



# -150°C Cryo Freezer



DW-150W209

# Scope of Application:

A mechanical cryogenic freezer is used for the long-term cryopreservation of samples such as cell cultures, tissue samples, bacteria, viruses and non-biological products such as electronics. Applications include cord blood preservation, biobanks, reproductive procedures, blood banks, life science research, biomedical engineering and fisheries. Mechanical cryopreservation is a safe alternative to LN2 and can reduce or eliminate the reliance on LN<sub>2</sub>, reducing safety concerns.

# **Innovative Design**

- 100% Hydrocarbon refrigeration technology
- Quiet, low noise operation
- Energy-efficient and Environmentally-friendly
- Safe and reliable
  Intelligent control

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# Product Advantages (



### Hydrocarbon energy-saving refrigeration technologies

- Includes specialist industrial compressor, hydrocarbon refrigerant, dual-compressors 4-stage cascade refrigeration system, which delivers excellent energy-efficiencies
- Energy-efficient fan design with intelligent start/stop



### Environmentally friendly

- HC refrigerant, truly environmentally-friendly refrigeration system with zero global warming potential (GWP)
- LBA polyurethane foam has low GWP and is significantly lower than most HFCs commonly used, offering better environmental protection



### Superior Uniformity

The temperature uniformity is  $\pm 5^{\circ}$ C with the setting temperature of -150°C



### Safe, Secure and Reliable

Large adjustable feet,

easy to level

The standard ambient temperature ranges from  $10^{\circ}\text{C}$  to  $32^{\circ}\text{C}$ . The pressure state of the system can be automatically adjusted by the pressure controller to prevent the pressure from being too high to effect the freezer operation. Multiple alarms, including high and low temperature, power failure, door ajar, hot condenser, low battery, sensor error, and high ambient temperature.



### Low noise

Noise-reduction features and system ensure a low noise output of just  $55 \mathrm{dB}$ 



Easy to grasp, comfortable to use and

durable

Screwless design making it easy to remove and clean the filter



# Product Details (

### Microprocessor controller

Equipped with a microprocessor controller and a 10.1 inch LCD screen with display accuracy at  $0.1^{\circ}$ C to show the cabinet and ambient temperature, voltage and other data clearly. The temperature inside the cabinet is adjustable from -130°C to -150°C.

### Safe and secure

Integrated handle, equipped with key lock and padlock as standard with optional electromagnetic lock and finger-print lock, providing multiple safeguards for sample safety.

### Large capacity USB

Enables users to download historical temperature data (up to 10 years) for compliance and auditing purposes.

### Backup power, extended standby

Equipped as standard with two lithium batteries which allows extended information/data availability, even after power cutoff.

### Multiple alarms

Including high and low temperature alarm, sensor error, hot condenser, power failure, low battery, door ajar, high ambient temperature and other alarm functions.

### Superior insulation performance

The VIP and polyurethane foam (140mm) cabinet design, multiple door seals, two inner lids to prevent cold loss, delivers excellent thermal efficiencies.

### · Compatible with freezer racks design

The internal height of the compartment means that various racks can be used for storage for flexibility.

### Networking functions

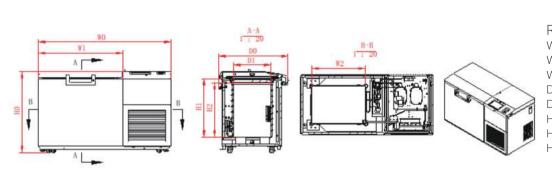
A standard RS485 port is configured to be connected to the monitoring software.

### Anti-defrost design

Built-in halo heater reduces frost build-up.

## **Product Dimension Drawings**





Remark:

W0-Total Width

W1-Cabinet Width

W2-Inner Cabinet Effective Width

D0-Total Depth

D1-Inner Cabinet Effective Depth

H0-Total Height

H1-Inner Cabinet Height

H2-Inner Cabinet Effective Height

Model Code	WO	W1	W2	НО	H1	H2	D0	D1
DW-150W209	1650mm	1050mm	667mm	1010mm	727mm	677mm	860mm	462mm



Model	DW-150W209					
	Cabinet type	Chest				
	Climate class	N				
Technical Data	Cooling type	Direct cooling				
	Defrost mode	Manual				
	Refrigerant	HC				
	Sound level (dB(A))	55				
	Cooling performance (°C)	-150				
Performance	Temperature range (°C)	-130 ~-150				
Cambust	Controller	Microprocessor				
Control	Display	LCD				
	Power supply (V/Hz)	220~240/50				
Electrical Data	Power (W)	1600				
	Max power draw (W)	1750				
	Electrical current (A)	10				
	Capacity (L/Cu.Ft)	209/7.4				
		kg	260/295			
	Net/gross weight (approx)	lbs	573.2/650.4			
		mm	667*462*677			
Dimensions	Interior dimensions (W*D*H)	in	26.3*18.2*26.7			
Dimensions		mm	1650*860*1010			
	Exterior dimensions (W*D*H)	in	65.0*33.9*39.8			
		mm	1810*940*1190			
	Packing dimensions (W*D*H)	in	71.3*37.0*46.9			
	Container load (20'/40'/40'H)	6/13/13				
	High/Low temperature	Y				
Functions	Hot condenser	Y				
	Power failure	Y				
	High/Low voltage	Y				
	Sensor error	Y				
	Low battery	Y				
	High ambient temperature	Y				
	Door ajar	Y				
	Start-up delay	Y				
	Caster	Y				
Accessories	Foot	Y				
	Porthole	Y/1				
	Inner doors	-/2				
	USB interface	Y				
	Remote alarm	Y				
	5V power supply port		Y			
	Temperature chart recorder		 Optional			
	RS485 port		У			
	LN2 backup system	Optional				
	Freezing rack	DCJ-10-A (SUS304), Quantity: 12 DCJ-12-A (SUS304), Quantity: 12				
Certification	CE	Y				

 $<sup>\</sup>hbox{^*Haier Biomedical reserves the right to change products and specifications without prior notice.}$