooling

Achieve 4°C in just 15 minutes from room temperature, speeding up your readiness.



### Maintenance-Free Motor

Enjoy seamless operation with our brushless induction motor that requires no maintenance and ensures a clean lab environment.



### Quiet Operation

Work in peace with a sound design that keeps noise levels below 60 dB, even at maximum speed.



### Stability

Trust in the stability of our low-center-of-gravity design for consistent performance and optimal centrifugal results.

## Ergonomic Design



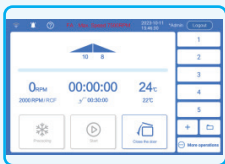
### One-Touch Automation

Experience unparalleled convenience with our one-button automatic door mechanism that seamlessly opens and closes from front to back, ensuring quick and easy access while maintaining sterility standards.



### Automated Rotor Lid Management

With our centrifuge, the rotor lid opens and closes automatically, complete with lid storage, reducing manual effort and enhancing workflow efficiency.



### Intuitive 10-Inch Touch Screen

The expansive 10-inch touch screen interface provides operators with user-friendly navigation through settings and features, making operation straightforward and minimizing training time.



### Electric Push Rod

Engineered for safety, the electric push rod offer smooth and controlled opening and closing of the centrifuge chamber, providing an extra layer of protection to users.



### 316 Stainless Steel Chamber

The premium 316 stainless steel construction of the centrifuge chamber ensures a rust-free and contaminant-resistant environment that is exceptionally easy to clean and maintain.



### Versatile Rotor Capacity

Our centrifuge accommodates a variety of research needs with three rotors designed for 250ml, 500ml, 1000ml, 2000ml, and 2400ml centrifuge bottles, as well as 500ml blood bags, maximizing your laboratory's throughput capabilities.



### Emergency Lid Release

The lid can be opened by utilizing the reset hole on the side plate. Rotate a 5mm hex key clockwise several times to open the lid.

# Haier Biomedical Blood Banking Centrifuge

## Interactive 10-inch LCD Touchscreen

- Glove-Friendly and Ergonomic**  
The 45 ° angled, glove-friendly touchscreen offers a wide viewing angle, making it comfortable and practical for users of all heights.
- Enhanced Access Controls**  
Equipped with user login and password protection, ensuring individualized program data management for each user.
- Visibility and Monitoring**  
Enlarged track bar display of set and actual run conditions during centrifugation, ensuring clear visibility from a distance.
- Adjustable On-the-Fly**  
Users can alter speed, centrifugal force, time, and temperature during the centrifugation process for precise control.
- Program Recall and Efficiency**  
Quick recall feature for over 1000+ programs with alpha-numeric naming, minimizing time between runs and facilitating quick starts for routine users.

Acceleration/deceleration stages

Progress bar

Target speed/centrifugal force and real-time speed display.

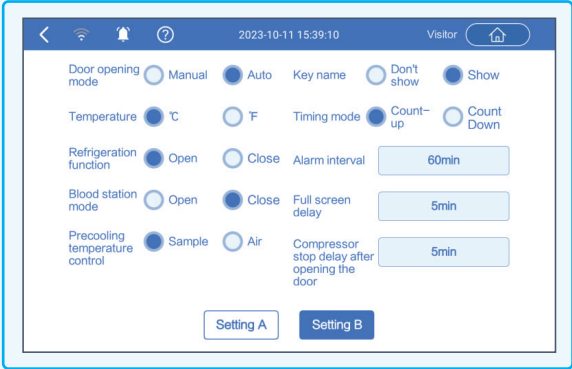
Temperature set-point and real-time temperature display.

Quick access to stored programs. 1000+ program storage, supports customized programs for convenient.

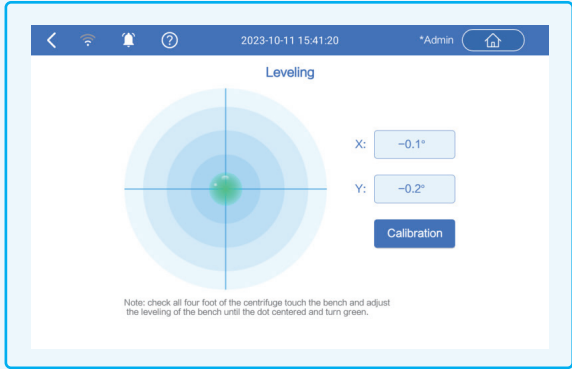
Clear one-touch buttons for fast refrigeration, fast centrifugation, intelligent start-stop and lid-closing status.

The main touchscreen interface displays a progress bar at the top with a blue triangle indicating the current stage. Below it, a large digital display shows '0 RPM' and '2000 RPM/RCF'. To the right, a timer shows '00:00:00' and a temperature display shows '24°C' with a real-time temperature of '22°C'. At the bottom, there are three large buttons: 'Precooling' (with a snowflake icon), 'Start' (with a play button icon), and 'Close the door' (with a door icon). A 'More operations' button is also visible. On the right side, there is a vertical list of program numbers 1 through 5, and a 'More operations' button at the bottom.

Multiple operation setting modes, including unique blood bank mode function, convenient for blood bank users to use.



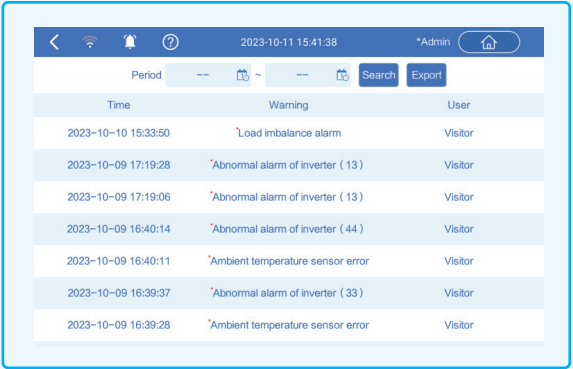
Electronic level assists in installation and leveling, making installation easier and simpler



Multi-echelon program running mode, achieving continuous operation of multiple speed steps for special users



The operation record including speed, time and temperature, operation curve with alarm messages etc. can be tracked on the screen and exported by USB port



## Enhanced Safety


- Immediate Imbalance Detection & Shutdown**  
Offers real-time loading imbalance detection with instant shutdown to protect against imbalances.
- Comprehensive Alarm System**  
Features a multi-faceted alarm system for abnormal voltage, high temperature, overspeed, load imbalance, rotor absence, brake anomalies, and rotor life.
- Robust Construction**  
Fully covered steel plate protective sleeve and a 12mm steel shell provide enhanced durability and user safety.
- Stable Installation**  
Φ 120mm adjustable feet ensure the centrifuge is securely and stably installed in any setting.
- Anti-Vibration Lid Lock**  
Prevents accidental opening during operation, ensuring sample integrity and operator safety.
- High-Quality Connectivity**  
Equipped with an imported 5-core aviation plug for easy, fast, and safe usage.



## Haier Biomedical Blood Banking Centrifuge


### Real - World Efficacy

Blood Station User: Blood centrifugal test



Haier Biomedical

VS



Other Brand

### Precision Layering

Clear Separation with Distinct Leukocyte Layer, Eliminating the Need for Re-Separation

Scientific Research User: Seaweed centrifugal test



Haier Biomedical

VS



Other Brand

### Optimal Centrifugation

Clear Layering, High Yield, and Zero Wall Adhesion

### Technical Data

Model	LX-75L2400R
Maximum Capacity	8*2000ml* or 16*500ml blood bags
Max Speed (rpm)	7,500
Max RCF(xg)	13,376
Speed Accuracy (rpm)	±5
Time Setting Range	1min-99h59m59s (1-second increment)
Precooling Function	Yes
Temperature Setting Range	-20°C~40°C, adjustment increment: 1°C
Display	10 inch touch screen
Noise (dB(A))	≤60
Power Supply (V/Hz)	3-400/50/60
Power (W)	6400
Exterior Dimensions (W*D*H)(mm)	900*1050*1020
Lid Opening Height (mm)	1780
Net Weight (kg)	620
Packing Dimensions (W*D*H)(mm)	1092*1279*1720
Gross Weight (kg)	750
Other Functions	Rotation speed/RCF switchover, inching operation, running process indicator, sound alert, adjustable acceleration/deceleration, user logging, user lock-out, automatic door opening, on-screen display for imbalance, over temperature, stainless steel chamber
Certification	CE

\*Buckets for 2000ml centrifuge bottles can be customized depending on requirements.



BE No.	BE12DC000	BE12JP002	BE12JQ002	BE12K1000
Type	Fixed-angle rotor (Sealed)	Adapter (Sets of 6) for BE12DC000	Adapter (Sets of 6) for BE12DC000	Centrifuge Bottle(Sets of 6) for BE12DC000
Max Capacity	6*1000ml	500ml	250ml	1000ml
Max RCF	13376xg	-	-	-
Max Speed	7500rpm	-	-	-
Max Bottle Capacity	1000ml	500ml	250ml	-
Bottles Per Rotor	6	6	6	-
Bottle Type	Flat bottom	Flat bottom	Flat bottom	-

Haier Biomedical Blood Banking Centrifuge

Swing-Out Rotor



Swing-Out Rotor  
12 Blood Bags

Swing-Out  
Rotor Block



BE No.	BE12F5001
Max. RCF (xg)	5,331
Max. speed (rpm)	4,000

Bucket  
(Sets of 6)

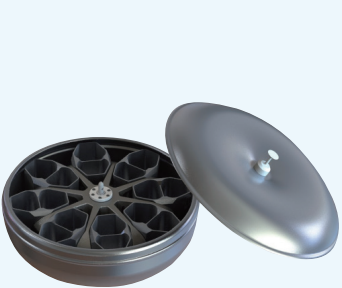


BE No.	BE12H4000
Max Capacity	2*500ml blood bags or 2400ml
Bucket Type	Flat bottom

Adapter/Bottle(Sets of 6) for BE12H4000



BE No.	BE12JT001	BE12K0000
Type	Double blood bag adapter	Centrifuge bottle
Max Capacity	2*500ml blood bags	2400ml
Blood bags/Bottles per rotor	12 blood bags	6 bottles



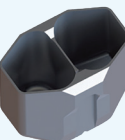
Swing-Out Rotor  
16 Blood Bags

Swing-Out  
Rotor Block



BE No.	BE12FP001
Max. RCF (xg)	5,706
Max. speed (rpm)	4,000

Double Blood Bag  
Bucket (Sets of 8)



BE No.	BE12H9000
Max Capacity	2*500ml blood bags
Bucket Type	Flat bottom

Adapter(Sets of 8) for BE12H9000

BE No.	BE12JF002
Type	Double blood bag adapter
Max Capacity	2*500ml blood bags
Blood bags per rotor	16



Cryogenic Workstation for Blood Applications



HXT-C5-0.7/1.3

A cryogenic workstation for blood and blood component work, such as labelling and audits. For use within hospital blood banks and blood operations.

Product Advantages



Safe Operation

- Tamper-proof adjustable temperature setting with self-locking mechanism.
- High-quality construction, made with corrosion-resistant stainless steel.
- The workstation is fitted with electrical leakage protection.



Temperature Control

- Intuitive and clear digital temperature display and microcomputer controller.
- The use of table face plate uniform air supply, uniform temperature, high precision.



Ergonomic Design

Designed to be consistent with working bench height for comfortable operation.



Refrigeration System

Independent refrigeration system, double compressor control double evaporator, can be installed separately, energy saving, low noise.

Specifications

Model	HXT-C5-0.7	HXT-C5-1.3
Power Supply (V/Hz)	220/50/60	220/50/60, 115/50/60
Power (W)	1200	1500
Temperature Range (°C) (adjustable)	2~8	2~8
Ambient Temperature (°C)	10~28	10~28
Exterior Dimensions (W*D*H) (mm)	1200*750*880	1900*850*880
Refrigerated Area (m²)	0.65	1.25
Refrigeration Mode	Forced air cooling	Forced air cooling
Weight (kg)	140	190

Product Portfolio

Automated Blood Management Refrigerator Used at Blood Station



HXC-629TR



HXC-1369TR

Automated Blood Management Refrigerator Used at Hospital



HXC-149ZZ



HXC-429RV



HXC-629RV

Cold Room



-30°C Plasma Freezer



DW-30L1280F



DW-30L1280FT  
(Intelligent)

Standard Blood Bank Refrigerator



HXC-106



HXC-158



HXC-158B

Unattended Self-help Blood Distribution Refrigerator



HXC-629ZZ

Automated Blood Management Refrigerator with Touch Screen



HXC-149T



HXC-279T



HXC-429T



HXC-629T



HXC-1369T

Plasma Apheresis System



XJ-III

Plasma Blast Freezer



XSD-24FL



XSD-24WFL



XSD-48WFL

Platelet Incubator with Agitator



HXZ-149



HXZ-1369

Automated Blood Management Refrigerator with LED Display



HXC-149



HXC-279



HXC-429



HXC-629



HXC-1369

Solar Direct Drive Blood Refrigerator



HTXC-240

Transport Cooler



HZY-5B



HZY-35B



HZY-8Z  
HZY-8ZA



HZY-15Z  
HZY-15ZA



HZY-10B

Floor-Standing Low-Speed Refrigerated Centrifuge



LX-75L2400R

Cryogenic Workstation for Blood Applications



HXT-C5-0.7/1.3