

# -86°C Ultra-low Temperature Freezer

*Targeted Refrigeration • Fast Refrigeration  
Energy-saving & Environmentally Friendly  
Awarded with the Second Prize under State  
Technological Invention Award*



## DW-HL218



### Precise Temperature Control and Safe Storage

Microprocessor-based temperature controller, -40°C~ -86°C can be set freely with display accuracy at 0.1°C.



### Visual & Audio Alarm system

Multiple alarm functions, such as high temperature/low temperature alarm, door ajar alarm, power failure alarm, sensor failure alarm, low battery alarm etc, alarm of poor heat dissipation of condenser and system failure alarm, can improve safety of storage.



### Human-oriented

The rotating handle facilitates door opening;  
The two-door design including the inner door and the outer door can lock cool air inside the cabinet and ensure thermal insulation for along period.





### High-precision Temperature Control

- Digital temperature display, simultaneously display the chamber temperature, power supply voltage, ambient temperature and other parameters etc. The running status is clearly displayed;
- The high-precision microcomputer temperature control system and platinum resistor temperature sensors enable users to set temperature inside the cabinet within a range from -40°C to -86°C.



### Refrigeration System

- The imported high-efficiency compressor and EBM fan are energy-saving and highly efficient;
- The large finned condenser with a space between fins  $\leq 2\text{mm}$ , providing effective heat dissipation.



### Supplies for Cryopreservation

Freezer racks/boxes for cryopreservation are optional.



### Thermal Insulation System

- The insulated foamed outer door with seal design prevents loss of cooling capacity effectively;
- The six sides of the cabinet are made from high performance vacuum insulation material, greatly improving thermal insulation performance.



### Security System

- The perfect audible & visual alarm system: high/low temperature, sensor failure, door ajar, power failure low battery etc;
- The turn-on delay and stopping interval protection can ensure reliable operation;
- The keyboard lock and password protection can prevent any adjustment of operation without permission.



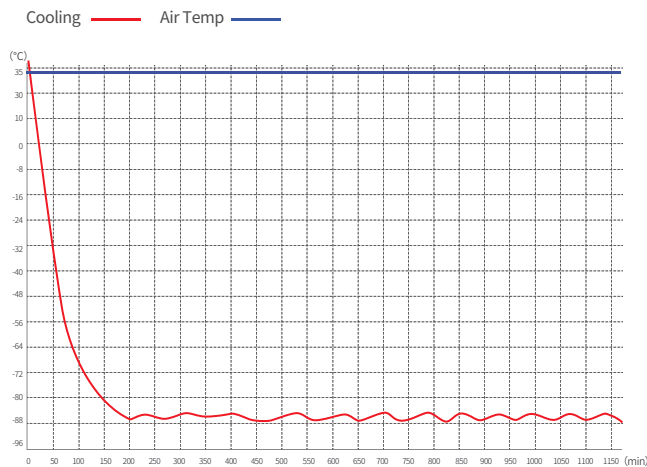
### Human-oriented

- The door with new-type assisting door handle to be opened easily;
- Door handle with lock for safety operation;
- SUS304 interior, low temperature resistance anti-corrosion for long service life and easy cleaning;
- Universal wheels easy for movement and fixation.

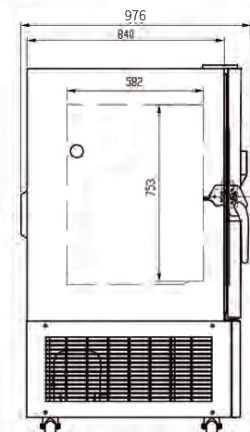
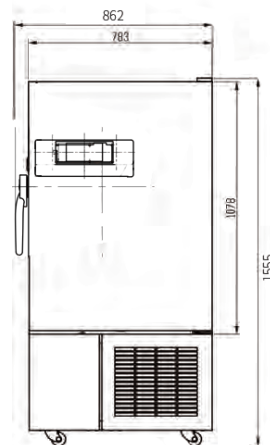
## Scope of Application

Suitable for use in blood banks, hospitals, health and disease prevention systems, research institutions, colleges & universities, the electronic industry, biological engineering, laboratories in colleges & universities, military enterprises, deep-sea fishing companies, etc.

## Performance Data / Cooling Curve



## External Dimension



## Specification Chart

<b>-86°C Ultra-low Temperature Freezer</b>	
<b>Model</b>	DW-HL218
<b>Cabinet Type</b>	Upright
<b>Capacity(L)</b>	218
<b>Internal Size(W*D*H)mm</b>	470*582*768
<b>External Size(W*D*H)mm</b>	862*976*1555
<b>Package Size(W*D*H)mm</b>	983*1073*1741
<b>NW/GW(Kgs)</b>	218/255
<b>Performance</b>	
<b>Temperature Range</b>	-40~-86°C
<b>Ambient Temperature</b>	16-32°C
<b>Cooling Performance</b>	-86 °C
<b>Climate Class</b>	N
<b>Controller</b>	Microprocessor
<b>Display</b>	Digital display
<b>Refrigeration</b>	
<b>Compressor</b>	1pc
<b>Cooling Method</b>	Direct cooling
<b>Defrost Mode</b>	Manual
<b>Refrigerant</b>	HC
<b>Insulation Thickness(mm)</b>	155
<b>Construction</b>	
<b>External Material</b>	High quality steel plates with spraying
<b>Inner Material</b>	Stainless steel
<b>Shelves</b>	1(stainless steel)
<b>Door Lock with Key</b>	Yes
<b>Padlock</b>	Yes
<b>Access Port</b>	1pc. Ø 40 mm
<b>Casters</b>	4
<b>Data Logging/Interval/Recording Time</b>	USB/Record every 10 minutes / 12 months
<b>Backup Battery</b>	Yes
<b>Alarm</b>	
<b>FW bVsfgdW</b>	High/Low temperature,High ambient temperature
<b>7^WfdUS^</b>	Power failure , Low battery
<b>EkefW</b>	Sensor failure, Condenser overheating ,Door ajar,Built-in USB datalogger failure, Communication error
<b>Electrical</b>	
<b>Power Supply(V/HZ)</b>	220-240~/50
<b>Power(W)</b>	990
<b>Power Consumption(KWh/24h)</b>	8.32
<b>Rated Current(A)</b>	6.53
<b>Accessories</b>	
<b>Standard</b>	RS485,Remote alarm contact
<b>Options</b>	Chart recorder, CO <sub>2</sub> backup system, Printer

\*The model, parameters and performance specified in this brochure may be changed without prior notice because of product upgrading.

\*There may be differences between the product images shown in this brochure and the actual products. When you are buying any product, please check the actual product.