

# -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.



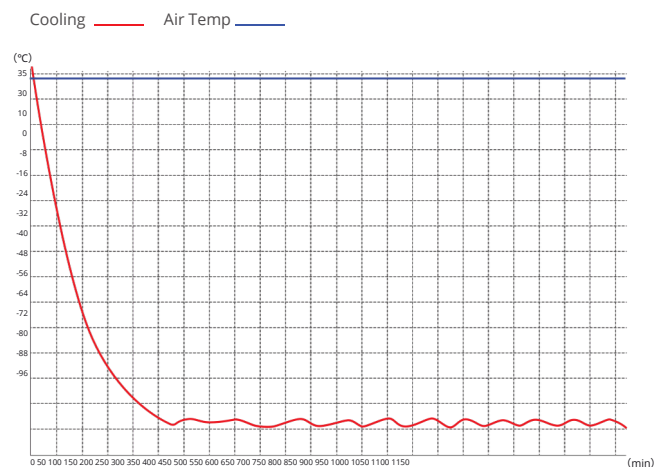
### Human-oriented

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

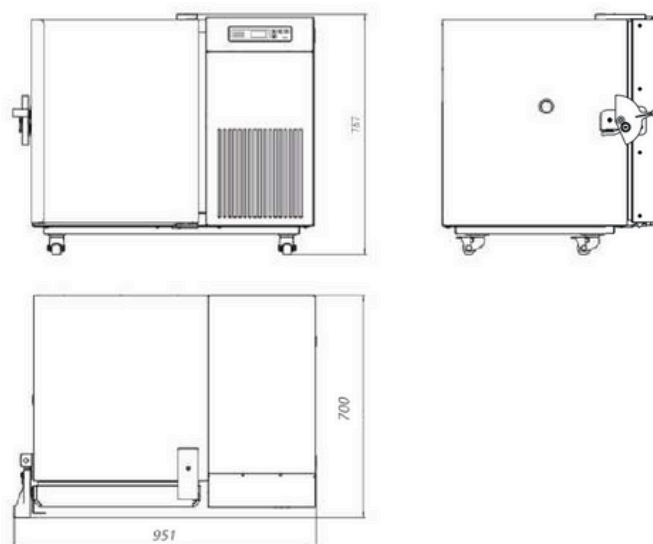
## ✓ Scope of Application

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 Upright 50
Cabinet Type	305*425*430
Capacity(L)	951*700*757
Internal Size(W*D*H)mm	1095*820*931
External Size(W*D*H)mm	104/156(wood packing)
Package Size(W*D*H)mm	
NW/GW(Kgs)	
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 Direct cooling Manual
Cooling method	HC
Defrost Mode	110
Refrigerant	High quality steel plates with spraing Galvanized steel sheet/Stainless steel
Insulation Thickness(mm)	1(stainless steel)
Construction	
External Material	Yes
Inner Material	1pc. Ø 25 mm
Shelves	4
Door Lock with key	USB/Record every 10 minutes / 12 months
Padlock	Yes
Access Port	High/Low temperature,High ambient temperature,Condenser overheating alarm
Casters	Power failure, Low battery
Data Logging/Interval/Recording Time	Sensor failure, Door ajar,Built-in USB datalogger failure,
Backup Battery	Communication error
Alarm	
Temperature	
Electrical	
System	
Electrical	
Power Supply(V/HZ)	
Power(W)	220-
Power Consumption(KWh/24h)	240~/50
Rated Current(A)	687
Accessories	
Standard	9.13 5.42
Options	
	Remote alarm contact,RS485
	Chart recorder, CO <sub>2</sub> backup system,Printer

\*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.