





-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-HL100

-  **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**
High/low temperature alarm, power failure alarm, low battery alarm, door ajar alarm, high ambient temperature alarm, communication failure alarm etc.
-  **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.
-  **Energy-saving & Environmentally Friendly**
Awarded with China Certificate for Energy Conservation Product, certificate numbers: CQC18702198375
Awarded with China Certificate for Ecolabelling Products, certificate numbers: CQC18702198376



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.



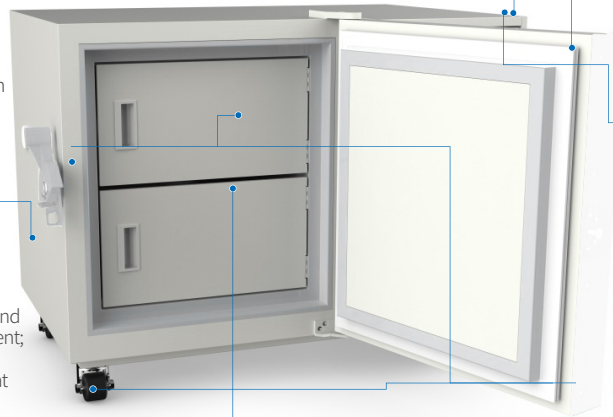
Refrigeration System

- 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.
- Standard with VIP board for high efficiency cooling performance. Door with hot gas pipe surrounding for defrost.



Supplies for Cryopreservation

Freezer racks/boxes for cryopreservation are optional.



Thermal Insulation System

- The two-layer insulated foamed door with double seal and the outdoor insulation design with multiple patents can prevent 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;



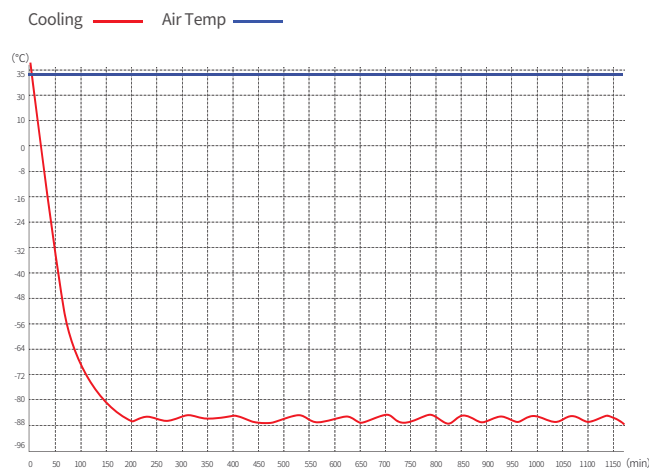
Human-oriented

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

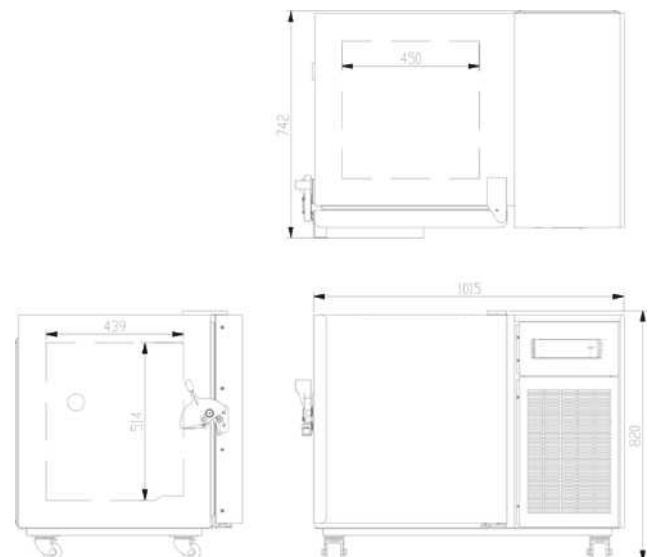
✓ Scope of Application

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



| -86°C Ultra-low Temperature Freezer | |
|---|--|
| Model | DW-HL100 |
| Cabinet Type | Upright |
| Capacity(L) | 100 |
| Internal Size(W*D*H)mm | 450*439*514 |
| External Size(W*D*H)mm | 1066*742*820 |
| Package Size(W*D*H)mm | 1200*863*991 |
| NW/GW(Kgs) | 145/227(wood packing) |
| Performance | |
| Temperature Range | -40~-86°C |
| Ambient Temperature | 16-32°C |
| Cooling Performance | -86°C |
| Climate Class | N |
| Controller | Microprocessor |
| Display | Digital display |
| Refrigeration | |
| Compressor | 1pc |
| Cooling Method | Direct cooling |
| Defrost Mode | Manual |
| Refrigerant | Mixture gas |
| Insulation Thickness(mm) | 90, R:115 |
| Construction | |
| External Material | Steel plates with spraying |
| Inner Material | 304 Stainless steel |
| Shelves | 1(stainless steel) |
| Door Lock with Key | Yes |
| External Lock | Yes |
| Access Port | 1pc. Ø 25 mm |
| Casters | 4 |
| Data Logging/Interval/Recording Time | USB/Record every 10 minute / 2 years |
| Backup Battery | Yes |
| Alarm | |
| Temperature | High/Low temperature,High ambient temperature |
| Electrical | Power failure , Low battery |
| System | Sensor failure, Condenser overheating alarm,Door ajar, built-in datalogger USB failure, Main board communication error |
| Electrical | |
| Power Supply(V/HZ) | 220-240~/50 |
| Power(W) | 900 |
| Power Consumption(KWh/24h) | 6.78 |
| Rated Current(A) | 4.75 |
| Accessory | |
| Standard | RS485,Remote alarm contact |
| Options | Chart recorder, CO2 backup system, Printer,RS232 |

*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.

JoJo Life Science UG (haftungsbeschränkt) – Biberstraße 32 - 89537 Giengen
 Tel. 07322-9111329 - Mail: info@jojo-ls.de - Web: www.jojo-ls.de