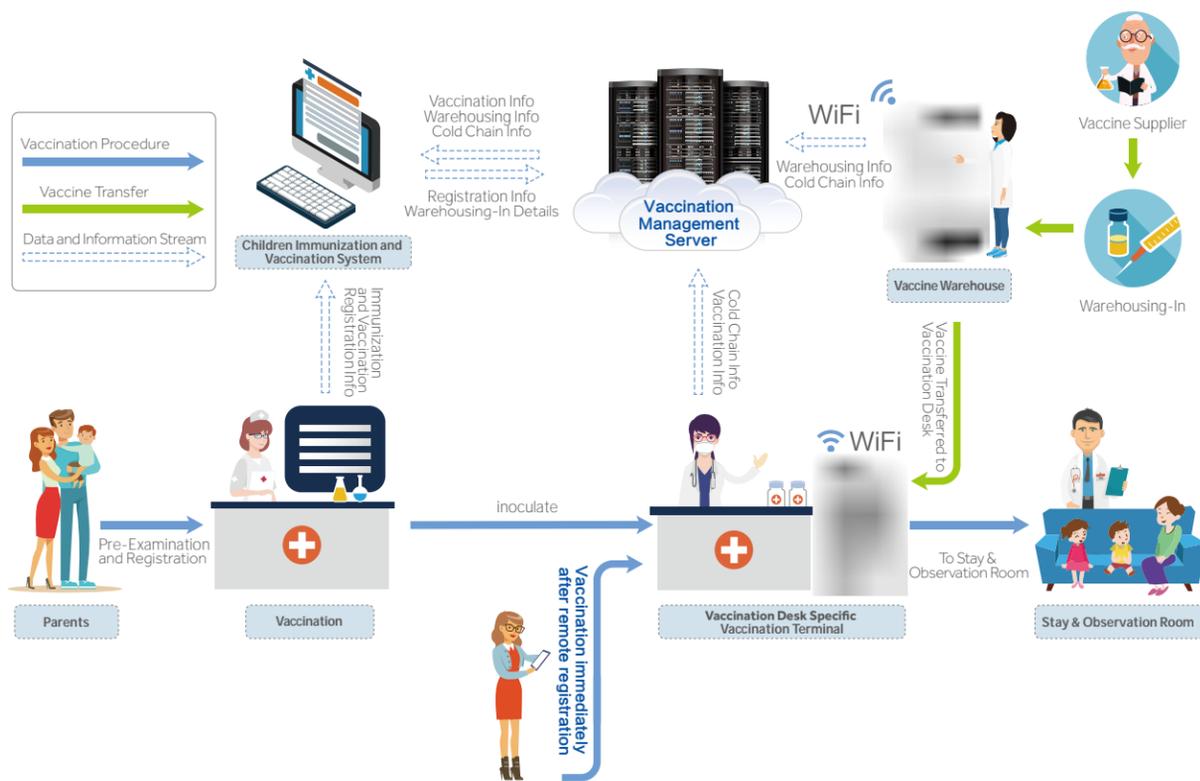Vaccine
Storage Solution

Smart Vaccine refrigerator

Haier Smart Vaccine

Haier Biomedical developed the Smart Vaccination Solution, by improving the conventional vaccination process, adopting advanced refrigeration technology, automation and intelligent vaccine delivery by incorporating IoT technologies. By connecting and leveraging the existing digital outpatient service system, the vaccination process can be managed as follows:

• After the vaccination record is scanned, the IoT based vaccination refrigerator will automatically and immediately eject the required vaccine.
• A 'double check' scan of the medical code to confirm a "Correct" & "Valid" vaccine prior to patient administration.
• Standardised vaccination process produces zero error.
• The vaccination records will be uploaded in real-time to the system. Records are traceable, making it possible to trace a specific vaccine code back to a specific child.

Smart Vaccine Safe Vaccination Solution

Safe, Worry-free and Intelligent Vaccine Management

3 Key Advantages
• Right patient-vaccine information management system (VIMS) confirms correct patient required for the vaccination
• Right vaccine-vaccine is automatically selected and delivered and double-checked by VIMS to ensure right medicine can and should be administered
• Exchange of vaccine, child and vaccination information, end-to-end visibility and transparency, plus immediate freezing of vaccines upon expiration or in question, ensure the high reliability of the vaccination programme.

Smart Vaccine Storage Solution

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

Smart Vaccine Refrigerator

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

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

HYC−361

Classification based storage	The smallest package units	Data and information streams
Each standard refrigerator is provided with 21 compartments in 7 layers. Each compartment can distinguish different lots of vaccines by applying specific first-in-first-out rules. Different kinds of vaccines can be stored upon such classification to effectively reduce the errors during the warehousing-in / out operations.	The warehousing-in/out operations are verified based on the electronic regulatory codes to realize the full digitalization and automation of vaccine management, and guarantee the accuracy and validity of vaccine storage data.	The data can be exchanged quickly between the vaccine warehouse and the vaccination desk. Vaccination program manager or disease control centre manager utilizes the vaccination management server, to monitor in real-time all vaccines stored by each vaccination station/centre.

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

HYC−61

Automated accurate vaccine dispensing	Reduce temperature fluctuation	A Double Check	Integrated nurse workstation
The vaccine will be ejected automatically after the Vaccination Record is scanned; The Regulatory Code will be scanned automatically to reconfirm the information of vaccine, including the inventory, expiration dates and cold chain early warnings; The time of dispensing can be shortened, and the rate of vaccination errors can be reduced effectively.	The refrigerator is divided into 8 independent chambers, and the small door of each chamber can be opened for taking out the vaccine required as quick as possible, to minimize the door opening time. The internal temperature fluctuation can be minimized to ensure the safe storage of vaccines.	The warehousing-in/out and dispensing of vaccines can be verified by using the electronic regulatory codes. The vaccination can be conducted only after the vaccine to be used is verified by scanning the code. This function can guarantee the accurate vaccination effectively.	The queue management, vaccination management, vaccination information input, real-time cold chain control and authorization management are integrated into the vaccination desk vaccine refrigerator. Multiple tasks are centralized to streamline the overall management.

Smart Vaccine refrigerator

Specifications

	Model		HYC-361	HYC-361 Scanner Cabinet	HYC-61
Technical Data	Cabinet Type		upright	upright	upright
	Climate Class		N	N	N
	Cooling Type		Forced Air Cooling	/	Forced Air Cooling
	Defrost Mode		Manual+ Auto defrost	/	Manual+ Auto defrost
	Refrigerant		HC	/	HC
	Sound Level (dB(A))		≤41	/	≤41
Performance	Temperature Range (°C)		2~8	/	2~8
Control	Controller		Microprocessor	/	Microprocessor
	Display		/	10.1 inch touch screen	10.1 inch touch screen
Electrical Data	Power Supply (V/Hz)		220/50	/	220/50
	Power (W)		254	/	230
	Electrical Current (A)		1.6	/	1.5
	Power Consumption (kWh/24h)		1.5	/	1.8
Construction	Capacity (L/Cu.Ft)		361/12.75	/	61/2.15
	Net/Gross Weight (approx)	kg	116/139	36/42	80/90
		lbs	255.7/306.4	79.2/92.4	176/198
	Interior Dimensions (W*D*H)	mm	530*555*1380	/	560*460*630
		in	20.8*21.9*54.3	/	22*18.1*24.8
	Exterior Dimensions (W*D*H)	mm	980*680*1980	315*710*1965	600*600*935
		in	38.6*26.8*78	12.4*28*77.4	23.5*22.6*37.1
	Packing Dimensions (W*D*H)	mm	1055*755*2110	420*744*2042	670*660*1110
		in	41.6*29.8*83.1	16.5*29.3*80.4	26.4*26*43.7
Loading Quantities	Container load (20'/40'/40'H)		23/46/46	/	54/102/102
Alarms	High/Low Temperature		Y	/	Y
	Remote Alarm		Y	/	Y
	Power Failure		Y	/	Y
	Sensor Error		Y	/	Y
	Door Ajar		Y	/	/
Accessories	Caster		Y	/	Y
	Foot		Y	/	Y
	Porthole		Y	/	/
	Shelves/Drawers		Y	/	Y
	USB Interface		Y	/	/
Certifications	Registeration certification for medical equipment		Y	/	Y
	CE		Y	/	Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Combined Refrigerator/Freezer

Display Panel

Lock Catch Designed to Match Padlock

Handgrip

HTCD-160

Storage Security

- The anti-freeze function ensures the internal temperature of the cooling chamber is not lower than 0°C.
- Guarantees the safe storage of vaccine even in the event of a power failure. Under an ambient temperature of 43 °C, the inner box temperature will be no more than 8°C in case of rainy or cloudy days for more than 121 hours (Autonomy time) and no more than 10°C after power outage for more than 160 hours(Holdover time).
- The freezing chamber can freeze 2.08kg of ice every day, with storage of 10.68kg in total.
- Solar powered temperature display indicates clearly the internal temperature.
- Lockable catch designed for padlock for added security
- The cooling chamber meets the A level WHO requirements for anti-freezing protection.

Temperature Control

- Microprocessor Control; accurate and precise temperature control

Ergonomic Design

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

Specifications

	Model		HTCD-160
Technical Data	Cabinet Type		Upright
	Ambient Temperature (°C)		5~43
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		38
Performance	Temperature Range (°C)		Freezer ≤-10 Refrigerator: 2~8
	Waterpack Storage Capacity (kg)		10.68
	Waterpack Freezing Capacity (kg/24h)		2.08
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature Display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		9
	Energy Consumption: Stable Running (kWh/24h)		0.86
	Energy Consumption: Cool Down Test (kWh/24h)		0.86
	Holdover time at 43°C		160hrs8mins
	Holdover time at 32°C		230hrs10mins
	Autonomy Time at 43°C		121hrs27mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		100/3.5
	Gross Volume (L/Cu.Ft)		Refrigerator：120/4.2 Freezer：40/1.4
	Net/Gross Weight (approx)	kg	170/197
		lbs	374.8/434.3
	Interior Dimensions (W*D*H)	mm	Cooling Chamber：545*500*530 / Freezer Chamber：560*520*150
		in	Cooling Chamber: 21.5*19.7*20.9 / Freezer Chamber: 22.0*20.5*5.9
	Exterior Dimensions (W*D*H)	mm	865*825*1700
		in	3510*32.6*66.9
	Packing Dimensions (W*D*H)	mm	985*920*1860
		in	38.8*36.2*73.2
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24
Alarm	Sensor Error		Y
Accessories	Shelves		2(Refrigerator Room)
	Data Logger		Y
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Combined Refrigerator/Freezer

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

HTCD-90

Solar Energy Display Panel

Product Features

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

Ergonomic Design

- Lockable to ensure no unauthorized access
- Equipped with USB charging socket, for charging a mobile phone, etc
- Quick and efficient sample retrieval, equipped with easy-to-reach storage baskets
- Low noise
- Corrosion-resistant and easy to clean aluminium interior
- Equipped with handles on both sides of the cabinet, making it easier to move around

Specifications

	Model		HTCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature (°C)		5~43
	Cooling Type		Direct cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		<38
Performance	Temperature Range (°C)		Freezer ≤-10 Refrigerator: 2~8
	Waterpack Storage Capacity (kg)		12.52
	Waterpack Freezing Capacity (kg/24h)		2.43
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		7
	Energy Consumption: Stable Running (kWh/24h)		0.86
	Energy Consumption: Cool Down Test (kWh/24h)		0.81
	Holdover time at 43°C		137hrs47mins
	Holdover time at 32°C		169hrs6mins
	Autonomy Time at 43°C		114hrs 56mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		37.5/1.3
	Gross Volume (L/Cu.Ft)		Refrigerator: 58/2.1 Freezer: 32 /1.1
	Net/Gross Weight (approx)	kg	83/113
		lbs	183.0/250.0
	Interior Dimensions (W*D*H)	mm	Cooling Chamber：270*345*555 Freezer Chamber：170*370*575
		in	Cooling Chamber: 10.6*13.6*21.9 Freezer Chamber: 6.7*14.6*22.6
	Exterior Dimensions (W*D*H)	mm	1128*720*875
		in	44.4*28.3*34.3
	Packing Dimensions (W*D*H)	mm	1190*770*1080
		in	46.9*30.3*42.5
Loading Quantities	Container Load (20'/40'/40'H)		26/56/56
Alarm	Sensor Error		Y
Accessories	Baskets		2
	Data Logger		Y
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Solar direct drive vaccine refrigerator

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

Solar Energy Display Panel

HTC-40

HTC-110/HTC-112
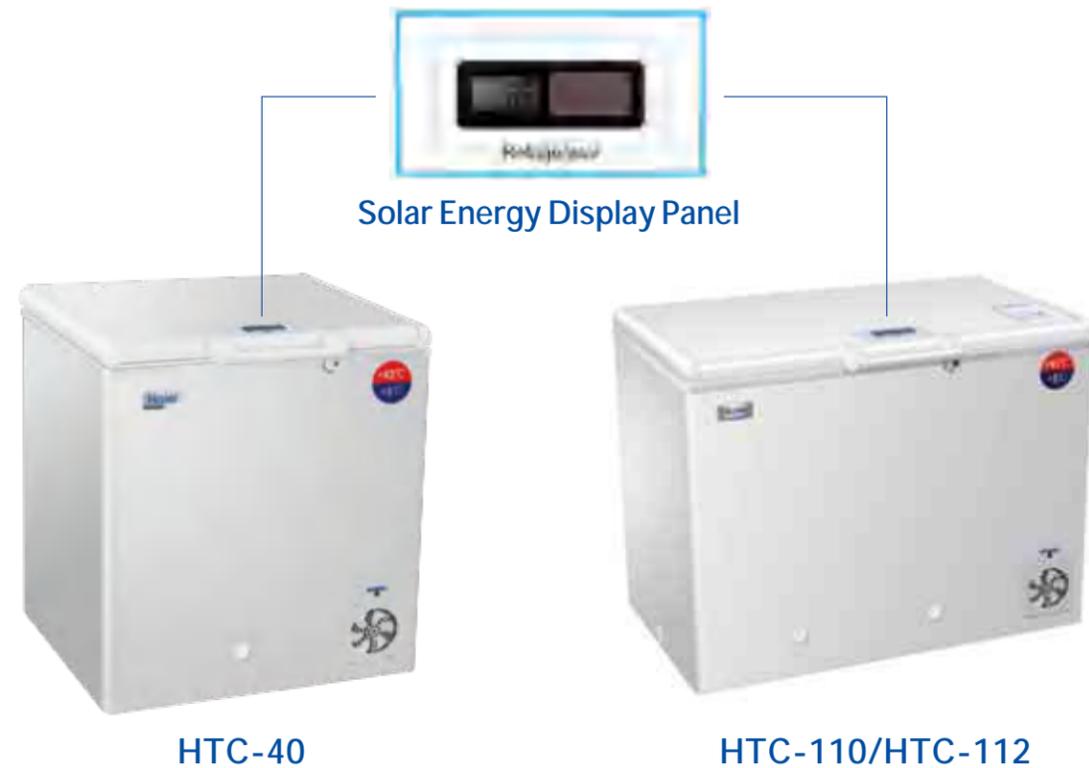
Product Features

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

Ergonomic Design

- Lockable to ensure no unauthorized access
- Equipped with USB charging socket, for charging a mobile phone, etc
- Quick and efficient sample retrieval, equipped with easy-to-reach storage baskets
- Low noise
- Corrosion-resistant and ease to clean aluminium interior
- Equipped with handles on both sides of the cabinet, making it easier to move around

Specifications

	Model		HTC-40	HTC-110	HTC-112
Technical Data	Cabinet Type		Chest	Chest	Chest
	Ambient Temperature (°C)		5~43	5~43	5~43
	Cooling Type		Direct cooling	Direct cooling	Direct Cooling
	Refrigerant		HC	HC	HC
	Sound Level (dB(A))		<30	<30	<30
Performance	Temperature Range (°C)		2~8	2~8	2~8
	Freezer Protection Level		A	A	A
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		Solar LED temperature display	Solar LED temperature display	Solar LED temperature display
Electrical Data	Power supply (V)		24	24	24
	Maximal Current (A)		5	5	5
	Energy Consumption: Stable Running (kWh/24h)		0.69	0.58	0.59
	Energy Consumption: Cool Down Test (kWh/24h)		0.71	0.62	0.62
	Holdover time at 43°C		122hrs18mins	106hrs17mins	/
	Holdover time at 32°C		162hrs36mins	152hrs28mins	145hrs29mins
	Autonomy Time at 43°C		117hrs18mins	96hrs24mins	92hrs46mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5	3.5	3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		22.5/0.8	59/2.08	75/2.65
	Gross Volume (L/Cu.Ft)		40/1.4	110/3.88	110/3.88
	Net/Gross Weight (approx)	kg	57/82	75/105	75/105
		lbs	125.6/180.7	165/231.5	165/231.5
	Interior Dimensions (W*D*H)	mm	200*345*575	545*345*575	545*345*575
		in	7.9*13.6*22.6	21.5*13.6*22.6	21.5*13.6*22.6
	Exterior Dimensions (W*D*H)	mm	788*720*875	1128*720*875	1128*720*875
		in	31.0*28.3*34.4	44.4*28.3*34.4	44.4*28.3*34.4
	Packing Dimensions (W*D*H)	mm	850*770*1080	1190*770*1080	1190*770*1080
		in	33.4*30.3*42.5	46.9*30.3*42.5	46.9*30.3*42.5
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78	26/56/56	26/56/56
Alarm	Sensor Error		Y	Y	Y
Accessories	Baskets		2	4	4
	Data Logger		Y	Y	Y
Certifications	CE		Y	Y	Y
	WHO/PQS		Y	Y	Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Refrigerator

HTC-240

Lock Catch Designed to Match Padlock

Handgrip

Display Panel

Product Features

Solar Energy Driven
• Solar power is green and environmentally friendly

Anti-Freeze
• A level protection ensures required internal temperature

Ergonomic Design
• Easy to clean and corrosion proof

Environmentally Friendly
• Ecofriendly product

Patented Technology
• Heat-pipe provides better temperature uniformity

Specifications

	Model		HTC-120	HTC-240
Technical Data	Cabinet Type		Upright	Upright
	Ambient Temperature (°C)		5~43	5~43
	Cooling Type		Direct Cooling	Direct Cooling
	Defrost Mode		No electric heating defrost	No electric heating defrost
	Refrigerant		HC	HC
	Sound Level (dB(A))		≤43	≤43
Performance	Temperature Range (°C)		2~8	2~8
	Freezer Protection Level		A	A
Control	Controller		Microprocessor	Microprocessor
	Display		Solar LED Temperature display	Solar LED Temperature display
Electrical Data	Power supply (V)		24	24
	Maximal Current (A)		5	5
	Energy Consumption: Stable Running (kWh/24h)		0.44	0.35
	Energy Consumption: Cool Down Test (kWh/24h)		0.48	0.54
	Autonomy Time at 43°C		112hrs24mins	95hrs23mins
	Autonomy Time at 32°C		183hrs20mins	151hrs10mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5	3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		100/3.5	200/7.1
	Gross Volume (L/Cu.Ft)		120/4.2	240/8.5
	Net/Gross Weight (approx)	kg	130/160	150/185
		lbs	286/352	330/407.9
	Interior Dimensions (W*D*H)	mm	530*500*530	530*500*960
		in	20.9*19.7*20.9	20.9*19.7*37.8
	Exterior Dimensions (W*D*H)	mm	865*825*1422	865*825*1815
		in	35*32*56	35*32*71
	Packing Dimensions (W*D*H)	mm	980*920*1585	980*920*1980
		in	38.6*36.2*62.4	38.6*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24	12/24/24
Alarm	Sensor Error		Y	Y
Accessories	Baskets		Y	Y
	Shelves		3	4
	Data Logger		Y	Y
Certifications	CE		Y	Y
	WHO/PQS		Y	Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Vaccine Freezer

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

Solar Energy Display Panel

HTD-40

Product Features

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

Ergonomic Design

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

Specifications

	Model		HTD-40
Technical Data	Cabinet Type		Chest
	Ambient Temperature (°C)		≤43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		<30
Performance	Temperature Range (°C)		<-10
	Waterpack Storage Capacity (kg)		16.8
	Waterpack Freezing Capacity (kg/24h)		2.4
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		5
	Energy Consumption: Stable Running (kWh/24h)		0.46
	Energy Consumption: Cool Down Test (kWh/24h)		0.50
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Gross Volume (L/Cu.Ft)		48/1.7
	Net/Gross Weight (approx)	kg	65/85
		lbs	143.0/187.4
	Interior Dimensions (W*D*H)	mm	265*370*575
		in	10.4*14.6*22.6
	Exterior Dimensions (W*D*H)	mm	788*720*875
		in	31.0*28.3*34.3
	Packing Dimensions (W*D*H)	mm	850*770*1080
		in	33.4*30.3*42.5
	Solar Panel (L*W*D)	mm	1335*990*40
		in	52.6*39.0*1.6
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78
Alarm	Sensor Error		Y
Accessories	Baskets		2
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Solar Direct Drive Blood Refrigerator

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 articles in areas that have power shortages.

HC

HTXC-240

Specifications

	Model		HTXC-240
Technical Data	Cabinet Type		Upright
	Ambient Temperature (°C)		≤43
	Cooling Type		Direct Cooling
	Defrost Mode		No electric heating defrost
	Refrigerant		HC
	Sound Level (dB(A))		≤43
Performance	Temperature Range (°C)		2~8
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power supply (V)		24
	Maximal Current (A)		5
	Energy Consumption: Stable Running (kWh/24h)		0.35
	Energy Consumption: Cool Down Test (kWh/24h)		0.54
	Autonomy Time at 43°C		95hrs23mins
	Autonomy Time at 32°C		151hrs10mins
	Solar Radiation Reference Period (kWh/m²/day)		3.5
Construction	Vaccine Storage Capacity (L/Cu.Ft)		200/7.1
	Gross Volume (L/Cu.Ft)		240/8.5
	Net/Gross Weight (approx)	kg	150/185
		lbs	330/407.9
	Interior Dimensions (W*D*H)	mm	530*500*960
		in	20.9*19.7*37.8
	Exterior Dimensions (W*D*H)	mm	890*825*1815
		in	35*32*71
	Packing Dimensions (W*D*H)	mm	985*920*1980
		in	38.8*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24
Alarm	High/Low Temperature		Y
	Sensor Error		Y
Accessories	Shelves		4
	Data Logger		Y
	Remote Temperature Monitoring Device(RTMD)		Optional
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Product Features

- Solar direct drive refrigerator without battery
- Wide applicable ambient temperature: 5-43°C
- Vertical structure, first-in first-out, easy operation
- Stainless steel drawer
- Optional RTMD
- Automatic drainage design

Ice-Lined Refrigerator

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

HC

<40

HBCD-90

Solar Energy Display Panel

Product Features

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

Ergonomic Design

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

Specifications

	Model		HBCD-90
Technical Data	Cabinet Type		Chest
	Ambient Temperature (℃)		5-43
	Cooling Type		Direct Cooling
	Defrost Mode		Manual
	Refrigerant		HC
	Sound Level (dB(A))		<40
Performance	Temperature Range (℃)		Freezer ≤-10 Refrigerator: 2~8
	Waterpack Storage Capacity (kg)		16
	Waterpack Freezing Capacity (kg/24h)		4
	Freezer Protection Level		A
Control	Controller		Microprocessor
	Display		Solar LED Temperature display
Electrical Data	Power Supply (V/Hz)		220～240/50
	Power (W)		190
	Electrical Current (A)		1
	Power Consumption:stable running (kWh/24h)		0.9
	Power Consumption: cool down test (kWh/24h)		1
	Holdover Time at 43 ℃		63hrs48mins
	Holdover Time at 32 ℃		132hrs21mins
Construction	Vaccine Storage Capacity (L/Cu.Ft)		30/1.1
	Gross Volume (L/Cu.Ft)		Refrigerator:42/1.5 Freezer:32/1.1
	Net/Gross Weight (approx)	kg	105/135
		lbs	231/298
	Interior Dimensions (W*D*H)	mm	Refrigerator Chamber:279*273*556 Freezer Chamber:166*366*580
		in	Refrigerator Chamber:11*10.8*21.9 Freezer Chamber:6.5*14.4*22.8
	Exterior Dimensions (W*D*H)	mm	1128*717*872
		in	44.4*28.2*34.3
	Packing Dimensions (W*D*H)	mm	1190*770*1080
		in	47*30*42.5
Loading Quantities	Container Load (20'/40'/40'H)		26/56/56
Alarm	High/Low Temperature		Y
	Sensor Error		Y
Accessories	Baskets		4
	Data logger		Y
	30 Days Temperature Logger		Optional
	Automatic Voltage Stabilizer		Optional
	Remote Temperature Monitoring Device (RTMD)		Optional
Certifications	CE		Y
	WHO/PQS		Y

Product appearance and specifications are subject to change without notice

Ice-Lined Refrigerator

Refrigeration System

- Optimized refrigeration system design
- Cabinet structure designed specifically to maintain 2°C to 8°C for more than 55 hours at 43°C ambient
- HC high-density foam insulation
- Complies with WHO/UNICEF standards Grade A freeze protection to ensure vaccine never freezes in the storage compartment
- Wide ambient temperature range, from 5°C -43°C

Temperature Control

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

Ergonomic Design

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

Solar Energy Display Panel

HBC-80

Specifications

	Model		HBC-80	HBC-150	HBC-260
Technical Data	Cabinet Type		Chest	Chest	Chest
	Ambient Temperature (℃)		5~43	5~43	5~43
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling
	Refrigerant		HC	HC	HC
	Sound Level (dB(A))		<40	<40	<40
Performance	Temperature Range (℃)		2~8	2~8	2~8
	Freezer Protection Level		A	A	A
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		Solar LED Temperature Display	Solar LED Temperature Display	Solar LED Temperature Display
Electrical Data	Power Supply (V/Hz)		220~240/50	220~240/50	220~240 (50/60)
	Power (W)		110	120	165
	Electrical Current (A)		0.9	1	1.3
	Power Consumption:Stable Running (kWh/24h)		0.6	0.6	1.47
	Power Consumption:Cool Down Test (kWh/24h)		0.7	0.7	1.62
	Holdover Time at 43℃		59hrs58mins	60hrs50mins	62hrs
	Holdover Time at 32℃		98hrs26mins	96hrs23mins	117hrs24mins
Construction	Vaccine Storage Capacity (L/Cu.Ft)		61/2.2	122/4.3	211/7.5
	Gross Volume (L/Cu.Ft)		80/2.8	150/5.3	260/9.2
	Net/Gross Weight (approx)	kg	85/110	105/140	160/200
		lbs	187.6/242.7	231.7/308.9	353/441.3
	Interior Dimensions (W*D*H)	mm	500*366*560	840*366*560	1359*366*560
		in	19.7*14.4*22	33.1*14.4*22	53.5*14.4*22
	Exterior Dimensions (W*D*H)	mm	788*717*872	1128*717*872	1647*717*940
		in	31*28.2*34.3	44.4*28.2*34.3	64.8*28.2*37
	Packing Dimensions (W*D*H)	mm	850*770*1080	1190*770*1080	1720*770*1080
		in	33.5*30*42.5	47*30*42.5	67.7*30*42.5
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78	26/56/56	18/38/38
Alarms	High/Low Temperature		Y	Y	Y
	Sensor Error		Y	Y	Y
Accessories	Foot		/	/	Y
	Baskets		1	3	5
	Data logger		Y	Y	Y
	Automatic Voltage Stabilizer		Optional	Optional	Optional
	Remote Temperature Monitoring Device (RTMD)		Optional	Optional	Optional
Certifications	CE		Y	Y	Y
	WHO/PQS		Y	Y	Y

Product appearance and specifications are subject to change without notice

Ice-Lined Refrigerator

HBC-120

HBC-240

Refrigeration System

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

Temperature Control

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

Ergonomic Design

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

Specifications

	Model		HBC-120	HBC-240
Technical Data	Cabinet Type		Upright	Upright
	Ambient Temperature (℃)		5～43	5～43
	Cooling Type		Direct Cooling	Direct Cooling
	Refrigerant		HC	HC
	Sound Level (dB(A))		<40	<40
Performance	Temperature Range (℃)		2～8	2～8
	Freezer Protection Level		A	A
Control	Controller		Microprocessor	Microprocessor
	Display		Solar LED Temperature Display	Solar LED Temperature Display
Electrical Data	Power Supply (V/Hz)		220～240/50/60	220～240/50/60
	Power (W)		145	145
	Electrical Current (A)		1	1
	Power Consumption:Stable Running (kWh/24h)		0.4	0.4
	Power Consumption:Cool Down Test (kWh/24h)		0.35	0.35
	Holdover Time at 43℃		128hrs 48mins	87hrs14mis
	Holdover Time at 32℃		185hrs	165hrs
Construction	Vaccine Storage Capacity (L/Cu.Ft)		100/3.6	200/7.2
	Gross Volume (L/Cu.Ft)		120/4.3	240/8.5
	Net/Gross Weight (approx)	kg	128/160	152/186
		lbs	281.6/352	334.4/409.2
	Interior Dimensions (W*D*H)	mm	530*500*530	530*500*960
		in	20.87*19.69*20.87	20.87*19.69*37.8
	Exterior Dimensions (W*D*H)	mm	890*829*1425	890*829*1815
		in	35.04*32.64*56.10	35.04*32.64*71.46
	Packing Dimensions (W*D*H)	mm	980*920*1585	980*920*1980
		in	38.6*36.2*62.4	38.6*36.2*78
Loading Quantities	Container Load (20'/40'/40'H)		12/24/24	12/24/24
Alarms	High/Low Temperature		Y	Y
	Sensor error		Y	Y
Accessories	Foot/Caster		Y	Y
	Shelves		3	4
	Data logger		Y	Y
	Automatic Voltage Stabilizer		Optional	Optional
	Remote Temperature Monitoring Device (RTMD)		Optional	Optional
Certifications	CE		Y	Y
	WHO/PQS		Y	Y

Product appearance and specifications are subject to change without notice

Vaccine & Icepack Freezer

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

Refrigeration System

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

Temperature Control

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

Ergonomic Design

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

HBD-116

HBD-286 Pull down test at 43 °C ambient
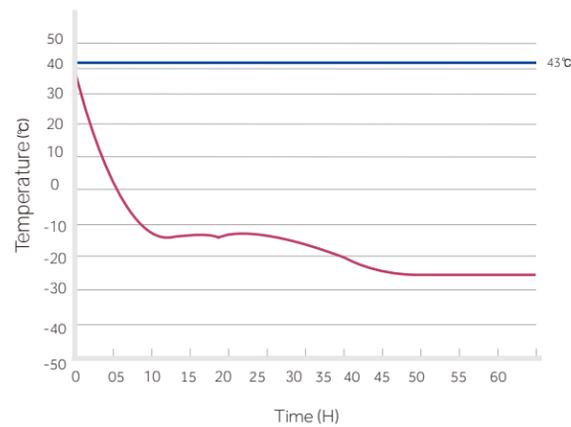
HBD-286 Warm up test at 43 °C ambient
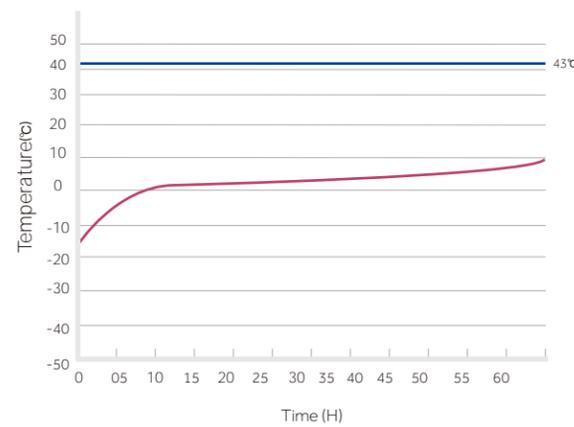
Specifications

	Model		HBD-86	HBD-116	HBD-286
Technical Data	Cabinet Type		Chest	Chest	Chest
	Ambient Temperature		<43°C	<43°C	<43°C
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		/	Manual	Manual
	Refrigerant		CFC-Free	CFC-Free	CFC-Free
	Sound Level (dB(A))		40.6	43	44
Performance	Temperature Range (°C)		-15~-25	-15~-20	-15~-20
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)		220~240(50/60)	220~240/50	220~240/50
	Power (W)		120	138	185
	Electrical Current (A)		1.1	1.1	1.3
	Power Consumption:Stable Running (kWh/24h)		0.98	3.01	4.36
	Power Consumption: Cool Down Test (kWh/24h)		0.95	3.77	3.77
	Holdover Time at 43°C		More than 5hrs (up to -5°C)	More than 4hrs (up to -5°C)	More than 5hrs (up to -5°C)
Construction	Gross Volume (L/Cu.Ft)		86/3	121/4.3	286/10.1
	Net/Gross Weight (approx)	kg	65/90	58/67	85/97
		lbs	143/198	110.3/121.3	174.2/187.4
	Interior Dimensions (W*D*H)	mm	500*366*560	497*457*655	1067*457*655
		in	19.7*14.4*22	19.6*18.0*25.8	42.0*18.0*25.8
	Exterior Dimensions (W*D*H)	mm	788*717*872	670*630*915	1240*630*915
		in	31*28.2*34.3	26.4*24.8*36.0	48.8*24.8*36.0
	Packing Dimensions (W*D*H)	mm	850*770*1080	755*760*1005	1325*760*1005
		in	33.5*30*42.5	29.7*29.9*39.6	52.2*29.9*39.6
Loading Quantities	Container Load (20'/40'/40'H)		36/78/78	42/90/90	24/50/50
Accessories	Foot		/	Y	Y
	Baskets		3	2	3
	Automatic Voltage Stabilizer		/	Y	Y
Certifications	CE		Y	Y	Y
	WHO/PQS		Y	Y	Y

Product appearance and specifications are subject to change without notice

Walk-In Cold/Freezer Room

Haier Biomedical walk-in cold rooms are for storage of vaccines and other temperature sensitive products. The complete unit is also designed for installations in housed areas such as warehouses to meet specified temperature standards. These units have been installed in India, Guinea, Syria, Pakistan, Burundi, Zimbabwe and other regions across the world.

Specifications

Type	Freezer Room	Freezer Room	Cold Room	Cold Room	Cold Room	Cold Room	Cold Room	Combined Cold/Freezer Room	
								Cold Room	Freezer Room
Model	HRZK-40D	HRZK-20D	HRZK-10G	HRZK-15G	HRZK-20G	HRZK-30G	HRZK-40G	HRZK-40GD	
Defrost Mode	Electrical heating								
Refrigerant	CFC-Free								
Internal Temperature Range (°C)	-20	-20	2-8	2-8	2-8	2-8	2-8	2-8	-20
Evaporator Temperature (°C)	-25	-25	-7	-7	-7	-7	-7	-7	-25
Power Supply (V/Hz)	380/50	380/50	220/50	220/50	220/50	380/50	380/50	380/50	
Power (W)	5300	2630	1300	1750	1750	2520	2610	2520	2010
Refrigerating Output (W)	4200	2060	1560	2230	2230	2950	3250	2950	1580
Capacity (m³)	40	20	10	15	20	30	40	25	15
Condensation Temperature (°C)	43								
Density (Kg/Cbm)	40±2								
K-Value (m²K)	0.22								
Insulation Thickness (mm)	100								
Certification	–	WHO/PQS							

Product appearance and specifications are subject to change without notice

Integral Cold Store Unit

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

Features of the Cold Room

• The set point of the cold room has an adjustable range of 0°C to 10°C (or -15°C to -25°C for the Freezer Room) with a resolution of 0.1°C.
• High-efficiency CFC-free polyurethane insulation foamed into place. With a density of 42kg/m³, a thickness of 100mm and an insulation K-value of 0.22 W/(m²)(K) or better.
• Internal and exterior surfaces are made up of hot-dipped galvanized steel sheet, coated in a white polyester coating. The floor is clad with non-slip material.
• Rooms are equipped with tungsten lighting.
• Rooms are equipped with shelving systems on 3 of their walls.
• Dual refrigeration system – while one system is working, the other one is reserved as a back-up.
• Forced air-cooling system
• Door equipped with a lock and heavy-duty hinges, with an internal safety release.
• CFC-free refrigerant
• Automatic defrosting
• A manual change-over switch is offered as standard, an automatic change-over switch is available as an optional extra.
• Temperature recorder and audible alarm system.

Technical Characteristics of the Refrigerating Unit

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

Temperature Recorder

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

Cold Room

Combined Cold Room

Applicable for storing large quantities of vaccines, reagents, medicines and other biological products. Suitable for CDCs, animal epidemic prevention and control centers, hospitals, biopharmaceutical companies, etc.
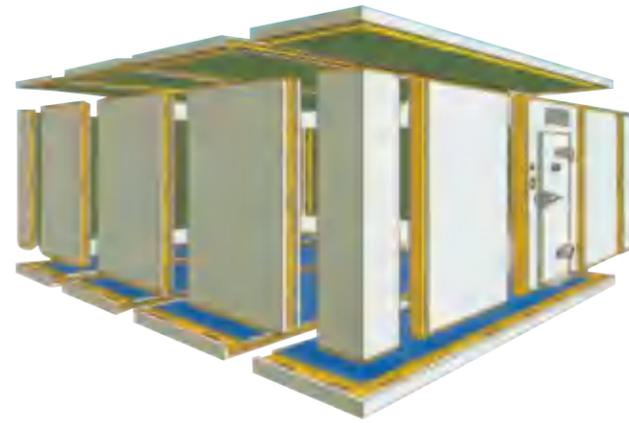
Technical Features:

• The integrated solution provider integrates cold storage, automation, informatization and environmental laboratory.

Environmental protection
• Uses R404a environmentally friendly refrigerant;
• Uses durable, environmentally-friendly poly-ethurane foam insulated walls to provide excellent insulation with a low ozone destruction coefficient.

Safety
• With equipment fault self-diagnosis function. With a variety of active protection and passive early warning functions, the operating status is monitored to ensure the safety of stored samples.

Modular
• The system is modular and solutions are customized according to individual requirements.

Energy saving
• The technology of liquid-subcooling and exhaust-precooling via defrosting water is adopted to save energy.

Smart
• The PLC control system can automatically control the start and stop of the refrigeration unit, the regular switching between the main and standby machines and the automatic fault switch. No manual operation is required for refrigeration and defrosting.

Side Loading Cold Room

Applied to save vaccines, reagents, medicaments, biological products, etc.,
Suitable for community clinics, pharmacies, etc.

Technical Features:

• All-weather: 24-hour uninterrupted monitoring of the cold storage operation status to ensure the safety of samples;

Solar Direct Driven Cold Room

• Whole process monitoring: production, transportation and storage

• Full coverage: network monitoring, real-time query, unified management

• Stable state change rate: ≤±0.3°C/10h

• Temperature uniformity: ≤±3°C

• Ultra-low noise: the noise of the outdoor unit is less than 50 decibels

• Exclusive perforated ceiling air supply design ensures rapid cooling and excellent temperature uniformity ±1°C

• Utilizes quick and effective hot fluoride defrosting method

• An electronic expansion valve accurately controls the storage temperature while ensuring the refrigeration system runs more energy efficiently

Applicable for storage of temperature-sensitive products such as large quantities of vaccines and medicines;
National or regional vaccine centers, hospitals, biopharmaceutical and other industries;

Technical Features:

• Powered by solar photovoltaic power generation system, low operating cost.

• Solar direct drive refrigeration, no battery driven compressor; combined with ice lining technology, maintain the temperature in the cold room at 2-8 °C throughout the day.

• Adopting PLC intelligent control, preferentially start the compressor of higher temperature cold storage box to ensure the uniformity of the room temperature.

• Power off and maintain 2-8°C for more than 48 hours at 43°C ambient temperature; it can last longer under low ambient temperature conditions.

• Low temperature protection function module (optional), can achieve 5-43 °C wide temperature range operation.

• Optional 48V switching power supply can be connected to single-phase 110-220V AC power supply.

Solar Photovoltaic Array

Cold Room

14 pieces 35mm
Thick piece group

8 pieces 40mm
Thick piece group

Distribution Board

MPPT 48V30A
Charging and Discharging Controller

Vaccine Refrigerated Vehicle

- High chassis, excellent cross-country capacity.
- Euro-2 standard, easy and low-cost maintenance in African area with backup power.
- Complies with WHO/PQS standard requirements.
- Backup power supply.
- Heating system to use in -20℃ ambient temperature.

Vaccine Stock Monitoring Solution

Monitoring the vaccine status of all vaccination sites nationwide, providing Enterprise Resource Planning (ERP) management for decision makers with timely and accurate information of vaccine inventory and temperatures.

Function:

- Manual entry of vaccine stock.
- Data acquisition of temperature.
- Receives immunization notifications.
- Checks inventory reports.
- Check inventory trend and alarm information.
- Information data and files of vaccines.
- Checking vaccine warehousing plans.
- Submitting information for invalid vaccines.
- Checking historical temperature curve.

- 7-inch touch screen.
- Internal Internet-enabled SIM card.
- Solar power USB, EHC power supply.
- External NTC temperature sensor.

U-COOL Remote Temperature Monitoring Device

Remote Temperature Recording:

- The external temperature sensor measures the temperature, records and stores the measured temperature values automatically, and transmits them to the platform through GPRS, realizing remote platform monitoring.

Application Scenarios:

- It can be used for real-time monitoring of warehousing and distribution of food, medicine, vaccine, blood, reagents, biological products, biological sample tissue and other items. The application scenarios include refrigerated trucks, incubators, cold rooms, cold packs, refrigerated cabinets, refrigerators, freezers and so on.

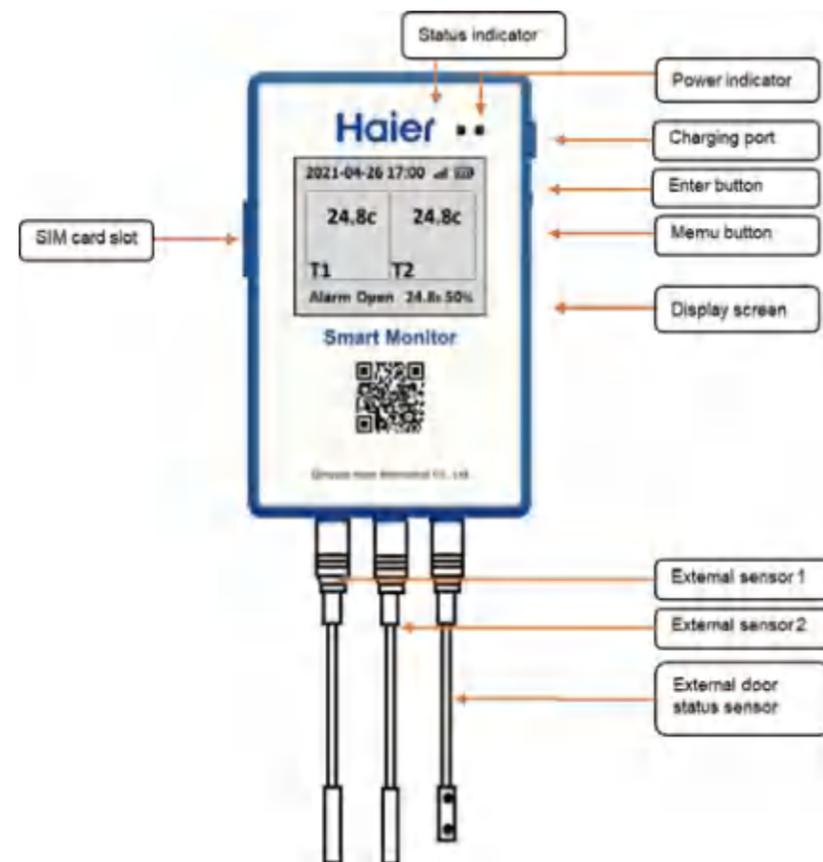### Cloud Platform Website   http://ems.haierbiomedical.com

U-COOL

- Once powered on, the device immediately uploads the data automatically to the portal. Superior device, one simple activation - no technical skills needed, easy and user friendly.
- Remote portal management platform, which can track temperature, location, signal strength information and has multiple data analysis reports.
- One full charge, more than 10 days of battery life.
- The device supports sound and light alarms.
- USB data export (30 days temperature records).
- High precision, wide range of temperature measurements.
- IP65 protection, waterproof, shockproof and dustproof to fit a variety of complex environments.
- Complies with WHO Standards, WHO prequalified code: E006/060

Item	Specifications
Model	U-Cool
Temperature Sensor	NTC sensor：-40℃~+120℃（±0.5℃ within -30℃ to +20℃, ±1℃ for other）
Environment Sensor	Temperature：-10℃~+55℃ Humidity：0%RH~99%RH
Signal	2G/4G
Storage Capacity	260,000 sets of data
Battery	Charging voltage：5V~12V Charging currents≤1.5A
Alarm	Audio-visual：buzzer + LED light
SIM card	Built-in SIM card
Map Location	Google map and LBS(Location Based Service)
USB	Micro USB：download data /charging
Material	Shell：PC / Shell Jacket：ABS
IP	IP65
Dimension	114.5 mm *71.5 mm *22mm

Vaccine Safety Solutions

U-COOL-PRO

Item	Specifications
Model	U-Cool-Pro
Temperature Sensor	2 Pluggable Digital temperature sensors (or PT100 optional)
	1 Ambient temperature and humidity sensor
Temperature Range	-40°C~+80°C
	PT100 sensor(optional): -200°C~+150°C
Accuracy	±0.5°C within -30°C to +20°C, ±1°C for other
Door Sensor	1 Pluggable Reed Switch sensor
Battery	Lithium battery: 4000mAh
Alarm	Audio-visual: buzzer + LED light
Map Location	Google map and LBS(Location Based Service-Mobile Base Station Positioning)
USB	Micro USB: download data /charging
Material	Shell: PC
IP	IP64
Dimension	112mm*75mm*21mm
Communication Network Mode	4G/3G/2G
Charging Voltage	5V~12V
Charging Current	≤1A
Working Current	≤2A
Storage Temperature	-40°C~+65°C
Working Temperature	-10°C~+55°C
SIM Card	Micro SIM Card
USB	Micro USB, support charging; When the device is turned off, it can be connected to the computer as a Flash drive export data in PDF/TXT format. When the device is turned on, it can be connected to the computer as a virtual serial port, which can be configured using the configuration tool.

Product advantages

• The user is free to set up, and automatically uploads data to portal while power on

• The device supports sound and light alarms

• LBS base station positioning, indoor use can also be positioned

• USB data export (30 days temperature record)

• One charge, more than 10 days of battery life

• 2 pluggable temperature sensor, 1 pluggable door switch sensor

• Support 4G/3G/2G signal

U-Cool-LoRa

Introduction of Temperature Data Logger

Temperature Data Logger consists of sensor node device(host) with multiple sensor probes. The intelligent gateway (LoRa -- 4G) is connected to the cloud cold chain management software to achieve real-time monitoring and alarm of temperature and humidity, door open status, power on & off of refrigerators and cold room(-40~80ºC).

Vaccine Safety Solutions

YB-HC600-01
Temperature Data Logger

YB-HC600-02
Door On-off Monitor

YB-HC600-03
Power Outage Monitor

YB-HZ600-01
Smart Gateway

Product advantages

Long communication distance

LoRa spread spectrum modulation is adopted for wireless communication, which works in sub-1 GHz band. With the characteristics of long communication distance, strong ability to pass through obstacles or walls, excellent anti-interference performance, no need to lay communication and power supply cables, user installation is flexible and beautiful.

Local sound and light alarm

When the acquisition temperature exceeds the set domain value, or the acquisition node is not working normally, the local sound and light alarm can be realized through the collector configuration.

Micro-USB export local data

It is equipped with standard Micro-USB interface to cooperate with PC upper computer software for local data export, firmware upgrade and system parameter configuration.

Power supply mode

The collector works with battery power, and the gateway works with the external power through adapter. When the external power supply is off, the gateway works with standby battery power supply.

Pluggable aviation plug

1) The probe is inserted into the refrigerator porthole or laid in the cold room, and the recorder host can be removed separately for operation;

2) When the probe is broken or damaged, it is convenient to replace it separately;

3) Compared to the 3.5mm audio connector, the aviation plug is more robust and offers better electromagnetic protection.

Model	YB-HC600-01	YB-HC600-02	YB-HC600-03
Product Name	Temperature Data Logger	Door On-off Monitor	Power Outage Monitor
Sensor	One line (2m) digital sensor	One line (3m)	One line (3+3m)
Measuring Function	Range: -40~80°C Precision: 0.1°C Accuracy: ±0.5°C	Door open-close monitoring	Power supply monitoring
Dimension (H*W*D mm)	125*73*23		
Battery	3.6V/5400mAh		
Communication	LoRa		
Display	LCD display, real-time display of measured data, such as electric quantity, signal strength, etc.		
Local-storage	Local storage data of 60000 sets and it supports breakpoint continued transmission		

Model	YB-HZ600-01
Product Name	Smart Gateway
Transit Network	4G
Maximum Number of Transmitters That Can Be Used	30
Dimension (W*H*D mm)	160*100*33
Battery	3.7V/10000mAh
Communication	LoRa
Local-storage	60000 sets

30-Day Electronic Temperature Logger

Haier Biomedical Vaccine Cold Chain Storage Safety Solution

• Continuous, real-time, whole-process traceable monitoring for vaccine safety storage
• WHO approved and sourced by WHO procurement.

30-Day Electronic Temperature Logger

HETL-01

WHO Certified
PQS code:**E006/042**

Easy to download data

Accessory: Bracket

Product Features

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

Specifications

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

Product appearance and specifications are subject to change without notice