-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

-86°C FREEZER

DW - HL1008S

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%.

The Largest Volume & Widest Temperature Span around the World
Based on the characteristics of biological sample storage, space design of the refrigerator is optimized to accommodate up to 77000 standard 2ml-vials for cryopreservation (DW-HL1008), which was specially designed for use in a biobank.

Three-dimensional Thermal Insulation
The 6 sides of the cabinet are made from high-efficiency VIP: Vacuum Insulation Panel, 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.

Energy-saving & Environmentally Friendly
·Awarded with China Certificate for Energy Conservation Product, certificate numbers: CQC18702198410（DW-HL1008）；
·Awarded with China Certificate for Ecolabelling Products, certificate numbers: CQC18702198411（DW-HL1008）.
·Awarded with America UL "Energy star" certificate of Conformance, certificate numbers:4789097658（DW-HL1008）.

7' LED Screen Control System
· The 7' LED touch screen has clear display, user-friendly interface and more accurate temperature control, which can indicate operating status clearly;
· 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.
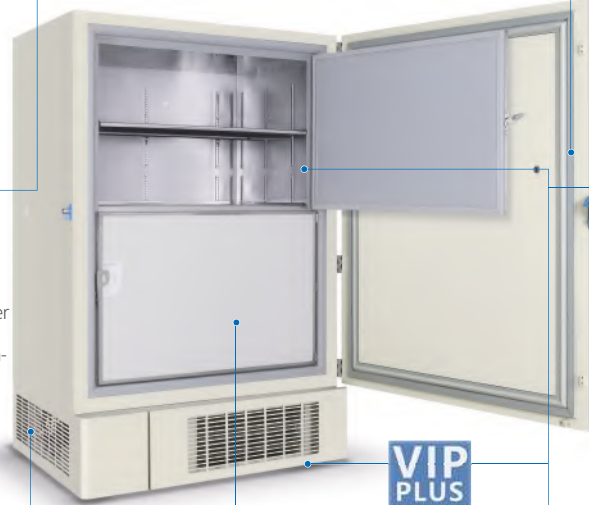
Security System
· The perfect audible & visual alarm system : high and low temperature ,senor error ,power failure ,low battery ,door ajar ,main board communication error high ambient temperature ,samples out of date notification etc;
· The compressor start delay and stopping interval protection can ensure reliable operation;
· Both the touch screen controller and keyboard controller have password protection which can prevent any adjustment of operatiion 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 affective heat dissipation.
· DW-HL678S/778S/858S/1008S with twin-compressor, if one is damaged, the other one could keep the temperture at -70°C stably.
· Standard with VIP board for high efficiency cooling performance. Door with hot gas pipe surrounding for defrost

Supplies for Cryopreservation
Inventory racks/boxes for cryopreservation are optional.

Alarm Upgrading
USB data storage function: can store relevant operating data, which can be downloaded and checked, ensuring improved security and reliability of sample storage.

Human-oriented
· 2-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;
· The 6 sides of the cabinet are made from high-performance VIP vacuum insulation material, improving thermal insulation performance to a large extent.
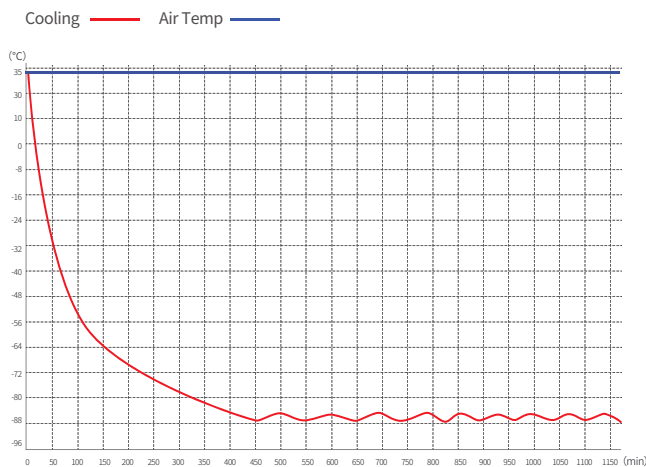
Human-oriented
· The new designed assisting handle and vaccum release port let the freezer be operated single-handed to open and close the outer door.
· The newly added file box makes recording easier and more convenient.
· The liner made from High quality galvanized steel sheet for medical use is low- temperature tolerant and corrosion-resistant, which has a long service life and is easy to clean;
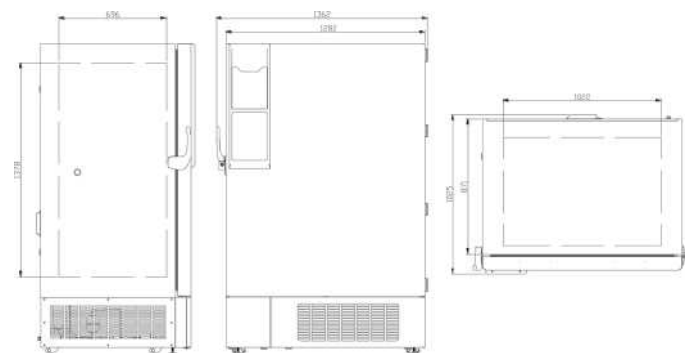· The universal casters and leveling feet design are more convenient for movement and fixation.

VIP PLUS vacuum insulation

✓ 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 ——

Eternal Dimension

Specification Chart

-86℃ Ultra-low Temperature Freezer

Model	DW-HL1008S
Cabinet Type	Upright
Capacity(L)	1008
Internal Size(W*D*H)mm	1022*696*1378
External Size(W*D*H)mm	1362*1025*2002
Package Size(W*D*H)mm	1473*1155*2176
NW/GW(Kgs)	430/500

Performance

Temperature Range	-40～-86℃
Ambient Temperature	16-32℃
Cooling Performance	-86℃
Climate class	N
Controller	Microprocessor
Display	Touch screen

Refrigeration

Compressor	2pcs
Cooling Method	Direct Cooling
Defrost Mode	Manual
Refrigerant	Mixture gas
Insulation Thickness(mm)	130

Construction

External Material	High quality steel plates with spraying
Inner Material	Galvanized steel sheet
Shelves	3(stainless steel), Optional increase the number of shelves
Door Lock with Key	Yes
External Lock	Yes
Access Port	3 pcs. Ø 25 mm
Casters	4+(2 leveling feet)
Data Logging/Interval/Recording Time	USB/Record every 1 minute / 365 days
Backup Battery	Yes

Alarm

Temperature	High/Low temperature,High ambient temperature
Electrical	Power failure
System	Sensor error,Built-in datalogger USB failure ,Main board communication error ，Condenser cooling failure,Door ajar,Sapmles out of date,System failure

Electrical

Power Supply(V/HZ)	230±10%/50
Rated Power(W)	2000
Input Power(W)	2600
Power Consumption(KWh/24h)	19.15
Rated Current(A)	11.8

Options Accessory

System	Chart recorder, CO2 backup system, Printer,Remote alarm contact
Freezer Rack	ZKL304-552B-CT:14+ / ZKL304-652B-CT:14 / ZKL304-552B-FG:14 / ZKL304-652B-FG:14

*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.