

Personal -86°C ULT Freezer



DW-86L100J

Typical Installation and Application

Suitable for clinical, medical, scientific research, quarantine and other departments to store items under low temperature conditions. Applicable for universities, hospitals, disease prevention and control centres, blood stations, scientific research institutes, electronics and chemical enterprise laboratories and biomedical engineering research institutes. For storage of biological products and sample biological samples such as red and white blood cells, viruses, bone and bacteria. Also used for electronic devices and other materials used for cytogenic tests.



Energy Efficient, Safe and Reliable

High efficiency HC refrigeration system, optimised for energy efficiency delivering a power consumption figure of just 5.5kW/24hr.



Personal ULT Storage

810mm cabinet height makes it easy to place on or under bench, saving storage space. Stackable design.



Ergonomic design

Ergonomic handle design ensures easy one-hand door opening.



Low noise

Optimized noise reduction cabinet and system design, emits sound level of only 46.8dB.



Product Features



Haier -86°C Personal ULT Freezer

Energy-efficient HC refrigeration design. Secure and reliable. Intelligent Control.

VIP insulation and multilayered sealing design
70mm insulating layer with 25mm VIP and 4 layers of gasket improves energy efficiency and reduces heat loss to deliver excellent warm up times in event of power failure.

Optional IoT Module
Real time monitoring of cabinet temperature, temperature setting, high and low temperature alarm value, temperature curve, alarm log and event log.

- User-settable parameters such as set point and alarms.
- Real-time cabinet temperature display, alarm information, power supply and compressor start/stop state.
- Standard USB port capable of storing >15 years of operating data for compliance.

Ergonomic design for easy door opening and closing. Lockable and equipped with 4 keys as standard with the ability to add a padlock for extra security when required.

Filter is easy to remove and clean without the need for tools.

4 casters + 2-foot locks, easy to move, lock and level.

Double stainless-steel inner doors to prevent cooling loss when opening the outer door, easy to clean.



Microprocessor control system

- Microcomputer electronic thermostat, LED temperature display, display precision 0.1 °C, adjustable cabinet temperature set point -40 °C ~ -86 °C.
- Cabinet temperature/voltage/ambient temperature checking are available.
- Multiple alarm functions: high temperature alarm, low temperature alarm, sensor fault alarm, power failure alarm, low battery power alarm, open door alarm and high ambient temperature alert.
- Sound and light alarm mode, attachable to remote alarm interface.
- Battery backup alarm function operates continuously for >24hr in the event of a power outage.
- Standard configuration: RS485 port and USB interface.
- Standard 5V power supply available for test equipment.
- Optional IoT module.



Superior thermal insulation performance

70mm super thick insulation layer design, aviation vacuum insulation material VIP, thickness of 25 mm or more, 4 layers of silicone seal, superior thermal insulation and energy saving effect.



Porthole

Portholes as standard, allows for independent testing of cabinet temperature.



Security lock

Standard door lock and padlock to ensure sample security and prevent unauthorised access.



USB data storage

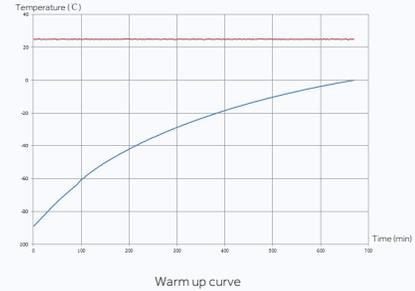
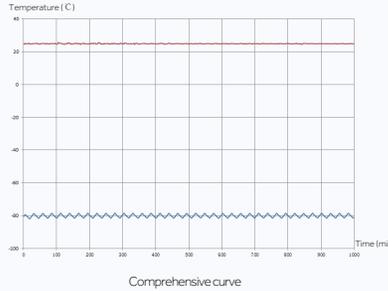
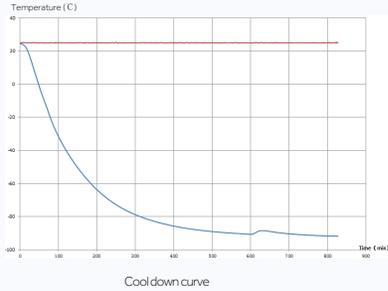
Capable of storing more than 15 years of data.



Typical Performance Characteristics in 25 °C Ambient: DW-86L100J

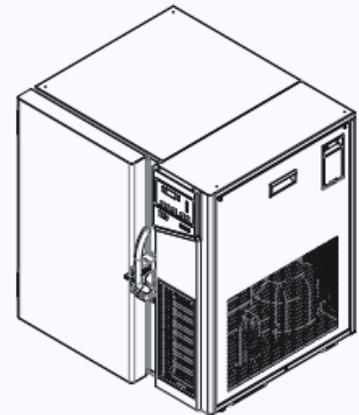
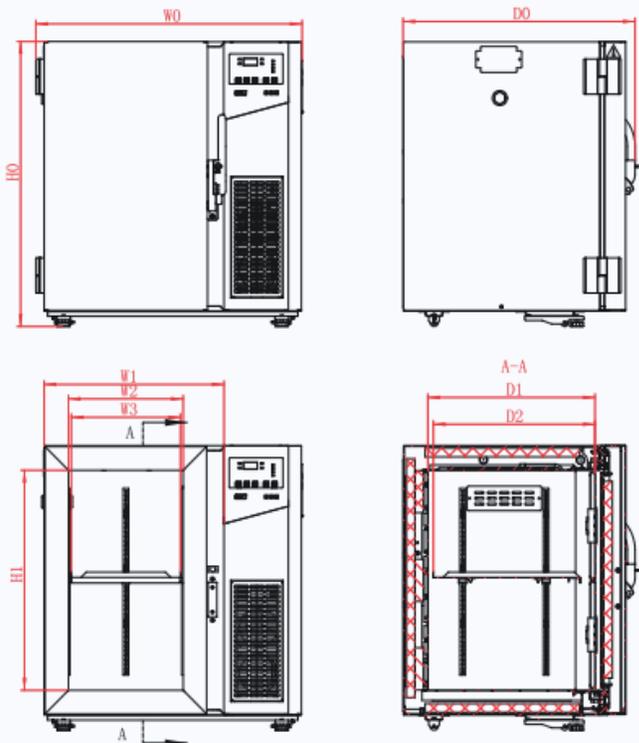


— Ambient Temp.
— Cabinet Temp.



| | | |
|---|-------------------------------|--|
| Cooling Time(ambient temperature reducing to -80 °C) | Temperature Uniformity | Time for inside temperature to rise back from -80 °C to -50 °C naturally at ambient 25 °C |
| 310min | ±4°C | 120min |

Product Dimension Drawing



Parameters description:

- W0: Overall width
- W1: External width
- W2: Internal width
- W3: Shelf width (efficient width for cryogenic vial storage)
- D0: Overall depth
- D1: Internal depth
- D2: Shelf depth (efficient depth for cryogenic vial storage)
- H0: Overall height
- H1: Internal height

| CODE MODEL | W0 | W1 | W2 | W3 | D0 | D1 | D2 | H0 | H1 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| DW-86L100J | 770mm | 520mm | 330mm | 314mm | 660mm | 481mm | 465mm | 810mm | 630mm |

Specifications



| Model | | DW-86L100J | |
|------------------------------|---------------------------|-----------------|-------------|
| Technical Data | Cabinet Type | Upright | |
| | Climate Class | N | |
| | Cooling Type | Air cooling | |
| | Defrost Mode | Manual | |
| | Refrigerant | HC | |
| | Noise((dB(A)) | 46.8 | |
| Performance | Cooling Performance(C) | -86 | |
| | Temp Range(C) | -40--86 C | |
| Control | Controller | Microprocessor | |
| | Display | LED | |
| Electrical Data | Power Supply(V/Hz) | 220~240/50 | |
| | Power(W) | 680W(220V/50Hz) | |
| | Electrical Current(A) | 3A(220V/50Hz) | |
| | Capacity(L/Cu.Ft) | 100L | |
| Dimensions | Net/Gross Weight(approx) | (kg) | 108/132 |
| | | (lbs) | 238/291 |
| | Interior Dimension(W*D*H) | (mm) | 330×481×630 |
| | | (in) | 13×19×25 |
| | Exterior Dimension(W*D*H) | (mm) | 770×660×810 |
| | | (in) | 30×26×32 |
| | Packing Dimension(W*D*H) | (mm) | 830×710×970 |
| | | (in) | 33×28×38.5 |
| Container Load(20'/40'/40'H) | | 44×88×88 | |
| Functions | Remote Alarm | Y | |
| | High/Low Temp | Y | |
| | Hot Condenser | Y | |
| | Power Failure | Y | |
| | Sensor Error | Y | |
| | Low Battery | Y | |
| | High Ambient Temp | Y | |
| | Door Ajar | Y | |
| Accessories | Caster | Y | |
| | Foot | 4 | |
| | Porthole | 1 | |
| | Shelves | 1 | |
| | USB Interface | Y | |
| | 5V Power Supply Port | Y | |
| | RS485 Port | Y | |
| Other | Certificate | CE | |



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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

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