-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 -40 to -86℃.

Well-developed Audible & Visual Alarm System

Multiple alarm functions, such as high temperature/low temperature alarm, power failure 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.
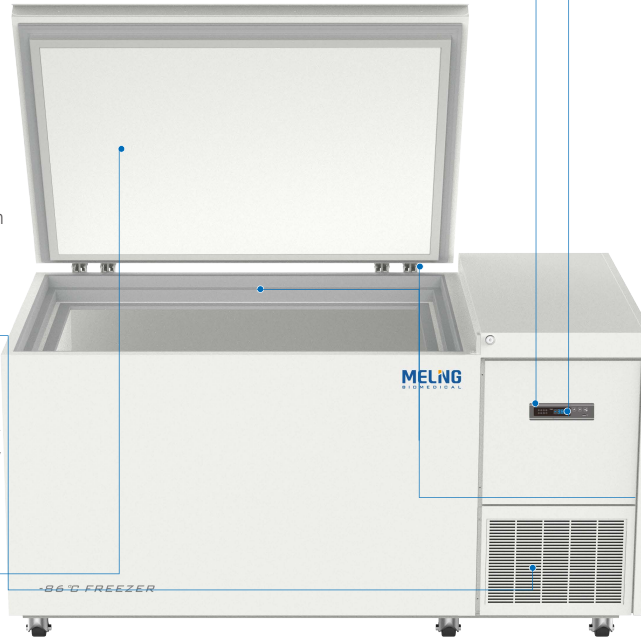
Refrigeration System

The imported high-efficiency compressor and EBM fan are energy-saving and highly efficient.
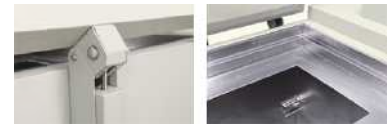
Thermal Insulation System

· 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 perfect audible & visual alarm system: high/low temperature, sensor failure, 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.
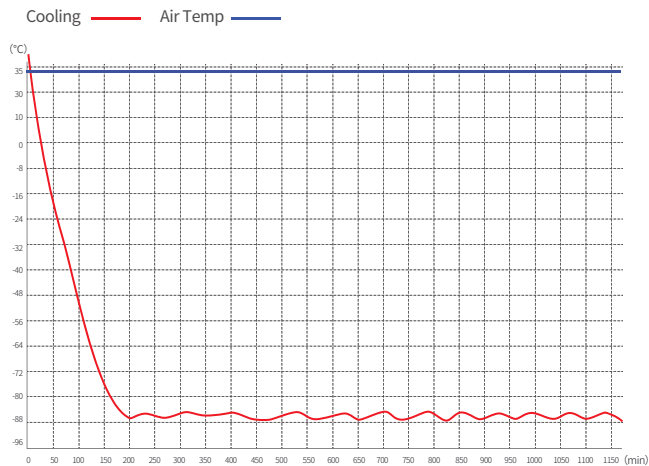
Human-oriented

· The door with new-type assisting door handle to be opened easily;

· Door handle with lock for safety operation;

· SUS interior, low temperature resistance anti-corrosion for long service life and easy cleaning;

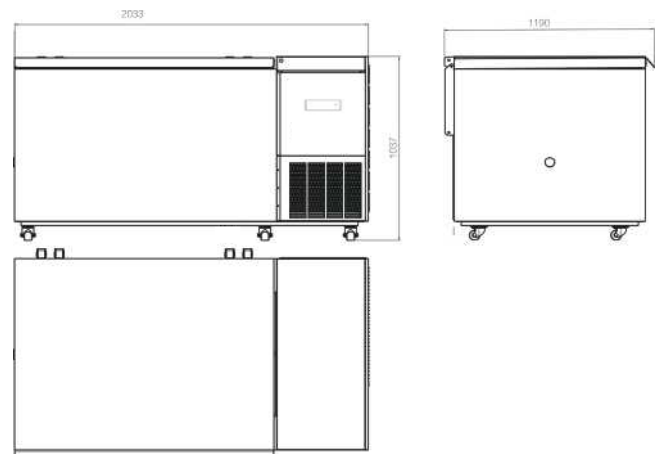· Universal wheels easy for movement and fixation.

✓ 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)

Cooling —— Air Temp ——

External Dimensions

Specification Chart

-86°C Ultra-low Temperature Freezer

Model	DW-HW138	DW-HW328	DW-HW668
Cabinet Type	Chest	Chest	Chest
Capacity(L)	138	328	668
Internal Size(W*D*H)mm	490*470*582	1200*470*582	1200*815*666
External Size(W*D*H)mm	1328*890*1025	2038*890*1025	2008*1180*1041
Package Size(W*D*H)mm	1470*990*1241	2193*1003*1256	2145*1305*1234
NW/GW(Kgs)	200/262	280/370	352/509
Performance			
Temperature Range	-40~-86°C	-40~-86°C	-40~-86°C
Ambient Temperature	16-32°C	16-32°C	16-32°C
Cooling Performance	-86°C	-86°C	-86°C
Climate Class	N	N	N
Controller	Microprocessor	Microprocessor	Microprocessor
Display	Digital display	Digital display	Digital display
Refrigeration			
Compressor	1pc	1pc	2pcs
Cooling Method	Direct cooling	Direct cooling	Direct cooling
Defrost Mode	Manual	Manual	Manual
Refrigerant	Mixture gas	Mixture gas	Mixture gas
Insulation Thickness(mm)	152	152	130
Construction			
External Material	Cold rolled steel sheet	Cold rolled steel sheet	Cold rolled steel sheet
Inner Material	Stainless steel	Stainless steel	Stainless steel
External Door	1 (Steel plate with spraying)	1 (Steel plate with spraying)	1 (Steel plate with spraying)
Door Lock with Key	Yes	Yes	Yes
Foaming Lid	2	3	3
Access Port	1pc. Ø 40 mm	1pc. Ø 40 mm	1pc. Ø 40 mm
Casters	4	6	6
Data Logging/Interval/Recording Time	USB/Record every 10 minutes / 2 years		
Backup Battery	Yes	Yes	Yes
Alarm			
Temperature	High/Low temperature,High ambient temperature		
Electrical	Power failure , Low battery		
System	Sensor failure, Condenser overheating, Built-in USB datalogger failure, Communication error		
Electrical			
Power Supply(V/HZ)	220-240~/50	220-240~/50	220-240~/50
Power(W)	1100	1042	1903
Power Consumption(KWh/24h)	6.49	7.89	16.08
Rated Current(A)	5.78	5.6	9.5
Accessories			
Standard	Remote alarm contact,RS485		
Options	CO_2 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.