



Your Haier Biomedical Partner

# Cold Chain Transportation 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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**A platform for sharing, an ecosystem of trust.**

# CONTENT

- **Temperature Range 0~25°C**  
Active Temperature Controlled RKN Container ----- 03
- **Temperature Range 0~10°C**  
Transport Cooler for Biological Products ----- 05  
Vaccine Transport Cooler ----- 11  
Medical Transport Cooler ----- 12  
Biosafety Transport Container ----- 13
- **Temperature Range -20~10°C**  
Portable Transport Cooler ----- 14  
Cold Chain Transport Cooler ----- 15
- **Temperature Range -25~25°C**  
Intelligent Control Cold Chain Transport Cooler ----- 17

## Temperature Range 0~25°C

### Scope of Application

This product is applicable for international aviation cold chain transportation of drugs, vaccines, medicines, biological products, raw materials, high-end fresh food and other products which require strict temperature control.



### Product Advantages



Robust construction with advanced technology to ensure reliable quality and stable performance



Prevent internal temperature deviation and ensure the temperature uniformity under extreme environmental temperature changes



Superior internal temperature uniformity



Cost-effective performance

### Specifications

Model		RKN-AT1	
Power	Supports automatic switching between external AC power supply and built-in battery power supply, which is convenient to use and simple to operate		
	Recharging power supply	100-240V AC, 50-60Hz	
	Maximum charging time (h)	10 (fast charging)	
	Maximum power during charging (w)	1,100	
Temperature Control Performance	The temperature management system, developed independently, achieves accurate temperature control through compressor refrigeration and electric heating innovative air circulation system to effectively balance the temperature difference		
	Temperature range	0°C~+25°C (+32°F to +77°F)	
	Internal temperature tolerance	At set temperature +2°C~+10°C (+35.6°F to +50°F), Tolerance +/- 3°C (+/- 5.4°F) At set temperature +10°C~+20°C (+50°F to +68°F), Tolerance +/- 5°C (+/- 9°F)	
	Battery capacity	When the ambient temperature is 25°C (77°F), the set temperature is 5°C (41°F), the container can operate for more than 50 hrs.	
	Operating ambient temperature	-20°C~+43°C (-4°F to +109.4°F)	
	Storage ambient temperature	-40°C~+55°C (-40°F to +131°F)	
Construction	Internal effective volume	2m <sup>3</sup> (70.6 foot <sup>3</sup> )	
	Exterior dimensions (L*W*H)	mm	2005*1534*1620
		in	78.9*60.4*63.8
	Interior dimensions (L*W*H)	mm	1294*1273*1264
		in	50.9*50.1*49.8
	Door opening (L*H)	mm	1294*1264
in		50.9*49.8	
Weight	Tare weight	kg	650
		lbs	1433
	Operational maximum gross weight	kg	1588
		lbs	3500
	Maximum payload	kg	938
		lbs	2067
Data Recording	Data recording function: internal and external temperature, door opening times, alarm information through USB port		
Others	Applicable Aircraft Models: A330, A350, A380, B747, B767, B777, B787 as key examples		
Note	Tare weight and maximum payload might vary due to load variations and maintenance		

Product appearance and specifications are subject to change without notice

# Transport Cooler for Biological Products

Temperature Range 0~10°C

Active Cooling Solution



HZY-8Z/8ZA



HZY-15Z/15ZA

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



### Low Noise

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



Air Duct Structure



### Easy to Clean

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



Internal Structure

## Product Features

Semiconductor for active cooling, energy saving and environmental protection.

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

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

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

# Transport Cooler for Biological Products

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



4 °C PCM Ice Pack

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

Multiple Fault Alarms, Making It Safer to Use.

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

The Power Supply Is Configured with Cigarette Lighter Plug, Easy for Vehicle Transportation.

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

## Passive Cooling Solution

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

## Product Features

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



HZY-5B



HZY-35B

## Product Features

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

## Specifications



	Model	HZY-5B	HZY-8Z	HZY-15Z
Technical Data	Storage Temperature (°C)	/	2-6	2-6
	Operating Temperature (°C)	2-10	2-10	2-10
Construction	Net / Gross Weight (kg)	2/3	3.5/5	6/8
	Exterior Dimensions (W*D*H mm)	2859*186*200	320*265*260	520*300*270
	Interior Dimensions (W*D*H mm)	220*118*126	230*140*170	430*150*180
	Packing Dimensions (W*D*H mm)	357*277*287	393*362*367	595*375*404
	Blood Bag Capacity	5	8	15
Functions	Foam material	High density foam	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
	Refrigeration method	Passive cooling	Semiconductor active refrigeration	Semiconductor active refrigeration
	Warm up time	3 hours (32°C ambient temperature load situation)	2 hours (32°C ambient temperature load situation)	2 hours (32°C ambient temperature load situation)
	Shell/liner	ABS/ABS	ABS/aluminium plate	ABS/aluminium plate
	Alarm	Low Battery	High temperature, sensor error, power off	High temperature, sensor error, power off
	Battery	Lithium Battery	Rechargeable lithium battery	Rechargeable lithium battery
Certification	CE	/	Y	Y



		HZY-8ZA	HZY-15ZA	HZY-35B
Technical Data	Storage Temperature (°C)	2-6	2-6	/
	Operating Temperature (°C)	2-10	2-10	2-10
Construction	Net / Gross Weight (kg)	4/5	6/8	9/12
	Exterior Dimensions (W*D*H mm)	320*265*260	520*300*270	550*328*370
	Interior Dimensions (W*D*H mm)	230*140*170	430*150*180	450*232*295
	Packing Dimensions (W*D*H mm)	393*362*367	595*375*404	674*455*490
	Blood Bag Capacity	8	15	35
Functions	Cold Chain Monitoring	Y	Y	/
	NFC Unlock	/	Y	/
	Foam material	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane	Polyurethane Cycloisopentane
	Refrigeration method	Semiconductor active refrigeration	Semiconductor active refrigeration	Passive cooling
	Warm up time	2 hours (32°C ambient temperature load situation)	2 hours (32°C ambient temperature load situation)	6 hours (43°C ambient temperature load situation)
	Shell/liner	ABS/aluminium plate	ABS/aluminium plate	HDPE/HDPE
	Alarm	High temperature, sensor error, power off	High temperature, sensor error, power off	/
	Battery	Rechargeable lithium battery	Rechargeable lithium battery	Button battery
Certification	CE	/	/	Y

Product appearance and specifications are subject to change without notice

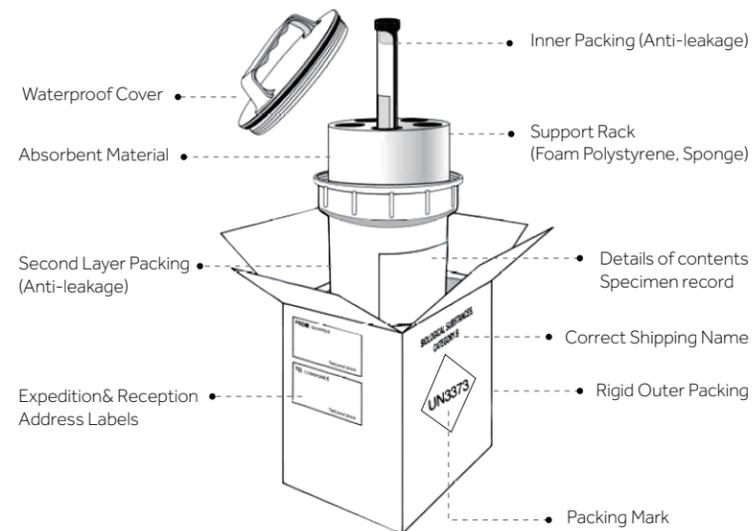
## Transport Cooler for the Infectious Material

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.

## Packaging System

### Three-layer packaging:

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



## Active Cooling



HZY-8Z (Specimen)



HZY-15Z (Specimen)

## Transport Cooler for Infectious Products

### Product Advantages



#### Active semiconductor cooling, energy saving and environment friendly

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



#### Precise temperature control

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



#### 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.



#### Multiple fault alarms, safer to use

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



#### The power supply is equipped with a car cigarette lighter plug, which is convenient for vehicle transport

The power supply can support 12V and 100-240V conversion, so the container can be put into the car to plug in and transfer.

## Auxiliary Container



HZY-8Z (Specimen)



HZY-15Z (Specimen)



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

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



The vaccine transport cooler is superior and efficient, having dual capabilities for cold storage and temperature preservation, which is environmentally friendly and energy saving. The performance of the cooler and holdover time of temperature preservation is influenced by the temperature of the stored items.

**6 Liter/12 Liter/20 Liter/ 30 Liter**

**Scope of Application** ▶ Suitable for vaccine cold chain transportation.

### Product Design and Advantages

- Both inside and outside of the boxes are made of PP (high strength plastic) material, non-toxic and harmless, safe for direct food contact.
- The wall of the box is filled with fluorine-free polyurethane foam insulation material without adding any chemical material, environment-friendly and odor-free.
- The body of the unit is designed with handles on both sides to facilitate manual handling & is manufactured with anti-ultraviolet materials.
- Equipped with professional sealing ring design, with good heat insulation and refrigeration effect.

### Specifications



Model	QBLL0606	QBLL0812	QBLL0820	QBLL0830
Temperature Range (°C)	2-8	2-8	2-8	2-8
Volume (L)	6	12	20	30
Exterior Dimension (mm)	330*240*275	420*245*300	440*262*308	580*310*360
Interior Dimension (mm)	238*143*195	335*170*240	375*215*250	475*245*295
Net Weight (Kg)	1.8	2.4	3.5	4.5
Material	PP	PP	PP	PP
Cold Source Configuration	6 pieces QB004 ice boxes	6 pieces QB004 ice boxes	10 pieces QB004 ice boxes	6 pieces QB010 ice boxes

Remark: QB004 and QB010 are models of ice packs, the dimension of QB004 is 160\*90\*30mm and the dimension of QB010 is 280\*120\*30mm



High strength material, anti-collision, non-toxic and harmless, UV resistant.



The outer-unit body is equipped with an integrated handle, which is firmly installed and durable.



Real-time display of temperature inside the cooler, making the temperature monitoring more intuitive.



Specially positioned ice packs, partitioned storage, easy to operate.



Professional & innovative sealed design ensuring zero cold leakage to achieve safe, secure and reliable long-term cooling preservation.

### Typical Application

Cold chain transportation for samples, reagents, blood products, specimens and drugs.

### Specifications

Model	FS-12LS	FS-18LS	FS-35LS	FS-54LS	FS-100L	FS-110L
Temperature Range (°C)	0-10	0-10	0-10	0-10	0-10	0-10
Duration (h)	≥24	≥24	≥24	≥24	≥24	≥24
Exterior Dimensions (W*D*H)(mm)	425*262*305	425*262*305	570*305*365	615*415*450	800*440*440	870*520*400
Interior Dimensions (W*D*H)(mm)	325*170*225	363*203*244	475*245*270	510*315*355	700*385*340	790*460*330
Qty of Icepacks (Pcs)	4	4	4	3	6	8
Net Weight (kg)	4.8	5.2	7.5	15	19.6	24
Others	CE	CE	CE	CE	CE	CE

Note: -25°C--15°C and 15°C-25°C are available with optional ice packs. The standard ice packs can only achieve 0-10°C temperature storage.

## Biosafety Transport Container



FS-12 18 35 54LS

- The sterilization process is easy, and the container can be used repeatedly
- High temperature outer case deformity protection for 10 years
- Manufactured with high-density polyethene and polypropylene material, which is non-toxic, UV resistant, non-fading and safe for direct food contact
- The container is filled with non-fluorinated polyurethane foam insulation material without any chemical materials, which is eco-friendly and without odor
- Easy to use: Smart-designed ice box, fixed clip, storage partition
- Integrated handles on both sides of the container, convenient, firm and durable
- Professional sealing with superior heat insulation and preservation effect
- Optional whole process temperature monitoring, which makes transportation more secure

## Portable Transport Cooler

Temperature Range -20~10°C



ALG50

- Low voltage battery protection
- LED lighting
- Widescreen LCD display
- Real-time voltage display
- Detachable temperature sensor
- Standard basket



BCD60

- Low voltage battery protection
- LED lighting
- Detachable temperature sensor
- Widescreen LCD display
- Real-time voltage display



BCD115

- Low voltage battery protection
- LED lighting
- Detachable temperature sensor
- Widescreen LCD display
- Real-time voltage display

### Technical Parameters

Model	FS-12LS	FS-18LS	FS-35LS	FS-54LS
Temperature Range (°C)	2-10°C	2-10°C	2-10°C	2-10°C
Duration (H)	≥24h	≥24h	≥24h	≥24h
Exterior Dimensions (W*D*H) (mm)	425*262*305	425*262*305	570*305*365	615*415*450
Interior Dimensions (W*D*H) (mm)	325*170*225	375*215*250	475*245*270	510*315*355
QTY of Sealed Tanks (Pcs)	2	3	5	14
QTY of Sampling Tubes (Pcs)	40	60	100	280
Qty of ice packs (Pcs)	4	4	8	3
Net Weight (include ice packs) (Kg)	5.2	6.5	9	20
Others	CE	CE	CE	CE

### Specifications

Model	ALG50	BCD60	BCD115
Capacity (L)	50	60	115
Climate Type	T, ST, SN, N	T, ST, SN, N	T, ST, SN, N
Net Weight (Kg)	16.7	24.0	28.6
Operating Temperature (°C)	-20- +10 (at 25°C)	-18- +10 (at 32°C)	-18- +10 (at 32°C)
Power (W)	55	70	70
Refrigerant	R134a	R134a	R134a
Insulation Material	C5H10/C-Pentane	C5H10/C-Pentane	C5H10/C-Pentane
Exterior Dimensions (W*D*H)	mm 630*404*530	621*485*569	811*482*672
Packing Dimensions (W*D*H)	mm 715*450*625	718*578*638	906*575*745
Voltage Power Supply	AC110-240V, 50/60Hz DC 12V/24V	AC110-240V, 50/60Hz DC 12V/24V	AC110-240V, 50/60Hz DC 12V/24V
Power Consumption (kWh/24h)	0.23	0.25	0.25

## Active Cooling

### Product Advantages

#### DC Frequency Conversion Technology

DC frequency conversion compressor, superior energy efficiency.

#### Tilt Protection Function

Electronic gyroscope in board, effective protection for compressors.

#### Integrated Main Body

Rotational molding body better adapted to complex transport environments.

#### Multiple Power Supply

Supports AC and DC power.



HZY-40Z

### Unique Designs



The body and door use integrated roto molding.



Using environmental LBA CFC-free foaming materials, thermal insulation performance is increased by up to 5%.



The body is equipped with a handle for easy carry.



Optional: Casters to facilitate transport.

# Cold Chain Transport Cooler



Optional: Electromagnetic lock, with password lock equipped; more secure.



Forced air cooling method, the temperature is more uniform.



Built-in UVC ultraviolet lamp for regular disinfection.



3 in 1 wide temperature range, multiple functions within one unit, greater cost savings.

### Specifications

Model	Exterior Dimension (W*D*H)(mm)	Interior Dimension (W*D*H)(mm)	Capacity (L)	Door	Foam Materials	Compressor	Basket Load Bearing(KG)	Working Mode	Outer Shell/ Inner Liner	Condenser/ Evaporator
HZY-40Z	800*550*505	338*348*285	33	Rotational moulding integrated forming foam door	LBA	DC variable frequency compressor	≤35	Forced air cooling and heating	Rotational moulding	Microchannel/ Fin type

Controller	Refrigerant	Light	UV Lamp	Net Weight (KG)	Temperature Range (°C)	Power Supply	Max power (W)	Power Consumption (Kwh/24h)	Electromagnetic Lock	USB
Microprocessor	HFC	LED 1W	UVC 1W	42	-20 to 22	AC 110-240V 50/60Hz DC12/24V	90	1.5	Optional coded lock	Optional

Temperature Range -25~25°C

## Product Advantages



### Check the insulation status at any time

Real-time upload setting parameters, operation parameters, operation curve, alarm record and event record. Monitor the operation of the transport cooler through the UCool system to visualize the complete process and traceability of information.



### Stable performance, long service life

The product adopts VIP insulation technology which has an insulation performance of 5-8 times that of polyurethane foam, and significant extended time temperature control that handles the changing transportation conditions and environment; It has long service life by adopting nanometer core material.

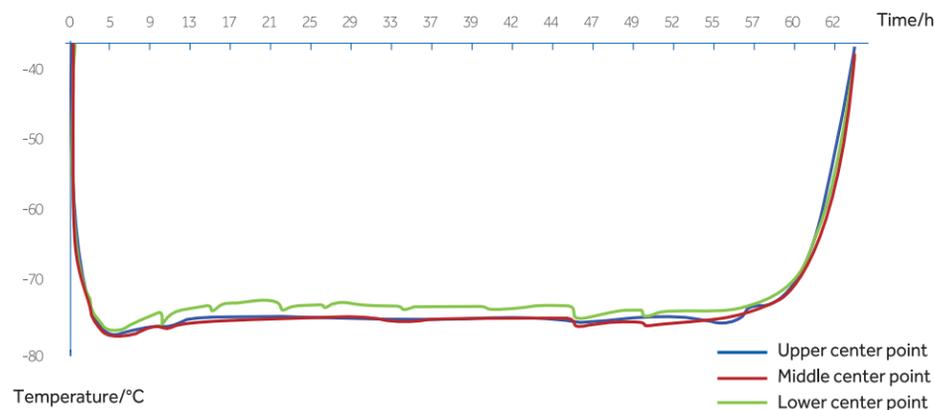
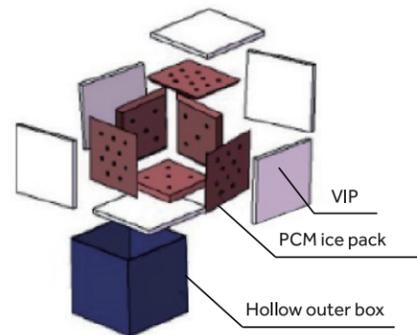


### Light weight, easy to carry

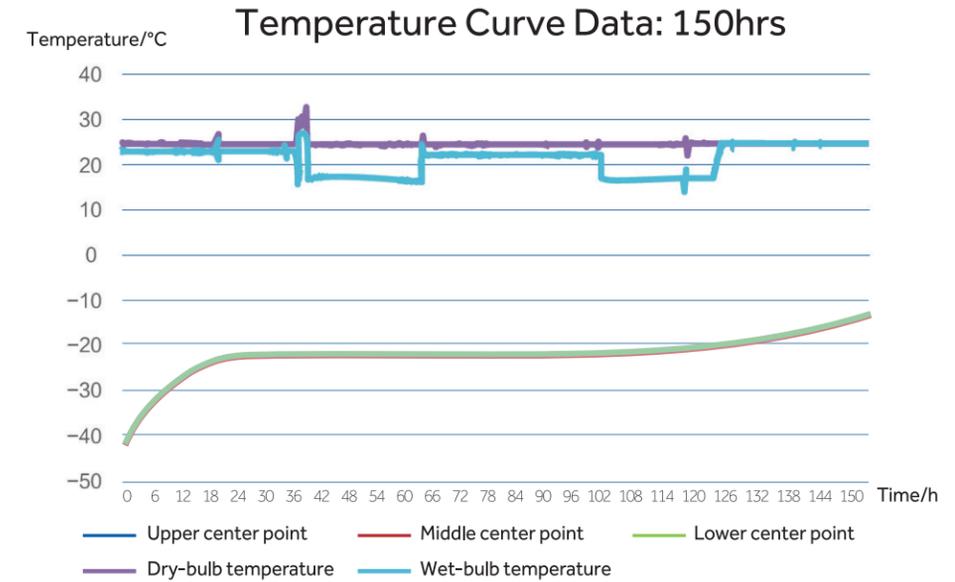
Lightweight with ergonomic design is easy to carry.



BW25-8A/12A/18A/36A/64A  
BW50-12A/36A



## Temperature Curve



## Specifications

Model	BW25-8A	BW25-12A	BW50-12A	BW25-18A	BW25-36A	BW50-36A	BW25-64A
Temperature Range (°C)	-25~-15/2-8/ 15-25/-90~-60						
Exterior Dimensions (W*D*H)(mm)	455*295*295	410*345*355	470*400*410	510*350*355	515*450*460	575*510*510	590*525*525
Packing Dimensions (W*D*H)(mm)	546*381*389	504*436*444	560*492*500	607*439*447	609*541*549	665*597*605	679*611*619
Interior Net Dimensions (W*D*H)(mm)	310*215*215	270*270*270	270*270*270	370*270*270	370*370*370	370*370*370	440*440*440
Payload Size (with ice pack)(mm)	270*175*175 (8L)	230*230*230 (12L)	230*230*230 (12L)	330*230*230 (18L)	330*330*330 (36L)	330*330*330 (36L)	400*400*400 (64L)
Net Weight (kg)	4	4.8	9.8	5.6	8.2	16.4	11
Gross Weight (kg)	6	6.8	12.5	8.2	11.2	20	14.8
Recorder Monitoring	Optional						
Heat Insulating Material	VIP						
Insulation Thickness (mm)	25	25	50	25	25	50	25
Daily Consumption of Dry Ice (kg)	1.5	1.6	0.75	1.85	2.5	1.5	2.7
Safety Margin (kg)	1	1	1	1	2	2	2

Note: The safety margin is the minimum amount of dry ice required to keep the temperature in the box not higher than -70°C.

## Scope of Application

Suitable for refrigerated transportation of vaccines and biological products, samples, reagents, blood products, specimens and medicines.



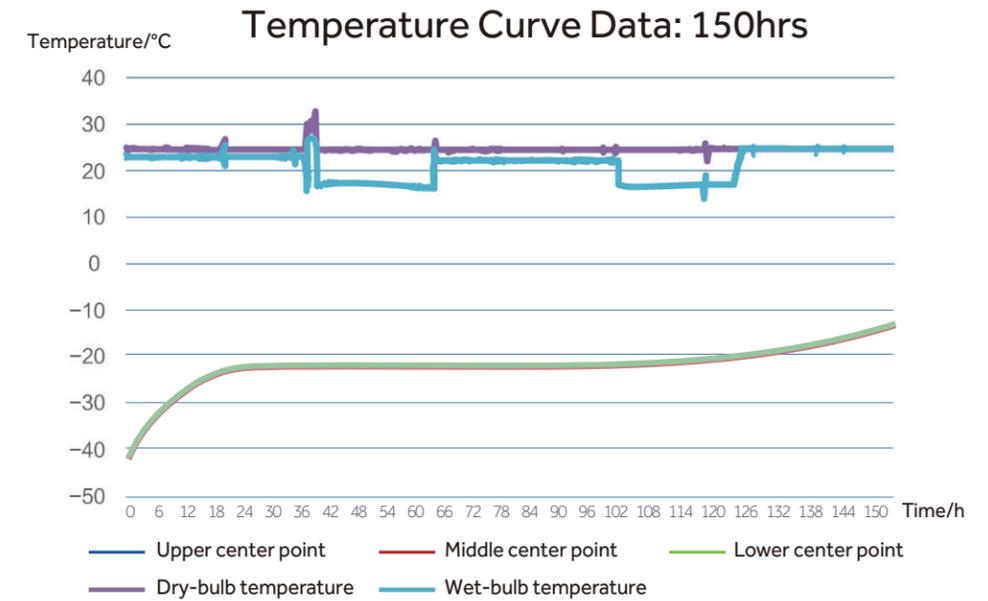
BW25-12B/36B/64B/55B

## Product Advantages

- 
**Stable performance, long service life**  
 Vacuum insulation technology, ultra low thermal conductivity, ultra long insulation time
- 
**Phase change cold storage, support multi-temperature range**  
 It can be compatible with -25-15°C, 2-8 °C and 15-25°C temperature ranges, and can be recycled
- 
**Intelligent IoT is optional, and the whole process can be traced**
- 
**Equipped with built-in handle for easy handling**
- 
**Six sided assembly structure is adopted for convenient maintenance**  
 Six sided assembly structure is adopted for convenient maintenance

# Intelligent Control Cold Chain Transport Cooler

## Temperature Curve



## Specifications

Model	BW25-12B	BW25-36B	BW25-64B
Temperature Range (°C)	-25--15/2-8/15-25	-25--15/2-8/15-25	-25--15/2-8/15-25
Exterior Dimensions (W*D*H mm)	410*345*355	515*450*460	590*525*525
Packing Dimensions (W*D*H mm)	504*436*444	609*541*549	679*611*619
Interior net Dimensions (W*D*H mm)	270*270*270	370*370*370	440*440*440
Payload Size (with ice pack) (mm)	230*230*230 (12L)	330*330*330 (36L)	400*400*400 (64L)
Net Weight (kg)	5.8	9.5	13
Gross Weight (kg)	7.8	12.5	16.8
Recorder Monitoring	Optional	Optional	Optional
Heat Insulating Material	Fiberglass VIP	Fiberglass VIP	Fiberglass VIP
Cooling Way	Passive cooling		
Coolant Type	PCM		
Duration Time	48h	72h	72h

\*Haier Biomedical reserves the right to change products and specifications without prior notice.