

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 cryogenic 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.



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

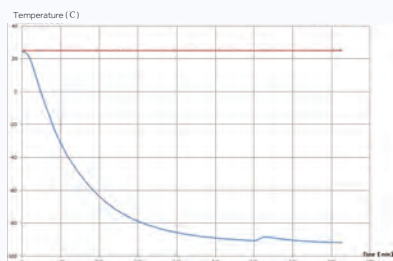
Capable of storing more than 15 years of data.



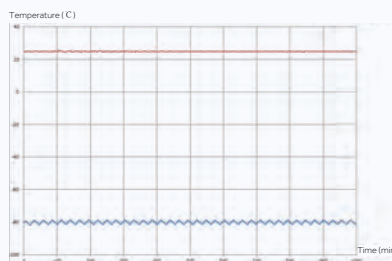
Typical Performance Characteristics in 25 °C Ambient: DW-86L100J



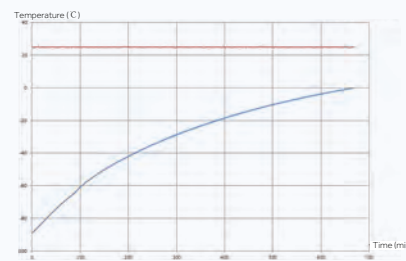
— Ambient Temp.
— Cabinet Temp.



Cool down curve



Comprehensive curve



Warm up curve

**Cooling Time(ambient temperature
reducing to -80 °C)**

310min

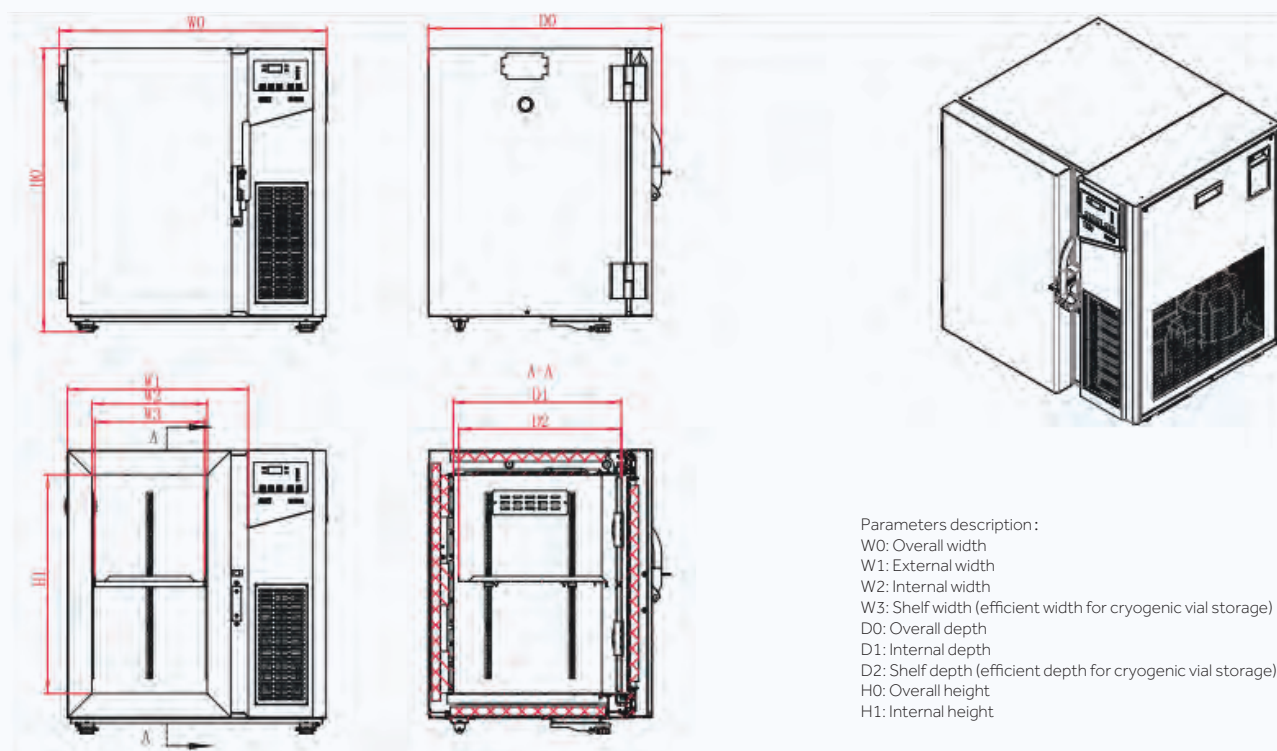
Temperature Uniformity

±4°C

**Time for inside temperature to rise back
from -80 °C to -50 °C naturally at ambient 25 °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
Functions	Container Load(20'/40'/40'H)		44×88×88
	Remote Alarm		Y
	High/Low Temp		Y
	Hot Condenser		Y
	Power Failure		Y
	Sensor Error		Y
	Low Battery		Y
	High Ambient Temp		Y
Accessories	Door Ajar		Y
	Caster		Y
	Foot		4
	Porthole		1
	Shelves		1
	USB Interface		Y
	5V Power Supply Port		Y
	RS485 Port		Y
Other	Certificate		CE