



**Tempin**<sup>TM</sup>  
*preserving life*

**Ultra Low Temperature Deep Freezer**



**TI- HW- 50-HC**

# Features

## **Precise Temperature Control and Safe Storage**

Microprocessor-based temperature controller,  $-40^{\circ}\text{C}\sim-86^{\circ}\text{C}$  can be set freely with display accuracy at  $0.1^{\circ}\text{C}$ .

## **Visual & Audio Alarm system**

High/low temperature alarm, power failure alarm, low battery 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  $-86^{\circ}\text{C}$  stably.

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

## **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.

# 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.



#### 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,  $-40^{\circ}\text{C}\sim-86^{\circ}\text{C}$  can be set freely.



#### Refrigeration System

Applied with Secop (Danfoss) compressor, single compressor system with target mixture refrigerant to reduce noise and improve the cooling temperature come to  $-86^{\circ}\text{C}$  stably and effectively.



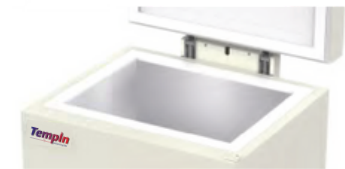
#### Insulation System

- The thickness of outer door insulation layer is equal to or greater than 90mm;
- The thickness of insulation layer in refrigerator body is equal to or greater than 110mm;
- 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, 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.



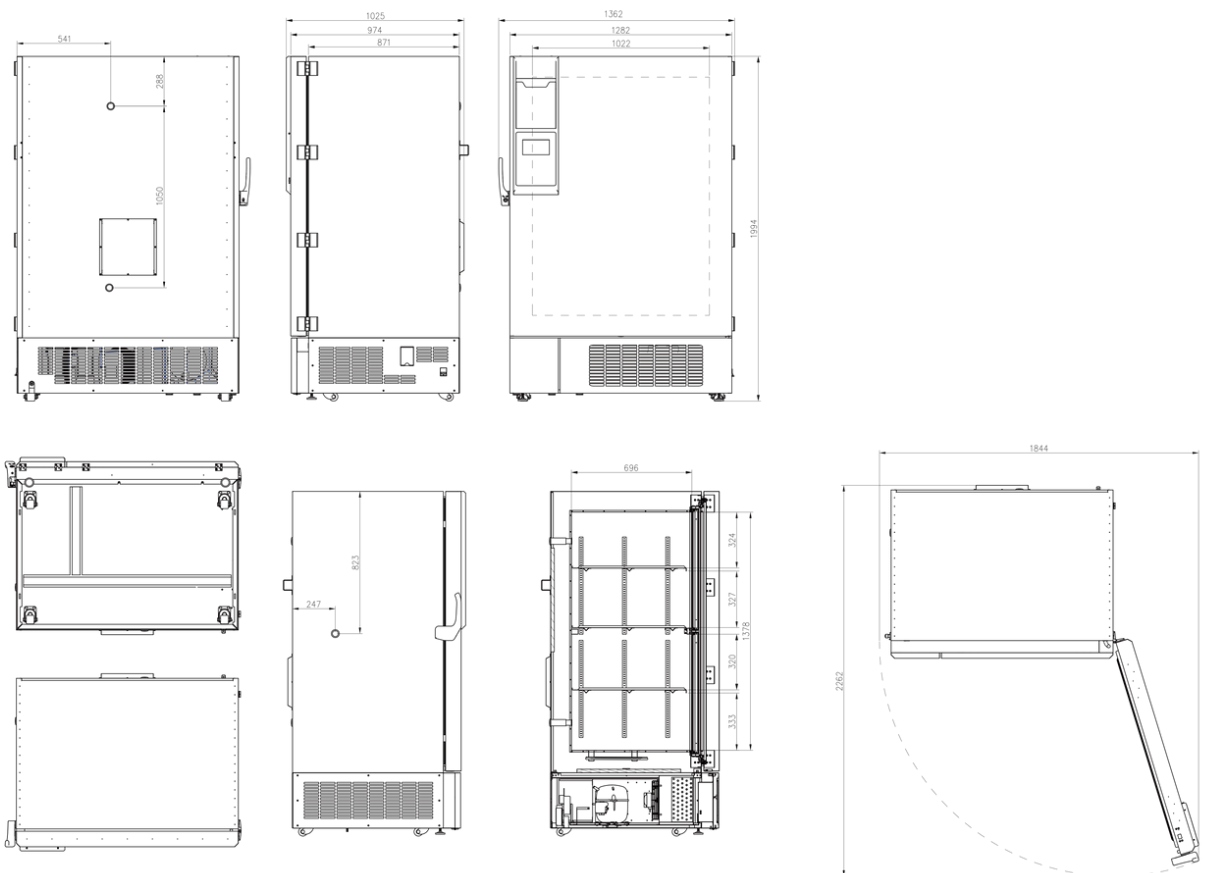
#### Human-oriented

- The inner liner is made of stainless steel, resistant to corrosion and easy to clean;
- 4 Universal casters for easy handling;
- Front opening lockable door with full height handle, with vacuum release port for easy open during cooling operation;
- Two-times foaming technology, 110mm foaming insulation with VIP board for better temperature performance.

# Performance Data / Cooling Curve



# External Dimension



# Specifications

-86°C Ultra-low Temperature Freezer	
<b>Model</b>	<b>TI- HW-50-HC</b>
Cabinet Type	Chest
Capacity(L)	50
Internal Size(W*D*H)mm	430*305*425
External Size(W*D*H)mm	650*606*1080
Package Size(W*D*H)mm	788*720*1283
NW/GW(Kgs)	74/120
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	High quality steel plates with spraying
Inner Material	Stainless steel
Door Lock with Key	Yes
Padlock	Optional
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
Electrical	Power failure,Low battery
System	Sensor failure, Condenser overheating alarm,Built-in USB datalogger failure, Communication error
Electrical	
Power Supply(V/HZ)	220-240~/50
Rated Current(A)	5.48
Power(W)	682
Power Consumption(KWh/24h)	8.33
Accessories	
Standard	RS485,Remote alarm contact
Options	Chart recorder, CO <sub>2</sub> backup system,Printer