

-86°C Ultra-low Temperature Freezer

Intelligent Cooling . Speed Cooling . Energy Saving



DW-HL50 (Smart Freezer)



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.



Refrigeration System

Applied Secop (Danfoss) compressor, 1 unit to reduce noise and improve the cooling temperature come to -86°C stably;

Fan electromotor with internationally famous of Germany EBM, energy saving, high efficiency, and low noise.



Energy Saving

Equipped with DC/DC power management module, optimized energy saving;

High-precision voltage control, stabilizing the voltage and freezer performance reduce the redundancy heat, completely eradicate overheating risk.





High-precision Temperature Control

- Digital temperature display; display inner temperature, power and voltage, ambient temperature and more at the same time.
- 2 inches high-brightness digital temperature display, microprocessor-based temperature controller, -40°C~86°C can be set freely.



Refrigeration System

- Applied Secop (Primary Danfoss) compressor, 1 unit to reduce noise and improve the cooling performance;
- Gasket surrounded with hot gas pipe for better defrost;
- With 110mm foaming insulation including Vacuum Isolated Panel for high-efficiency cooling performance.



Insulation System

- 110mm foaming insulation with VIP board for better temperature performance;
- Perfectly lock air conditioning, effectively prevent the loss of cooling capacity.



Alarm system

- The perfect audible & visual alarm system: High/low temperature, sensor failure, power failure, low battery, door ajar, high ambient temperature, communication failure etc;
- Startup delay and stop interval protection function to ensure reliable operation;
- Keyboard lock and password protection function to prevent arbitrary adjustment of operating parameters;
- Safety door lock design, ensure safety sample storage.



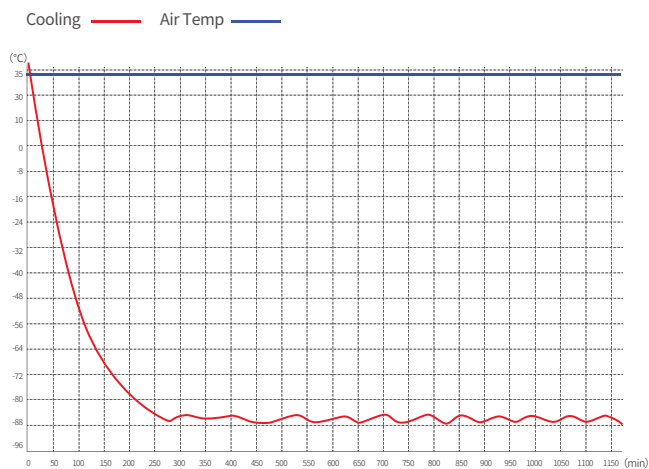
Human-oriented

- 4 universal casters for easy handling;
- Front opening lockable door with full height handle, with vacuum release port for easy open during cooling operation.

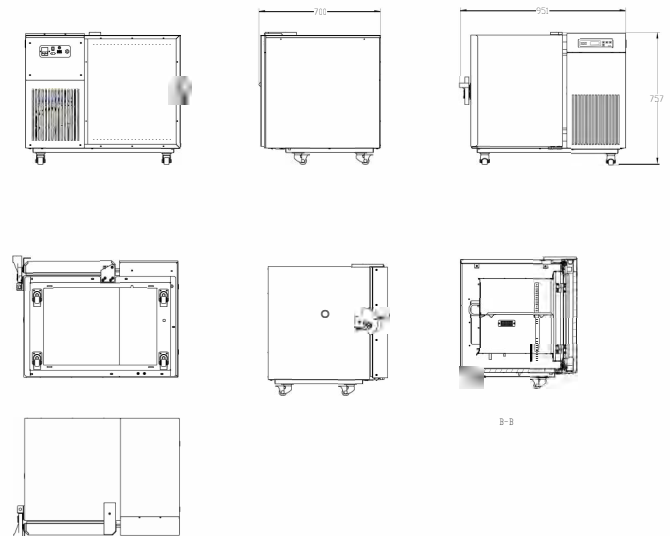
✓ Scope of Application

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-HL50
Cabinet Type	Upright
Capacity(L)	50
Internal Size(W*D*H)mm	305*425*430
External Size(W*D*H)mm	951*700*757
Package Size(W*D*H)mm	1110*840*935
NW/GW(Kgs)	104/156(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	HC
Insulation Thickness(mm)	110
Construction	
External Material	Cold rolled steel sheet
Inner Material	Stainless steel
Shelves	1(stainless steel)
Door Lock with key	Yes
Padlock	Yes
Access Port	1pc. Ø 25 mm
Casters	4
Data Logging/Interval/Recording Time	USB/Record every 10 minutes / 2 years
Backup Battery	Yes
Alarm	
Temperature	High/Low temperature,High ambient temperature,Condenser overheating alarm
Electrical	Power failure, Low battery
System	Sensor failure, Door ajar,Built-in USB datalogger failure, Communication error
Electrical	
Power Supply(V/HZ)	220-240~/50
Power(W)	687
Power Consumption(KWh/24h)	9.13
Rated Current(A)	5.42
Accessories	
Standard	Remote alarm contact,RS485
Options	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.