

# Solar Direct Drive Combined Refrigerator/ Freezer



**HTCD-90**

## Scope of Application

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.

## Innovative Design

- ◉ Safe, secure and reliable
- ◉ Environmentally friendly
- ◉ Solar energy display panel
- ◉ Optimized refrigeration system design

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# Solar Direct Drive Combined Refrigerator/Freezer

## Product Advantages



### 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/PQS 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



Solar Energy Display Panel

### 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	137hrs 47mins		
	Holdover time at 32°C	169hrs 6mins		
	Autonomy Time	114hrs 56mins		
	Solar Radiation Reference Period (kWh/m <sup>2</sup> /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		
Others	Certification	CE, WHO/PQS		

Product appearance and specifications are subject to change without notice

# Solar Direct Drive Vaccine Refrigerator



**HTC-110**

## Scope of Application

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

## Innovative Design

- ◉ Safe, secure and reliable
- ◉ Environmentally friendly
- ◉ Solar energy display panel
- ◉ Optimized refrigeration system design

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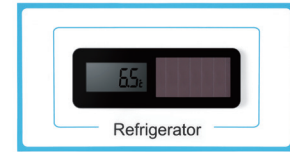


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## Product Advantages

### 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/PQS 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



Solar Energy Display Panel

### 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-110		
Technical Data	Cabinet Type	Chest		
	Ambient Temperature (°C)	5-43		
	Cooling Type	Direct cooling		
	Refrigerant	HC		
	Sound Level (dB(A))	< 30		
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)	0.58		
	Energy Consumption: Cool Down Test (kWh/24h)	0.62		
	Holdover Time at 43°C	106hrs 17mins		
	Holdover Time at 32°C	152hrs 28mins		
	Autonomy Time at 43°C	96hrs 24mins		
Solar Radiation Reference Period (kWh/m <sup>2</sup> /day)	3.5			
Construction	Vaccine Storage Capacity (L/Cu.Ft)	59/2.08		
	Gross Volume (L/Cu.Ft)	110/3.88		
	Net/Gross Weight (approx)	kg	75/105	
		lbs	165/231.5	
	Interior Dimensions (W*D*H)	mm	545*345*575	
		in	21.5*13.6*22.6	
	Exterior Dimensions (W*D*H)	mm	1128*720*875	
		in	44.4*28.3*34.4	
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	4		
	Data Logger	Y		
Others	Certification	CE, WHO/PQS		

Product appearance and specifications are subject to change without notice