-86°C Ultra-low Temperature Freezer

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

MELING BIOMEDICAL

-86°C FREEZER

DW - HL678SA

CE

🎯 Targeted Refrigeration
The new generation of ultra-low temperature refrigeration system can ensure fast refrigeration and was awarded with the Second Prize under State Technological Invention Award.

🌿 Five Magic Weapons for Energy Saving
Imported high-efficiency compressor + separated evaporator + composite heat exchanger + optimized fractional condensation & separation system + high-efficiency thermal insulation system can save energy and reduce power consumption of the freezer by 40%.

🔊 Low Noise Design
Low-noise direct cooling circuit + suspension frame & sound absorbing compartment & low-noise fan can reduce noise generated by the entire freezer to the largest extent.

👥 Three-dimensional Thermal Insulation
The six sides of the cabinet are made from high-efficiency VIP vacuum thermal insulation plate, and the thermal insulation design of the inner door made from foaming material and the outer door system was awarded with multiple patents, which can improve the thermal insulation performance of the freezer.

📶 Optional Accessory(WiFi/Bluetooth printer/Mechanical lock/Swipe card/Fingerprint)
Connect WiFi to upload data to the cloud space, monitor the device, check the status of the refrigerator faster, and ensure the safety of the samples;
Optional Bluetooth printer, real-time export temperature data, temperature graph, setting operation and other data, to understand the freezer operating status;
Optional functions such as card unlocking, fingerprint unlocking, and facial recognition unlocking are available to facilitate quick access to samples.

7" HD Intelligent Screen Control System

· 7-inch HD intelligent display touch screen, user-friendly interface and more accurate temperature control, with Bluetooth, WiFi and other functions, more convenient operation and more comprehensive functions;
· Can add multiple user accounts to log in and record usage/operation records;
· The high-precision microcomputer control system and platinum resistor sensors enable users to set temperature inside the cabinet within a range from -40 to -86°C;
· Optional functions such as card unlocking, fingerprint unlocking, and facial recognition unlocking are available to facilitate quick access to samples.

Security System

· The perfect audible & visual alarm system : high and low temperature ,sensor failure ,power failure ,low battery ,door ajar ,main board communication error, high ambient temperature etc;
· Equipped with alarm self-recovery function, it reminds users of unhandled alarm problems in freezer many times;
· The compressor start delay and stopping interval protection can ensure reliable operation;
· Both the touch screen controller and key-board controller have password protection which can prevent any adjustment of operation without permission.

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≤2mm, providing effective heat dissipation;
· DW-HL678SA with twin- compressor, if one is damaged, the other one could keep the temperature at -70°C stably;
· Standard with VIP board for high efficiency cooling performance. Door with hot gas pipe surrounding for defrost.
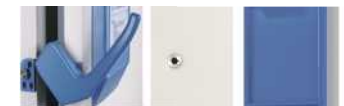
Data Storage

The temperature data recorded by the system can be exported, the operating data of the system settings, the alarm data, and the temperature data can be recorded in 5 minutes, and the data can be recorded for up to 10 years, which can effectively record the running status of the product for you for a long time.

Thermal Insulation System

· 4-layer heat insulating foamed doors 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;
· The 6 sides of the cabinet are made from high-performance VIP vacuum insulation material, improving thermal insulation performance to a large extent.
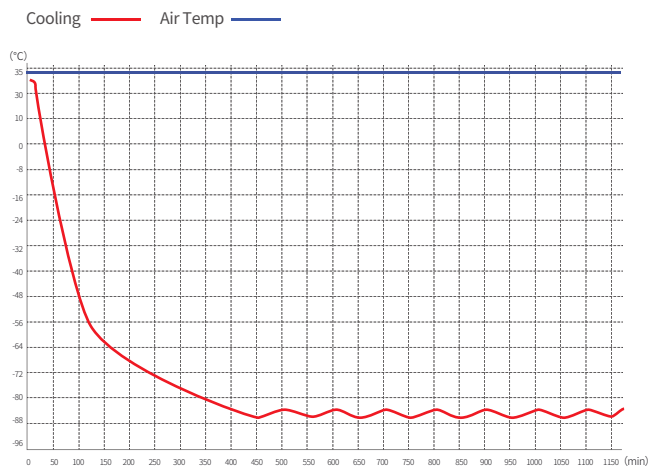
Supplies for Cryopreservation
Freezer racks/boxes for cryopreservation are optional.

Remote alarm contact，RS485
Equipped with RS485 and remote alarm interface to realize remote observation of freezer operation status, real-time reception of product operation information, and ensure the storage safety of samples.

Human-oriented

· The new designed assisting handle and vacuum release port let the freezer be operated single-handed to open and close the outer door;
· The newly added file box makes recording easier and more convenient;
· The liner made from Galvanized steel sheet/ Stainless steel for medical use is low- temperature tolerant and corrosion-resistant, which has a long service life and is easy to clean;
· The universal casters and leveling feet design are more convenient for movement and fixation.
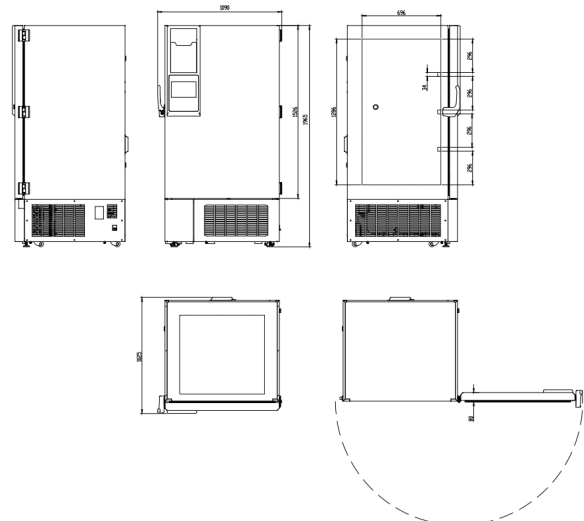
✓ Scope of Application

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

Cooling ——   Air Temp ——

〜 External Dimension

⚞ Specification Chart

-86°C Ultra-low Temperature Freezer	
Model	DW-HL678SA
Cabinet Type	Upright
Capacity(L)	678
Internal Size(W*D*H)mm	750*696*1286
External Size(W*D*H)mm	1090*1025*1955
Package Size(W*D*H)mm	1203*1155*2171
NW/GW(Kgs)	330/413
Performance	
Temperature Range	-40～-86°C
Ambient Temperature	16-32°C
Cooling Performance	-86°C
Climate Class	N
Controller	Microprocessor
Display	HD Intelligent Touch Screen
Refrigeration	
Compressor	2pcs
Cooling Method	Direct Cooling
Defrost Mode	Manual
Refrigerant	Mixture gas
Insulation Thickness(mm)	130
Construction	
External Material	Cold rolled steel sheet
Inner Material	Galvanized steel sheet/Stainless steel
Shelves	3(stainless steel)
Door Lock with Key	Yes
Padlock	Yes
Access Port	3pcs. Ø 25 mm
Casters	4+(2 leveling feet)
Data Logging/Interval/Quantity	USB/Record every 5 minutes / 10 years
Backup Battery	Yes
Alarm	
Temperature	High/Low temperature,High ambient temperature
Electrical	Power failure,Low battery
System	Sensor failure,Main board communication error, Condenser overheating ,Door ajar
Electrical	
Power Supply(V/HZ)	230~/50
Rated Power(W)	1680
Power Consumption(KWh/24h)	13
Rated Current(A)	8.9
Accessories	
Standard	Remote alarm contact,RS485
Options	Chart recorder, 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.