

# -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-HW138 / DW-HW328 / DW-HW668



### High-precision Temperature Control & Safe Storage

The high-precision microcomputer temperature control system and platinum resistor temperature sensors can realize more precise temperature control and enable users to set temperature inside the cabinet within a range from -10 to -86°C.



### Well-developed Audible & Visual Alarm System

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



### Refrigeration System

Environmentally-friendly Freon-free refrigerant and high-efficiency compressor supplied by an international famous brand ensure energy saving and high efficiency; The CFC-free Polyurethane foaming technology, the super-thick thermal insulation layer and VIP: Vacuum Insulation Panel can improve effect of thermal insulation to a large extent.



DW-HW138



DW-HW328



### 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.



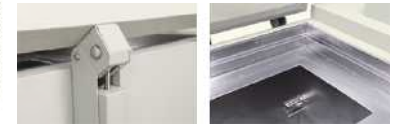
### Thermal Insulation System

- The two-layer heat insulating foamed door with inner and outer door seal and the insulation design of the outer door system with multiple patents can prevent loss of refrigerating capacity in an effective way;
- No CFC polyurethane foaming technology, super thick VIP insulation which greatly improves the insulation effect.



### Security System

- The well-developed security system with multiple audible & visual alarm functions: high/ low temperature alarm, door opening alarm, power outage alarm, abnormal voltage alarm, sensor failure alarm, low battery alarm, condenser poor heat dissipation alarm, system failure alarm;
- The turn-on delay and stopping interval protection function can ensure reliable operation;
- The keyboard lock function and password protection function can prevent any adjustment of operating parameters without permission;



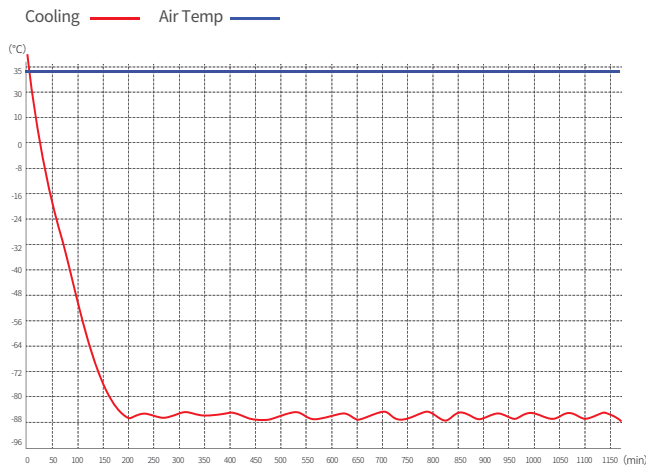
### Human-oriented

- 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.

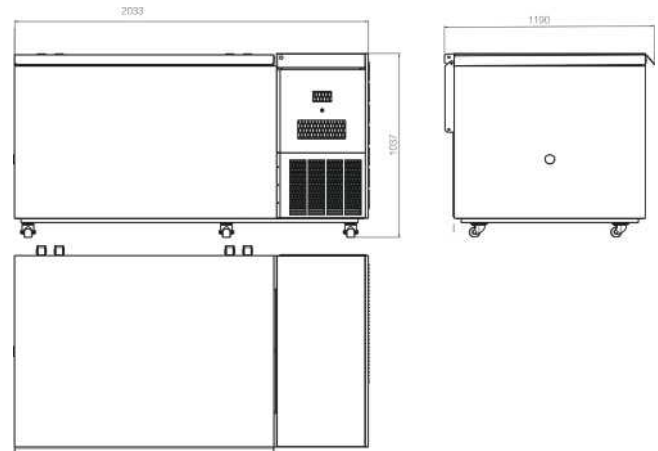
## Scope of Application

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 (DW-HW138)



## External Dimensions



## Specification Chart

<b>-86°C Ultra-low Temperature Freezer</b>			
<b>Model</b>	<b>DW-HW138</b>	<b>DW-HW328</b>	<b>DW-HW668</b>
<b>Cabinet Type</b>	Chest	Chest	Chest
<b>Capacity(L)</b>	138	328	668
<b>Internal Size(W*D*H)mm</b>	490*470*580	1200*470*570	1200*815*610
<b>External Size(W*D*H)mm</b>	1320*890*1030	2005*890*1009	2033*1190*1037
<b>Package Size(W*D*H)mm</b>	1470*990*1241	2150*960*1242	2145*1305*1234
<b>NW/GW(Kgs)</b>	200/231	280/344	352/438
<b>Performance</b>			
<b>Temperature Range</b>	-40~-86°C	-40~-86°C	-40~-86°C
<b>Ambient Temperature</b>	16-32°C	16-32°C	16-32°C
<b>Cooling Performance</b>	-86°C	-86°C	-86°C
<b>Climate Class</b>	N	N	N
<b>Controller</b>	Microprocessor	Microprocessor	Microprocessor
<b>Display</b>	Digital display	Digital display	Digital display
<b>Refrigeration</b>			
<b>Compressor</b>	1pc	1pc	2pcs
<b>Cooling Method</b>	Direct cooling	Direct cooling	Direct cooling
<b>Defrost Mode</b>	Manual	Manual	Manual
<b>Refrigerant</b>	Mixture gas	Mixture gas	Mixture gas
<b>Insulation Thickness(mm)</b>	155	130	135
<b>Construction</b>			
<b>External Material</b>	Steel plates with spraying	Steel plates with spraying	Steel plates with spraying
<b>Inner Material</b>	304 Stainless steel	304 Stainless steel	304 Stainless steel
<b>External Door</b>	1 (Steel plates with spraying)	1 (Steel plates with spraying)	1 (Steel plates with spraying)
<b>Door Lock with Key</b>	Yes	Yes	Yes
<b>Foaming Lid</b>	2	3	3
<b>Access Port</b>	1pcs. Ø 40 mm	1pcs. Ø 40 mm	1pcs. Ø 40 mm
<b>Casters</b>	4	6	6
<b>Data Logging/Interval/Recording Time</b>	Printer/Record every 20 minute / 7 days		
<b>Backup Battery</b>	Yes	Yes	Yes
<b>Alarm</b>			
<b>Temperature</b>	High/Low temperature,High ambient temperature		
<b>Electrical</b>	Power failure , Low battery		
<b>System</b>	Sensor error,System failure, Condenser cooling failure		
<b>Electrical</b>			
<b>Power Supply(V/HZ)</b>	230±10%/50	230±10%/50	230±10%/50
<b>Rated Power(W)</b>	1100	987	1950
<b>Input Power(W)</b>	1270	1050	1950
<b>Power Consumption(KWh/24h)</b>	5.6	8.7	13.4
<b>Rated Current(A)</b>	5.78	5.6	9.5
<b>Options Accessory</b>			
<b>System</b>	Chart recorder, CO2 backup system		

\*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.