

Your Haier Biomedical Partner

in



# **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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Haier Biomedical



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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.

**Digital Blood Safety Management Complete Solutions** Model: IoT equipment + big data platform+ value-added services Aid decision-making center Whole-hospital digital blood use service guarantee Digital blood supply guarantee Distributed blood use Collection >>>Intelliaent Preparation transportation Delivery Integration Smart blood Blood supply transfusion department

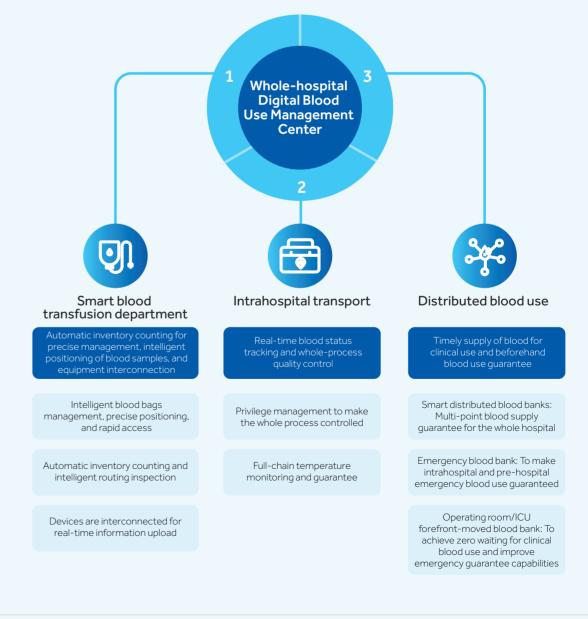
## **Overview of Blood Network Scenarios**

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**



#### **Platelet Management**



Precise and accurate temperature control

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

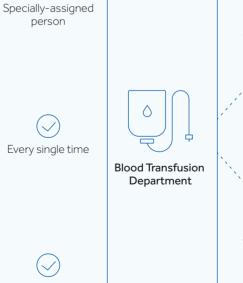
#### **Red Blood Cell Management**

#### 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, gueryable, and traceable



Multiple bags per time

 $(\checkmark$ 

#### Plasma Management

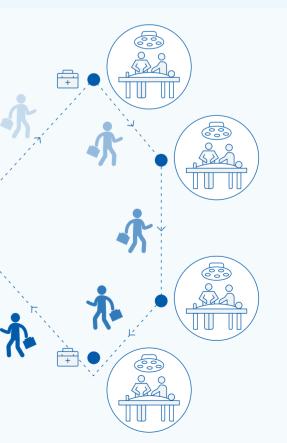
RFID radio frequency

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

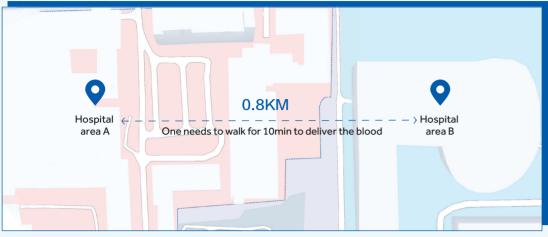
Semiconductor refrigeration and intelligent temperature control





## **Distributed Blood Bank**

### 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



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.



Improved pre-hospital medical first aid and emergency medical rescue

Whole-process information and cold chain monitoring; temperature maintained between 2 and 6°C for quality control; information of clinical blood use traceable

Shortened blood access time to make blood transfusion safe, timely, and



## **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

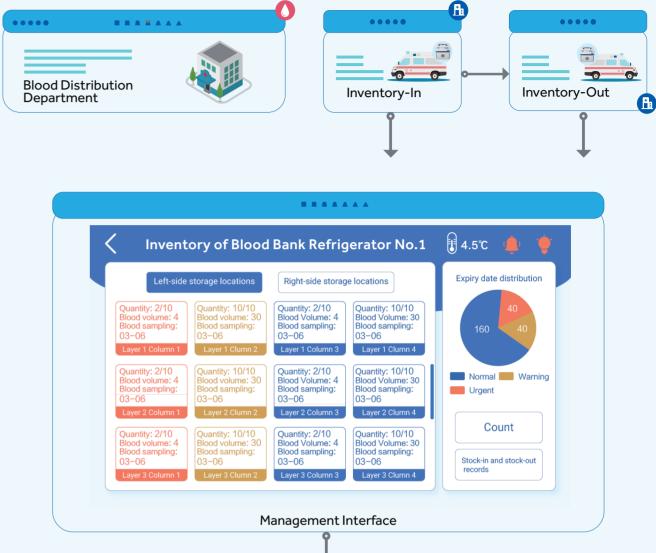
Blood Transfusion Department

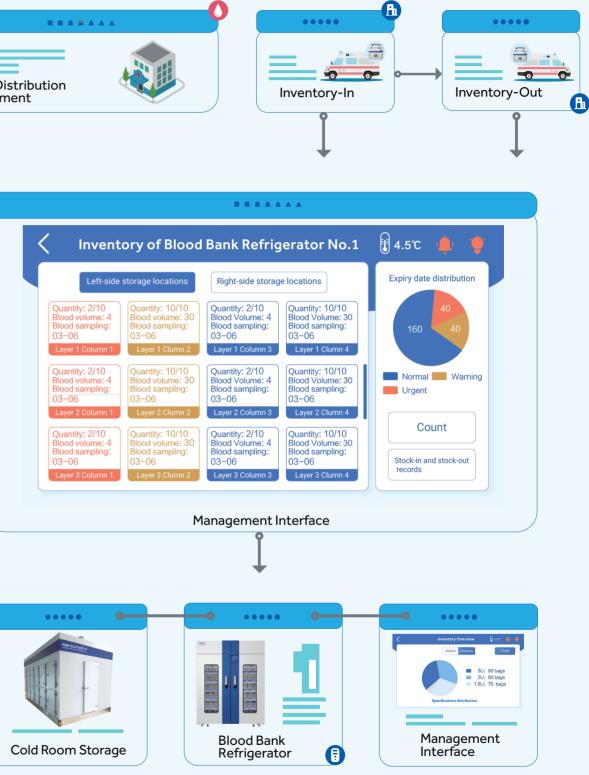
Both blood quality and patient safety are guaranteed

#### **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, guality 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 ±2°C
- Energy-saving liquid self-cooling technology cools the liquid by more than 5°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: 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: first-out management practices
- The refrigerator or freezer has a built-in RFID read-write device: 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: information cannot be deleted or tampered with, and thus is safe, secure and reliable



The blood inventory management App ensures accurate, real-time and automatic management of

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

To ensure state of the art inventory count using a simple one-button protocol, the inventory information is

The blood information stored in the RFID tag is encrypted with read-only information to ensure that such

## **Hospital Solution Summary**

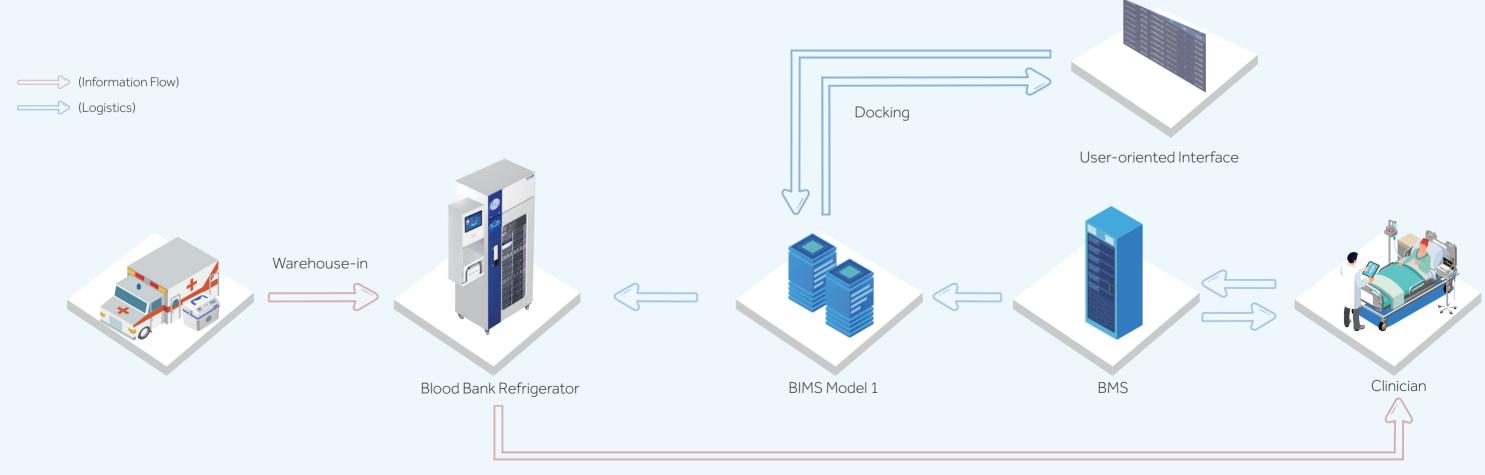
## Solution Introduction

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**



**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: 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 storeditems being left in error.

- can be maintained at 2~10°C with no power
- in real-time
- 12V and 100-240V power supply for in-vehicle operation
- Energy-efficient optimized semi-conductor refrigeration technology



Displays data in real-time and information is uploaded to the cloud platform for query through the 4G

• Storage temperature is maintained at 2~6°C once the cooler is fully charged; the transfer temperature

• Storage security is enhanced with an NFC swipe card module, lock/unlock status information is uploaded

# Blood Bank Refrigerators & Freezers

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**Blood Management Solutions** 





## **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



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#### **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





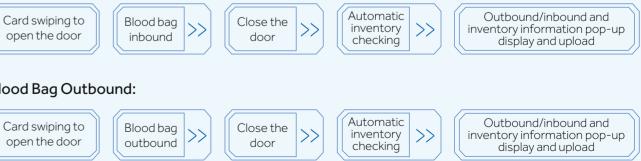
Server

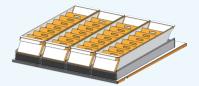
### **Operation Instructions**

#### Blood Bag Inbound:



#### Blood Bag Outbound:





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





Refrigerator screen APP



## Automated Blood Management Refrigerator

Specifications

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



#### 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.

#### **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.





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
Туре		Drawer	r-Type	Drawe	Drawer-Type		Drawer-Type	
	Climate Class		Ν		Ν		N	
	Cooling Type		Forced Air Cooling		Forced Air Cooling		Forced Ai	r Cooling
Technical Data	Defrost Mode		Au	to	Au	ito	Au	to
	Refrigerant		R6C	)0a	R60	00a	R6C	10a
	Sound Level (dB(A))		40	C	4	1	4	1
	Temperature Range (°C)		4±	1	41	±1	4±	1
Performance	Ambient Temperature (°C)		16-	32	16-	-32	16-	32
	Controller		Micropro	ocessor	Micropro	ocessor	Micropro	cessor
Control	Display		LC	D	LC	D	LC	D
	Power Supply (V/Hz)		220~240/50	230~ 50/60	220~240/50	230~ 50/60	220~240/50	230~ 50/60
Electrical Data	Power (W)		25	0	28	30	30	0
	Electrical Current (A)		1.	5	1.	.8	1.	9
	Capacity (L/Cu.Ft)		149/5.3		429/	15.1	629/	22.2
	Blood Storage Capacity (450ml blo	od bags)	18		6	0	88	
	Net/Gross Weight (approx)		129/179		245/280		295/335	
			283.8/ 393.8		539/616		649/737	
	Interior Dimensions (W*D*H) mmin		505*560*610		505*680*1315		645*680	D*1455
Dimensions			19.7*32.3*23.8		19.7*26	6.5*51.3	25.2*26	.5*56.7
	Exterior Dimensions (W*D*H)		625*820*1425		925*94	0*1830	1065*94	0*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 in		740*945*1575		725*98	5*1940	875*99	5*2090
			28.9*36.9*61.4		28.3*38	8.4*75.7	34.1*38	.8*81.5
	Container Load (20'/40'/40'H)		18/36/36		18/3	5/35	12/20	6/26
	High/Low Temperature		Y		γ	(	Y	
	Power Failure		Y		Y		Y	
	Sensor Error		Y		Y		Y	
Alarms	Low Battery		Y		Y		Y	
	Door Ajar		Y		Y		Y	
	Remote Alarm		Y	,	γ	(	Y	
	Caster		4		4		4	
	Foot		2		2		2	
	Porthole		Y		Y		Y	
Accessories	Drawers		9		30		44	4
	USB Interface		Y		Y		Y	
	Temperature Recorder		Y		Υ	(	Y	
Others	Certification		CE	UL	CE	UL	CE	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

### **Ergonomic Design**



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







#### 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



#### Automatic Inventory

Automatic inventory and blood bag information at a glance

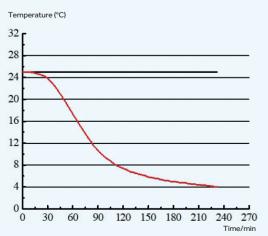




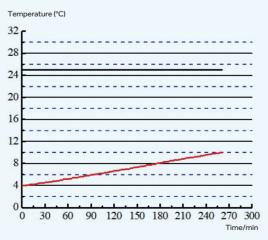


Product Performance

#### Cool down curve (empty loaded)



#### Warm up curve (empty loaded)



	Model							
	Туре							
	Climate Class							
	Cooling Type							
Technical Data	Defrost Mode							
	Refrigerant							
	Sound Level (dB(A))							
	Temperature Range (°C)							
Performance	Ambient Temperature (°C)							
	Controller							
Control	Display							
	Power Supply (V/Hz)							
Electrical Data	Power (W)							
	Electrical Current (A)							
	Capacity (L/Cu.Ft)							
	Blood Storage Capacity (450ml blood bags)							
		kg						
	Net/Gross Weight (approx)	lbs						
		mm						
Dimensions	Interior Dimensions (W*D*H)	in						
		mm						
	Exterior Dimensions (W*D*H)	in						
		mm						
	Packing Dimensions (W*D*H)	in						
	Container Load (20'/40'/40'H)							
	High/Low Temperature							
	Power Failure							
	Sensor Error							
Alarms	Low Battery							
	Door Ajar							
	Remote Alarm							
	Caster							
	Foot							
	Porthole							
Accessories	Drawers							
	USB Interface							
	Temperature Recorder							
Others	Certification							

Drawer-Type         Drawer-Type           N         N           Forced Air Cooling         Forced Air Cooling           Auto         Auto           R600a         R600a           41         41           4±1         4±1           16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y <th>HXC-429RV</th> <th>HXC-629RV</th>	HXC-429RV	HXC-629RV
Forced Air Cooling         Forced Air Cooling           Auto         Auto           R600a         R600a           41         41           4±1         4±1           16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y	Drawer-Type	Drawer-Type
Auto         Auto           R600a         R600a           41         41           441         4±1           16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y	Ν	Ν
R600a         R600a           41         41           41         41           41         41           41         41           41         41           16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y </td <td>Forced Air Cooling</td> <td>Forced Air Cooling</td>	Forced Air Cooling	Forced Air Cooling
41         41           4±1         4±1           16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y	Auto	Auto
4±1         4±1           16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y	R600a	R600a
16-32         16-32           Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y	41	41
Microprocessor         Microprocessor           LCD         LCD           220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y	4±1	4±1
LCDLCD220-240/50220-240/502803001.81.9429/15.1629/22.23688245/280295/335539/616649/737505*680*1315645*680*145519.7*26.5*51.325.2*26.5*56.7925*940*18301065*940*198036.1*36.7*71.441.5*36.7*77.2725*985*1940875*995*209028.3*38.4*75.734.1*38.8*81.518/35/3512/26/26YYY </td <td>16-32</td> <td>16-32</td>	16-32	16-32
220-240/50         220-240/50           280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y     <	Microprocessor	Microprocessor
280         300           1.8         1.9           429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y	LCD	LCD
1.81.9429/15.1629/22.23688245/280295/335539/616649/737505*680*1315645*680*145519.7*26.5*51.325.2*26.5*56.7925*940*18301065*940*198036.1*36.7*71.441.5*36.7*77.2725*985*1940875*995*209028.3*38.4*75.734.1*38.8*81.518/35/3512/26/26YY	220~240/50	220~240/50
429/15.1         629/22.2           36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y	280	300
36         88           245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y	1.8	1.9
245/280         295/335           539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y         <	429/15.1	629/22.2
539/616         649/737           505*680*1315         645*680*1455           19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y	36	88
505*680*1315645*680*145519.7*26.5*51.325.2*26.5*56.7925*940*18301065*940*198036.1*36.7*71.441.5*36.7*77.2725*985*1940875*995*209028.3*38.4*75.734.1*38.8*81.518/35/3512/26/26YY <td>245/280</td> <td>295/335</td>	245/280	295/335
19.7*26.5*51.3         25.2*26.5*56.7           925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           Y <td>539/616</td> <td>649/737</td>	539/616	649/737
925*940*1830         1065*940*1980           36.1*36.7*71.4         41.5*36.7*77.2           725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           36         44           Y         Y           Y         Y           Y         Y	505*680*1315	645*680*1455
36.1*36.7*71.4       41.5*36.7*77.2         725*985*1940       875*995*2090         28.3*38.4*75.7       34.1*38.8*81.5         18/35/35       12/26/26         Y       Y         36       44         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y	19.7*26.5*51.3	25.2*26.5*56.7
725*985*1940         875*995*2090           28.3*38.4*75.7         34.1*38.8*81.5           18/35/35         12/26/26           Y         Y           12/26/26         1           Y         Y           Y         Y           Y         Y           Y         Y           36         44           Y         Y           Y         Y           Y         Y           Y         Y           Y         Y           Y	925*940*1830	1065*940*1980
28.3*38.4*75.7       34.1*38.8*81.5         18/35/35       12/26/26         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         36       44         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y       Y         Y	36.1*36.7*71.4	41.5*36.7*77.2
18/35/35     12/26/26       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       36     44       Y     Y       Y     Y       Y     Y	725*985*1940	875*995*2090
Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       36     44       Y     Y       Y     Y       Y     Y       Y     Y	28.3*38.4*75.7	34.1*38.8*81.5
Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       36     44       Y     Y       Y     Y       Y     Y       Y     Y	18/35/35	12/26/26
Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       Y     Y       4     4       2     2       Y     Y       36     44       Y     Y       Y     Y       Y     Y       Y     Y	Y	Y
Y     Y       Y     Y       Y     Y       Y     Y       4     4       2     2       Y     Y       36     44       Y     Y       Y     Y       Y     Y	Y	Y
Y     Y       Y     Y       4     4       2     2       Y     Y       36     44       Y     Y       Y     Y       Y     Y       Y     Y	Y	Y
Y     Y       4     4       2     2       Y     Y       36     44       Y     Y       Y     Y       Y     Y	Y	Y
4     4       2     2       Y     Y       36     44       Y     Y       Y     Y       Y     Y	Y	Y
2 2 Y Y 36 44 Y Y Y Y	Y	Y
Y         Y           36         44           Y         Y           Y         Y           Y         Y	4	4
36         44           Y         Y           Y         Y           Y         Y	2	2
Y Y Y Y	Y	Y
Y Y	36	44
	Y	Y
CE CE	Y	Y
	CE	CE



## Smart IoT and self-help blood distribution

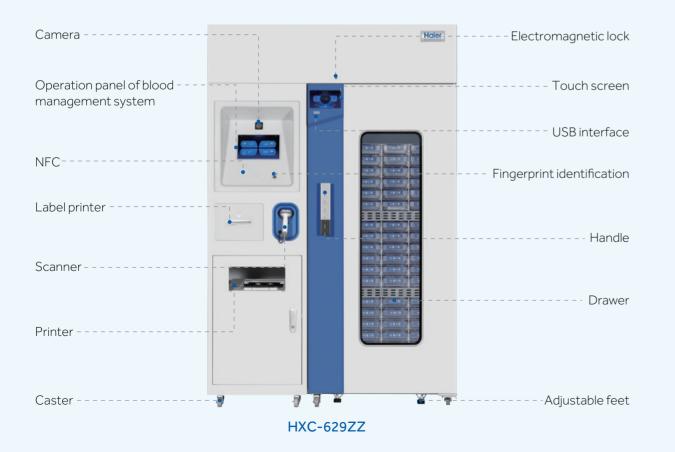


#### Self-help blood distribution of blood transfusion departments

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



#### **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 ±1°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





- 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



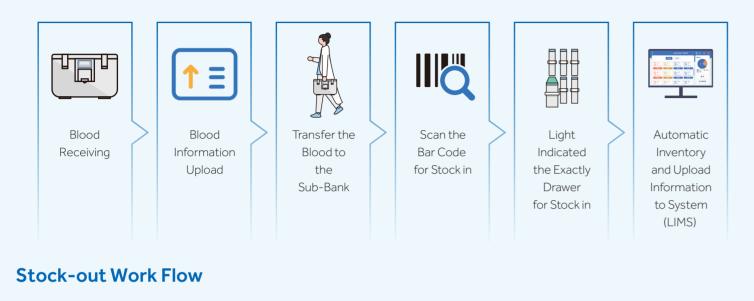
#### Safe, Reliable and Traceable

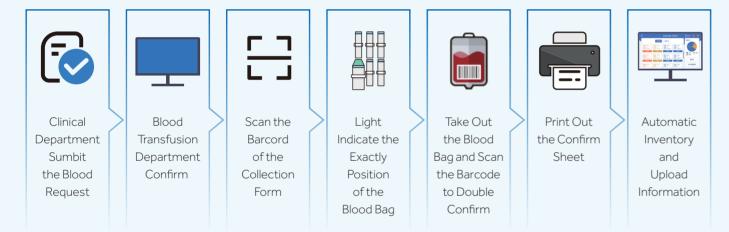
- Designed with fingerprint and NFC access modules providing dual permission modes to open the electromagnetic lock
- Each drawer is equipped with an independent electronic lock to ensure that only the unique and correct blood bag can be taken out in each blood collection operation
- The camera module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





## **Stock-in Work Flow**





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

$\mathcal{D}$	How does the Haier Intelligent Blood Haier refrigerator and with Hosptial s
7	Self-service blood distribution: self-service op
	Realize real-time management of Stock-in and
	Quick and accurate positioning management of
	Multiple protection: Security management, ele
	Real-time monitoring and management of refr



- (need to apply in advance).
- the first time).



- locked to ensure safety.



Blood Management Solutions

#### Management system interact with system (LIMS)

eration through the blood collection form

d Stock-out blood;

of target blood;

ectromagnetic lock, camera, NFC authorization card

rigerator temperature

• The refrigerator is placed on the front line of blood use, and can be used on demand

• Emergency blood support (Type O blood and other emergency blood guarantee at

• Only the blood that has been applied for can be taken each time, and all the others are

• Real-time monitoring of the entire refrigerator and blood collection environment.

• 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.



#### **Specifications**

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

<sup>7</sup> Self-service blood bank refrigerator suitable for blood stations, haematology departments and other hospital areas to provide secure and convenient access to blood.



**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



1 t g

• 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

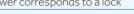
Six high-precision sensors and a mechanical thermostat accurately control the temperature in real-time to maintain the refrigerator temperature at 4 ±1°C



#### 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







Operation panel of blood -Label printer management system 12 Scanner NFC -Haier Touch screen-----USB interface -Drawer Handle-Electromagnetic lock Caster -----Adjustable feet - **P** 1 HXC-149ZZ **Product Performance** Cool down curve (empty loaded) Warm up curve (empty loaded) Stable operating curve (empty loaded) Temperature (°C) Temperature (°C) Temperature (°C) —T1 —T5 \_\_\_\_\_ 4 WWWWWWWWWW ---------. . . . . . . . . . . . . . . . . 0 10 20 30 40 50 60 70 80 0 20 40 60 80 100 120 140 160 180 0 30 60 90 120 150 180 210 240 Time (min)

Time (min)

-T2 -T3

**-**T4

Time (min

Model Туре Climate Class Cooling Type Technical Data Defrost Mode Refrigerant Sound Level (dB(A)) Temperature Range (°C) Performance Ambient Temperature (°C) Controller Control Display Power Supply (V/Hz) Power (W) Electrical Data Electrical Current (A) Capacity (L/Cu.Ft) Blood Storage Capacity (450ml Blood Bags) kg Net/Gross Weight (approx) lbs mm Interior Dimensions (W\*D\*H) Dimensions in mm Exterior Dimensions (W\*D\*H) in mm Packing Dimensions (W\*D\*H) in Container Load (20'/40'/40'H) High/Low Temperature Power Failure Sensor Error Low Battery Alarms Door Ajar Remote Alarm Caster Foot Porthole Shelves/Drawers Accessories USB Interface Temperature Recorder Certification Others

HXC-149ZZ
Drawer-Type
Ν
Forced Air Cooling
Auto
R600a
40
4±1
16-32
Microprocessor
LCD
220-240~50
240
1.4
149/5.26
12
129/179
283.8/ 393.8
505*560*610
19.7*32.3*23.8
625*820*1425
24.4*30.2*55.6
748*958*1610
29.44*37.72*63.38
18/36/36
Y
Y
Y
Y
Y
Y
4
2
Y
0/12
Y
Option
CE



## Automated Blood Management Refrigerator with Touchscreen

#### Product Features



#### **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  $4\pm1^{\circ}C$ 

HXC-1369T

#### 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

	Model		HXC-149T	HXC-279T	HXC-429T	HXC-629T	HXC-1369T
	Туре	Drawer-Type	Drawer-Type	Drawer-Type	Drawer-Type	Drawer-Type	
	Climate Class		N	N	N	N	N
	Cooling Type		Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Coolin
Technical Data	Defrost Mode	Auto	Auto	Auto	Auto	Auto	
	Refrigerant		R600a	R600a	R600a	R600a	R600a
	Sound Level (dB(A))		39	39	40	40	41
	Temperature Range (°C)		4±1	4±1	4±1	4±1	4±1
Performance	Ambient Temperature (°C)		16-32	16-32	16-32	16-32	16-32
	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocesso
Control	Display		LCD	LCD	LCD	LCD	LCD
	Power Supply (V/Hz)		220-240 230~50/ /50 60	230~50/60	220-240 230~50/ /50 60	220-240 230~50/ /50 60	220-240 230~5 /50 60
Electrical Data	Power (W)		240	295	245	255	400
	Electrical Current (A)		1.4	1.5	1.5	1.5	2
	Capacity (L/Cu.Ft)		149/5.3	279/9.85	429/15.15	629/22.21	1369/48.35
	Blood Storage Capacity (450ml Blood Bags)		60	48.34577874	195	312	624
		kg	108/136	113/130	182/217	212/252	380/445
	Net/Gross Weight (approx)	lbs	237.6/299.2	249/286.6	400.4/477.4	466.4/554.4	836/979
		mm	505*560*610	505*410*1315	505*680*1315	645*680*1455	1425*680*145
Dimensions	Interior Dimensions (W*D*H)	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	55.6*26.5*56.
		mm	625*820*1150	630*705*1750	625*940*1830	765*940*1980	1545*940*198
	Exterior Dimensions (W*D*H)	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	60.3*36.7*77.
	Packing Dimensions (W*D*H)	mm	730*926*1236	748*777*1881	749*1008*1960	880*1010*2090	1678*1044*20
		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	66.1*41.1*82.
	Container load (20'/40'/40'H)		18/38/76	14/45/45	18/35/35	12/26/26	7/14/14
	High/Low Temperature		Y	Y	Y	Y	Y
	Power Failure		Y	Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y	Y
Alarms	Low Battery		Y	Y	Y	Y	Y
	Door Ajar		Y	Y Y		Y	Y
	Remote Alarm		Y	Y	Y Y		Y
	Caster		4	4	4	4	4
	Foot		2	2	2	2	2
	Porthole		Y	Y	Y	Y	Y
	Baskets		6	15	15	24	48
	Shelves/Drawers		0/2	5/0	0/5	0/6	0/12
Accessories			0	5	0	0	0
	USB Interface		Y	Y	Y	Y	Y
	Temperature Recorder		Y	/	Y	Y	Y
Others	Certification		CE UL	CE	CE UL	CE UL	CE UL



## **Blood Management Refrigerator with LED Display**

#### Product Features



#### Dual Temperature Control Technology

Refrigeration system is designed with an inverter compressor and dual-speed fans, providing an optimal temperature performance of  $4\pm 1^{\circ}$ 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

	Model		HXC-149	HXC-279 (Vehicle Mounted)	HXC-429	HXC-629	HXC-629B	HXC-1369
	Туре		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 Cooli
Technical Data	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
	Temperature Range (°C)		4±1	4±1	4±1	4±1	4±1	4±1
Performance	Ambient Temperature (°C)		16-32	16-32	16-32	16-32	16-32	16-32
_	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocesso
Control	Display		LED	LCD	LED	LED	LED	LED
	Power Supply (V/Hz)		220-240 230~50/ /50 60	230~50	220-240 230~50/ /50 60	220-240 230~50/ /50 60	115/60	220-240 230~5 /50 60
Electrical Data	Power (W)		240	400	245	255	255	400
	Electrical Current (A)		1.4	1.5	1.5	1.5	3	2
	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 Blo	ood Bags)	60	135	195	312	312	624
		kg	97/125	113/130	169/204	187/217	187/217	345/410
	Net/Gross Weight (approx)	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*14
Dimensions		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
	Exterior Dimensions (W*D*H)	mm	625*820*1150	660*705*1750	625*940*1830	765*940*1980	765*940*1980	1545*940*19
		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
	D   D	mm	730*926*1236	748*777*1881	749*1008*1960	880*1010*2090	880*1010*2090	1678*1044*20
	Packing Dimensions (W*D*H)	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
	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
Alarms	Low Battery		Y	Y	Y Y		Y	Y
	Door Ajar		Y	Y	Y	Y	Y	Y
	Remote Alarm		Y	Y	Y	Y	Y	Y
	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
Accessories	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 UL	/	CE UL	CE UL	UL	CE 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

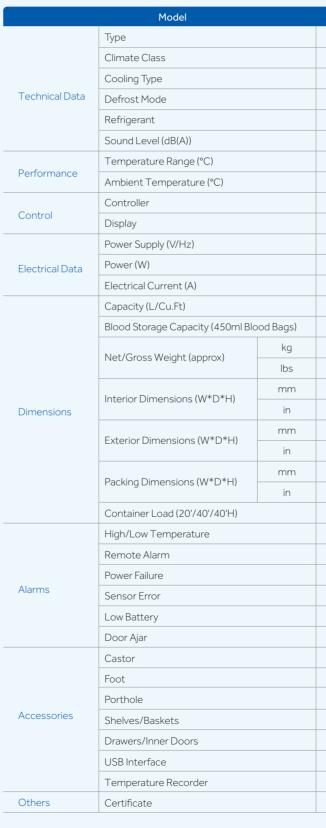
#### **Ergonomic Design**

- 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-158	HXC-158B
Basket-Type	Drawer-Type
ST	ST
Forced Air Cooling	Forced Air Cooling
Auto	Auto
HC	HC
42	42
4±1	4±1
10~38	10~38
Microprocessor	Microprocessor
LED	LED
220~240/50/60	220~240/50/60
320	320
1.9	1.9
158/5.6	158/5.6
84	84
107/120	113/126
235.9/264.6	249.1/277.8
460*370*950	460*370*950
18.1*14.6*37.4	18.1*14.6*37.4
560*570*1530	560*570*1530
22.0*22.4*60.2	22.0*22.4*60.2
645*675*1680	645*675*1680
25.4*26.6*66.1	25.4*26.6*66.1
27/54/54	27/54/54
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
4/4	-
-/2	4/-
Optional	Optional
Optional	Y
CE	CE



## 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

# 0.1

## Microprocessor Control System

The temperature range is 4±1°C, with temperature accuracy of 0.1°C



#### **Multiple Protection**

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

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#### 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



#### 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



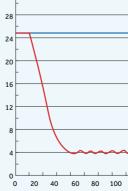


# Product Parts





Temperature drop and insulation curve



Temperature (°C)



#### LED digital display:

The internal temperature is 2-6°C, digital display of upper and lower temperature, the average temperature display and the resolution of 0.1°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

		Ambient Temp. Center Temp.
120 140 160 180	Time (min)	



## Solar Direct Drive Blood Refrigerator

## Specifications

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

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

**Product Features** 



Solar direct drive refrigerator without battery





Environmentally friendly hydrocarbon refrigerant R600a and foam material LBA



**Product Parts** 





Handgrip







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



Automatic drainage design



HTXC-240



## Solar Direct Drive Blood Refrigerator

## -30°C Plasma Freezer

## IoT Cryogenic Solution

## Specifications

Model			HTXC-120	HTXC-240
	Cabinet Type		Upright	Upright
	Ambient Temperature (°C)		≤43	≤43
Technical Data	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
	Temperature Range (°C)		2~8	2~8
Performance	Freezer Protection Level		A	А
	Controller		Microprocessor	Microprocessor
Electrical Data	Display		Solar LED Temperature Display	Solar LED Temperature Display
	Power Supply (V)		24	24
Electrical Data	Maximal Current (A)		5	5
	Energy Consumption: Stable Runr	ning (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
	Blood Storage Capacity (350ml Blood Bags)		108	192
	Gross Volume (L/Cu.Ft)		120/4.2	240/8.5
	k		130/160	150/185
	Net/Gross Weight (approx)	lbs	286/352	330/407.9
	Interior Dimensions (W*D*H)	mm	530*500*530	530*500*960
Construction		in	20.9*19.7*20.9	20.9*19.7*37.8
		mm	865*825*1422	890*825*1815
	Exterior Dimensions (W*D*H)	in	34*32*56	35*32*71
		mm	980*920*1585	985*920*1980
	Packing Dimensions (W*D*H)	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
	High/Low Temperature		Y	Y
Alarms	Sensor Error		Y	Y
	Shelves		3	4
Accessories	Data Logger		Y	Y
	Remote Temperature Monitoring	Device (RTMD)	Optional	Optional
	CE		Y	Y
Certifications	WHO/PQS		Y	Y



## **Product Features**

- quick inquiry function
- Hydrocarbon refrigeration, efficient and quick
- Multiple alarms, safe and reliable
- 10-inch large screen, easy to operate and more intuitive display
- direction and traceable information

• RFID radio frequency, accurate management of plasma information, with automatic inventory and

• NFC permission management system combined with an electromagnetic lock, controllable flow

45/46

## -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

	Model		DW-30L1280FT
	Cabinet Type		Upright
Technical Data	Climate Class		Ν
	Cooling Type		Forced Air Cooling
	Defrost Mode		Automatic Defrost
	Refrigerant		R290
	Sound Level (dB(A))		46
	Cooling Performance (°C)		-30
Performance	Temperature Range(°C)		-10~-30
Control	Controller		Microprocessor
Control	Display		LCD
	Power Supply (V/Hz)		220/50
Electrical Data	Power (W)		900
	Electrical Current (A)		5
	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
Dimonsions		in	52*29.6*49.6
Dimensions	Exterior Dimensions (W*D*H)	mm	1520*1065*1996
		in	59.8*41.9*78.6
	Decline Dimensions (W/*D*LL)	mm	1580*1100*2100
	Packing Dimensions (W*D*H)	in	62.2*43.3*82.7
	Container Load (20'/40'/40'H)		6/14/14
	High/Low Temperature		Y
	Remote Alarm		Y
	Power Failure		Y
Alarms	Sensor Error		Y
	Low Battery		Y
	High Ambient Temperature		Y
	Door Ajar		Y
	Castor		Y
	Foot		Y
	Porthole		Y
Accessories	Drawers/Inner Doors		Ν
	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



#### 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°C ( $\pm$ 5°C during the defrosting period).

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#### 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		
upersized double outer oors, 70mm insulation layer		<ul> <li>Microcomputer control, LED digital temperature display with inside temperature accuracy of 0.1°C</li> </ul>
afe lock		- Standard USB port
ectronic mortise lock design, ith NFC clocking-in function		Capable of storing more than 15 years of data
ingerprint optional)		- Low noise
		Optimal system and engine noise reduction design, the temperature can cool down to -30°C within 3 hours
		<ul> <li>Bottom strainer drawable design</li> </ul>
		Easy to clean
Casters and foots		
nsulation design of efrigeration unit Subtle temperature rise during lefrosting		<ul> <li>Intelligent hot gas defrosting</li> <li>Prolongs the defrosting cycle,</li> <li>eradicates the hidden danger of</li> <li>electric leakage</li> </ul>
helves		
teel shelves of 6 layers, which re adjustable to meet lifferent requirements of		
isers		<ul> <li>Foam beam design</li> </ul>

	Model		DW-30L1280F		
	Cabinet Type		Upright		
	Climate Class		Ν		
	Cooling Type		Forced Air Cooling		
Technical Data	Defrost Mode		Automatic Defrost		
	Refrigerant		HC		
	Sound Level (dB(A))		46		
	Cooling Performance (°C)		-30		
Performance	Temperature Range (°C)		-10~-30		
0	Controller		Microprocessor		
Control	Display		LED		
	Power Supply (V/Hz)		220~240/50		
Electrical Data	Power (W)		900		
	Electrical Current (A)		5		
	Capacity (L/Cu.Ft)		1280/45.2		
		kg	420/480		
	Net/Gross Weight (approx)	lbs	925/1057		
Dimensions	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		
		mm	1580*1100*2100		
	Packing Dimensions (W*D*H)	in	62.2*43.3*82.7		
	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		
Alarms	Low Battery		Y		
	High Ambient Temperature		Y		
	Dirty Condenser		Y		
	Door Ajar		Y		
	Castor		Y		
	Foot		Y		
	Porthole		Y, 1 Left Side, 1 Right Side, (25mm)Diameter		
	Drawers/Inner Doors		Optional/		
Accessories	USB Interface		Y		
	RS485		Y		
	NFC		Y		
	Temperature Recorder		/		
Others	Certification		CE		

## **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.



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 • Automatic recording and • Precise control of data is automatically monitored and managed.



#### 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.



#### 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.



#### The pioneer to maintain blood activity perfectly

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

## **Specifications**

Model	Power Su	oply (V/Hz)	Exterior Dimensions (W*D*H) (mm)			Gross	Veight (kg)
XJ-II	220	~/50	540*510*770		29		
		Total Diagram		Detum Speed		ent (Citrete)	Contrifues

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.

uploading data.

immediate.



#### 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.



#### 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.



#### 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.



## **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
	S-50		
	S-100		
	S-200		
	S-250	8	
	S-300		
Single Blood Bag	S-350		ACDB/CPDA
	S-400		ACDB/CPDA
	S-450		
	S-500		
	S-600		
	S-800		
	S-1000		
	D-100		
	D-200		
Double Blood	D-250	19 F	
Bags with NPD	D-300		ACDB/CPDA
	D-350		
	D-400		
	D-450		
	T-200		
	T-250		ACDB/CPDA+MAP
Triple Blood Bags with NPD	T-300		
	T-350		
	T-400		
	T-450		
	Q-200		
	Q-250		ACDB/CPDA+MAP
Quadruple Blood Bags	Q-300	8 8 8	
Blood Bags (with PDS and NPD)	Q-350		
	Q-400		
	Q-450		
	P-200		
	P-250		
Dente erem Riss d	P-300		
Pentagram Blood Bags (with NPD)	P-350	Had had had had had	ACDB/CPDA+MAP
5	P-400		
	P-450		
	Tr-50	4	
	Tr-100		
	Tr-160	3	
Transfer Empty	Tr-180	2	,
Transfer Empty Bag (Tr)	Tr-200		/
	Tr-250		
	Tr-300	1	
	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 Storaging 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).

needle sticek protection device, S represents collection sample device, Prepresents platelet storage bag.

## Sterilization

- plastic bags
- with ethylene oxide and valid for 2 years



• Optional devices include: needle sticek protection device, collection sample device, platelet storage bag; N represents

• Disposable plastic blood bags (single bag, double bags, triple bags, guadruple bags, transfer bag, P represents pentagram bags) containing anticoagulant/preservative solution shall be sterilized by moist heat and packaged in

• Transfer bag without anticoagulant/preservative solution is packaged in plastic bags and dialysis paper, sterilized

## **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.



### **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.

- 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
- 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.



- Real-time display of inside temperature.

- road.



From blood collection vehicle/blood donation house to blood center/blood station from blood



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





4 °C PCM Ice Pack

# Transport Cooler





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



HZY-35B
/
2~10
/
30.8/1.09
550*328*370
450*232*295
674*455*490
10.5
12
35
160/320/320
Without
Without
Without
Polyurethane Cycloisopentane
Passive Cooling
Without
1
6 Hours (43°C Ring Temperature Load Situation)
HDPE/HDPE
/
Button Battery



# Transport Cooler

Specifications





	Model	HZY-5B	HZY-8Z		
	Storage Temperature (°C)	/	2~6		
Technical Data	Operating Temperature	2~10	2~10		
	Power Supply (V/Hz)	1	100~240 50/60		
	Capacity (L/Cu.Ft)	3.2/0.11	5.5/0.19		
	Exterior Dimensions (W*D*H)(mm)	285*186*200	320*265*260		
	Interior Dimensions (W*D*H)(mm)	220*118*126	230*140*170		
Electrical Data	Packing Dimensions (W*D*H)(mm)	357*277*287	400*370*370		
	Net Weight	2	4		
	Gross Weight (kg)	3	5kg		
	Blood Bag Capacity	5	8		
	Container Load (20'/40'/40'H)	850/1700/1700	450/900/900		
	Cold Chain Monitoring	Without	Without		
	RFID Identification	Without	Without		
	NFC Unlock	Without	Without		
	Foam Material	High Density Foam	Polyurethane Cycloisopentane		
Alarms	Coolinng Way	Passive Cooling	Semiconductor Active Refrigeration		
Aldinis	Fan	Without	DC 12V		
	Protection	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)		
	Shell/Liner	ABS/ABS	ABS/Aluminium Plate		
	Alarm	Low Battery	High Temperature /Sensor Error/Power Off		
	Battery	Lithium Batteries	Rechargeable Lithium Batteries		



HZY-15Z
2~6
2~10
100~240 50/60
11.6/0.41
520*300*270
430*150*180
595*384*418
6
7
15
260/520/520
Without
Without
Without
Polyurethane Cycloisopentane
Semiconductor Active Refrigeration
DC 12V
I
2 Hours (25°C Ring Temperature Load Situation)
ABS/Aluminium plate
High Temperature/Sensor Error/Power Off
Rechargeable Lithium Batteries

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## **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

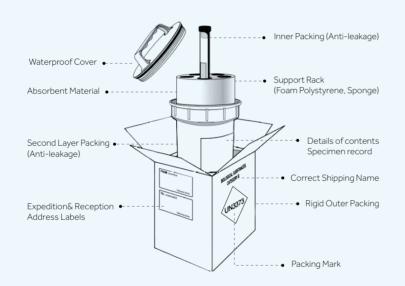
Test tube with cap (user configures according to business)

#### 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**



#### 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

## **Auxiliary Container**



HZY-8Z (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  $-40^{\circ}$ C to  $+55^{\circ}$ C



#### Precise temperature control

Precise temperature control at  $2^{\circ}C \sim 6^{\circ}C$  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







## **Transport Cooler for the Infectious Material**

## **Passive Cooling**



#### 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

Model	HZY-10B (P620)
Туре	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

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## **Plasma Blast Freezer**



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

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

Precise temperature control, control

PLC control module, the system is stable and

reliable, temperature control precision 1°C,

to ensure the safety of plasma

activity of factor VIII

precision 1°C

#### **Product Advantages**

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## Low rapid-freezing temperature

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

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#### Data is printable and the information traceable

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

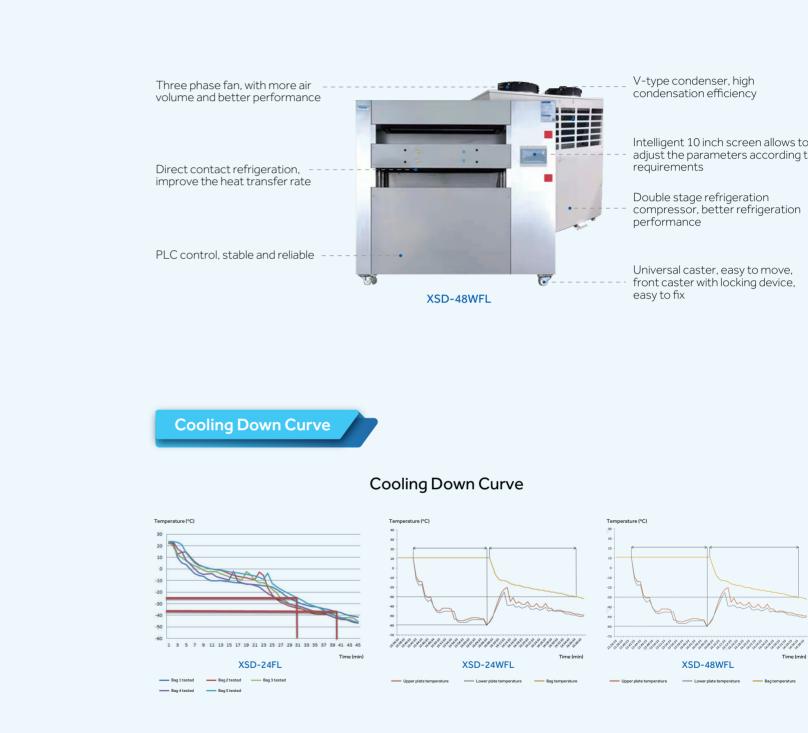


#### Efficient core components, energy saving

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

#### **Product Parts**





Intelligent 10 inch screen allows to adjust the parameters according to

## Plasma Blast Freezer

Specifications





Model	XSD-24FL	XSD-24WFL
Freezing Capacity (Plasma Bag)	16 at 1000ml /24 at 400ml /40 at 200ml	16 at 1000ml /24 at 400ml /40 at 200ml
Freezing Plate Temperature (°C)	-59	-59
Storage Temperature (°C)	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
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.
Noise Level (db(A))	≤56	≤40
Refrigerant Type	R507	R507
Cooling Type	Forced Air Cooling	Forced Air Cooling
Operating Voltage Range	3~380V~400V/50Hz(60Hz)	3~380V/50Hz(60Hz)
Power (KW)	7	7
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
Pakcing Demension of Indoor Machine (W*D*H)(mm)	1570*1000*1620	1570*1000*1620
Dimension of Outside Machine (W*D*H)(mm)	/	1340*760*1640
Packing Demension of Outdoor Machine (W*D*H)(mm)	/	1595*910*1998
Net Weight of Indoor Machine(kg)/Gross Weight	480/540	320/380
Net Weight of Outside Machine(kg)/Gross Weight	/	360/410
GWP	3985	3985



#### XSD-48WFL

32 at 1000ml /48 at 400ml /80 at 200ml

-59

Manual Adjustment Between -30° to -50°

48 unit (450ML) ±30min 32 unit (1000ML) ±45min

Integrated thermal defrosting, defrosting delay time about 10 minutes; Defrost for 15 minutes.

≤40

R507

Forced Air Cooling

3~380V/50Hz(60Hz)

14

2040\*880\*1895mm

2205\*1105\*2100

1340\*760\*1640

1595\*910\*1998

640/720

360\*2/410\*2

3985





## **Platelet Incubator with Agitator**





This incubator includes an integrated platelet agitator and is designed to create the optimal storage environment of platelets after collection. Suitable for hospitals, blood stations and research applications.

#### **Product Advantages**



### Data Traceability

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



#### **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



#### **Reliable Oscillation**

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



## Low Noise

Semiconductor and EBM oscillating motor provide a quiet working environment



#### Variable Agitation Speed control from **Touch Screen**

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



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#### Peltier Technology

Energy Saving







hours



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

Peltier technology, PID algorithm adjustment, energy

60mm thickened foam layer. In the event of a power failure

22°C to 24°C in the center of the chamber is more than 4

within a 25°C ambient and a full load, the warm up time from

saving 13% than the traditional compressor

Superior Insulation Performance

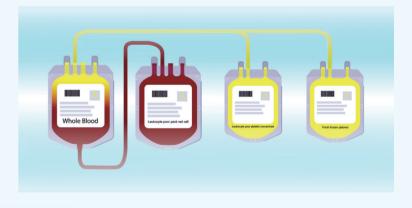
#### Ultraviolet Disinfection



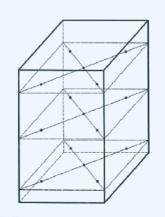
#### **Robust Structure**

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



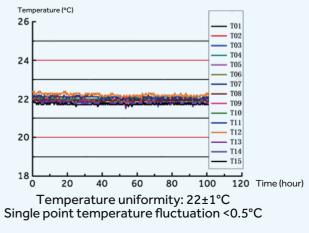


## **Cooling Down Curve**



HXZ-149 15 test points

#### HXZ-149 Running temperature curve (Empty loaded)



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## Platelet Incubator with Agitator

Haier Biomedical Blood Banking Centrifuge

**Specifications** 

	Model		HXZ-149	HXZ-1369
	Temperature Range (°C)		20~24	20~24
	Ambient Temperature (°C)		10-32	10-32
	Amplitude		50±5mm Amplitude	50±5mm Amplitude
Performance	Display Accuracy (°C)		0.1	0.1
	Noise		50	55
	Variable Agitation Speed (cycles/n	nin)	30-80	30-80
	Controller		Microprocessor	Microprocessor
Control	System Temperature Control		Peltier Technology (Semi-Conductor Heating and Cooling)	Peltier Technology (Semi-Conductor Heating and Cooling)
	Display		LCD	LCD
	Power Supply (V/Hz)		200-240/50	200-240/50
Electrical Data	Power (W)		300	1500
	Capacity (L/Cu.Ft)		149/5.26	1369/48.35
	Blood Storage Capacity (300ml Blo	ood Bags)	36	216
		kg	94/122	412/480
	Net/Gross Weight (approx)	lbs	207/269	908/1058
		mm	505*560*610	1425*680*1455
Dimensions	Interior Dimensions (W*D*H)	in	19.8*22*24	56.1*26.8*57.3
		mm	625*795*1050	1545*915*1945
	Exterior Dimensions (W*D*H) in		24.6*31.3*41.3	60.8*36*76.6
		mm	718*815*1228	1610*995*2090
	Packing Dimensions (W*D*H)	in	28.3*36.2*48	63.4*39.2*82.08
	Container Load (20'/40'/40'H)		18/38/76	7/14/14
	High/Low Temperature		Y	Y
	Power Failure		Y	Y
	Sensor Error		Y	Y
A 1	Low Battery		Y	Y
Alarms	Door Ajar		Y	Y
	Remote Alarm		Y	Y
	Abnormal Oscillation Motor Alarm	1	Y	Y
	Caster		Y	Y
	Foot		Y	Y
	Porthole		Y	Y
	Baskets		Ν	Ν
Accessories	Shelves/Drawers		8	18
	Inner Doors		Ν	Ν
	USB Interface		Y	Y
	IoT Function		Optional	Optional
Others	Certification		CE	CE



#### 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.



#### 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.



#### Rapid Cooling

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



#### **Quiet Operation**

Work in peace with a sound design that keeps noise levels below 65 dB, even at maximum speed

Precise Control



-**Ö**-

#### Maintenance-Free Motor

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

#### Stability

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

Tailor your operations with 10 acceleration and

deceleration stages for unparalleled precision.

### **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.



#### Motorized Gas Springs

Engineered for safety, the motorized gas springs 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.

79/80

#### 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.

### 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.

## Enhanced Access Controls Equipped with user login

Equipped with user login and password protection, ensuring individualized program data management for each user.

#### 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. 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



#### Enhanced Safety



Immediate Imbalance Detection & Shutdown

Offers real-time loading imbalance detection with instant shutdown to protect against imbalances.



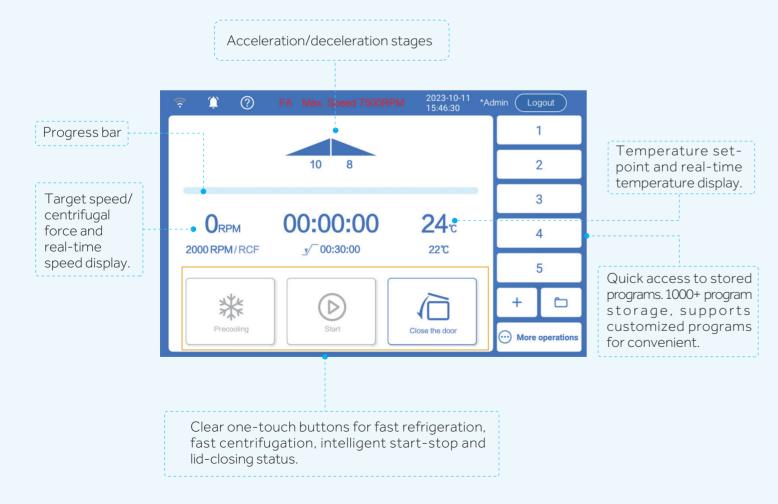
 $(\mathbb{A})$ 

#### 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.



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

< 후 🇊 🕐	2023-10-11 15:41:38	*Admin
Period	🛍 ~ 🛍 Search	Export
Time	Warning	User
2023-10-10 15:33:50	Load imbalance alarm	Visitor
2023-10-09 17:19:28	Abnormal alarm of inverter (13)	Visitor
2023-10-09 17:19:06	Abnormal alarm of inverter (13)	Visitor
2023-10-09 16:40:14	*Abnormal alarm of inverter (44)	Visitor
2023-10-09 16:40:11	Ambient temperature sensor error	Visitor
2023-10-09 16:39:37	Abnormal alarm of inverter (33)	Visitor
2023-10-09 16:39:28	Ambient temperature sensor error	Visitor



#### Stable Installation

 $\Phi$  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.



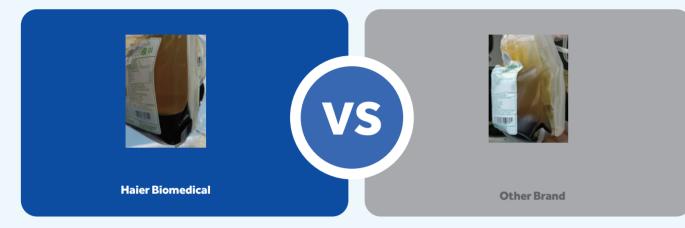
#### **High-Quality Connectivity**

Equipped with an imported 5-core aviation plug for easy, fast, and safe usage.

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Real - World Efficacy

## Blood Station User: Blood centrifugal test



## **Precision Layering**

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

## Scientific Research User: Seaweed centrifugal test



## **Optimal Centrifugation**

Clear Layering, High Yield, and Zero Wall Adhesion

Model	LX-75L2400R
Maximum Capacity	8*2000ml
Max Speed (rpm)	7500
Max RCF(xg)	13376
Speed Accuracy	±10rpm
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
Cooling	Direct Cooling
Noise (dB(A))	≤65
Power Supply	3~400V 50/60Hz
Power (W)	6400
Exterior Dimensions (W*D*H)(mm)	900*1050*1020
Lid Opening Height (mm)	1780
Net Weight (kg)	670
Packing Dimensions (W*D*H)(mm)	1092*1279*1720
Gross Weight (kg)	750
Other Functions	Rotation speed/RCF switchover, inching operation, running proces 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

Laboratory centrifuges contain fluorinated greenhouse gases in the sealing equipment.



BE No.	BE12DC000	BE12JP002	BE12JQ002	BE12K1000
Туре	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	-

## **Technical Data**

В	lood	Ma	nag	em	ent	So	lutic	ons
			J					







Swing-Out Rotor				
	Swing-Out Rotor Block		Bucket (Sets of 6)	
	BE No.	BE12F5001	BE No.	BE12H4000
	Max. RCF	5331×g	Max Capacity	2400ml
Swing-Out Rotor 12 Blood Bag	Max. speed	4000rpm	Bucket Type	Flat bottom
Adapter/Bottle(Sets of 6) for	BE12H4000			
BE No.		BE12JT001	BE12K000	00
Туре		Double blood bag adapter	Centrifuge b	ottle
Max Capacity		2*500ml blood bag	2400m	
Blood bags/Bottles per rotor	-	12 blood bags	6 bottle:	5



Swing-Out Rotor Block		
BE No.	BE12FP001	
Max. RCF	5706xg	

Swing-Out Rotor 16 Blood Bag

Max. RCF	
Max. speed	

Double Blood Bag Bucket (Sets of 8)

BE No.



Max Capacity 2\*500ml
Bucket Type Flat bottom

#### Adapter(Sets of 8) for BE12H9000

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

4000rpm

## **Cryogenic Workstation for Blood Applications**



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

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



#### **Temperature Control**

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



#### **Refrigeration System**

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

## **Product Portfolio**

Automated Blood Management Refrigerator Used at Blood Station



Automated Blood Management Refrigerator Used at Hospital



#### Unattended Self-help Blood Distribution Refrigerator



Automated Blood Management Refrigerator with Touch Screen



#### Automated Blood Management Refrigerator with LED Display



Solar Direct Drive Blood Refrigerator



#### Cold Room

#### -30°C Plasma Freezer





Plasma Apheresis System

Plasma Blast Freezer



#### Transport Cooler



### Standard Blood Bank Refrigerator





HXC-106

HXC-158

HXC-158B

Platelet Incubator with Agitator



Cryogenic Workstation for Blood Applications

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