



TempinTM
preserving life

Ultra Low Temperature Deep Freezer



TI- HL-678

Features

Targeted Refrigeration

The new generation of ultra-low temperature refrigeration system can ensure fast refrigeration.

Five Magic Weapons for Energy Saving

Imported high-efficiency compressor + separated evaporator + composite heat exchanger + optimized fractional condensation & separation system + high-efficiency thermal insulation system can save energy and reduce power consumption of the freezer by 40%.

Low Noise Design

Low-noise direct cooling circuit + suspension frame & sound absorbing compartment & low-noise fan can reduce noise generated by the entire freezer to the largest extent

Three-dimensional Thermal Insulation

The six sides of the cabinet are made from high-efficiency VIP vacuum thermal insulation plate, and the thermal insulation design of the inner door made from foaming material and the outer door system was awarded with multiple patents, which can improve the thermal insulation performance of the freezer.

Optional Accessory(WiFi/Bluetooth printer/Mechanical lock/Swipe card/Fingerprint)

Connect WiFi to upload data to the cloud space, monitor the device, check the status of the refrigerator faster, and ensure the safety of the samples.

Optional Bluetooth printer, real-time export temperature data, temperature graph, setting operation and other data, to understand the freezer operating status.

Optional functions such as card unlocking, fingerprint unlocking, and facial recognition unlocking are available to facilitate quick access to samples.

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, simultaneously display the chamber temperature, power supply voltage, ambient temperature and other parameters etc. The running status is clearly displayed;
- The high-precision microcomputer temperature control system and platinum resistor temperature sensors enable users to set temperature inside the cabinet within a range from -40°C to -86°C.



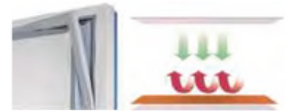
Refrigeration System

- The imported high-efficiency compressor and EBM fan are energy-saving and highly efficient;
- The large finned condenser with a space between fins $\leq 2\text{mm}$, providing effective heat dissipation.



Supplies for Cryopreservation

Freezer racks/boxes for cryopreservation are optional.



Thermal Insulation System

- The insulated foamed outer door with seal design prevents loss of cooling capacity effectively;
- The six sides of the cabinet are made from high performance vacuum insulation material, greatly improving thermal insulation performance.



Security System

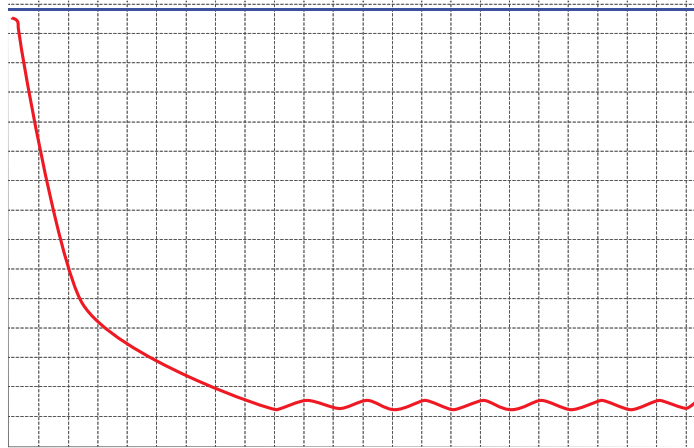
- The perfect audible & visual alarm system: high/low temperature, sensor failure, door ajar, power failure, low battery etc.;
- The turn-on delay and stopping interval protection can ensure reliable operation;
- The keyboard lock and password protection can prevent any adjustment of operation without permission.



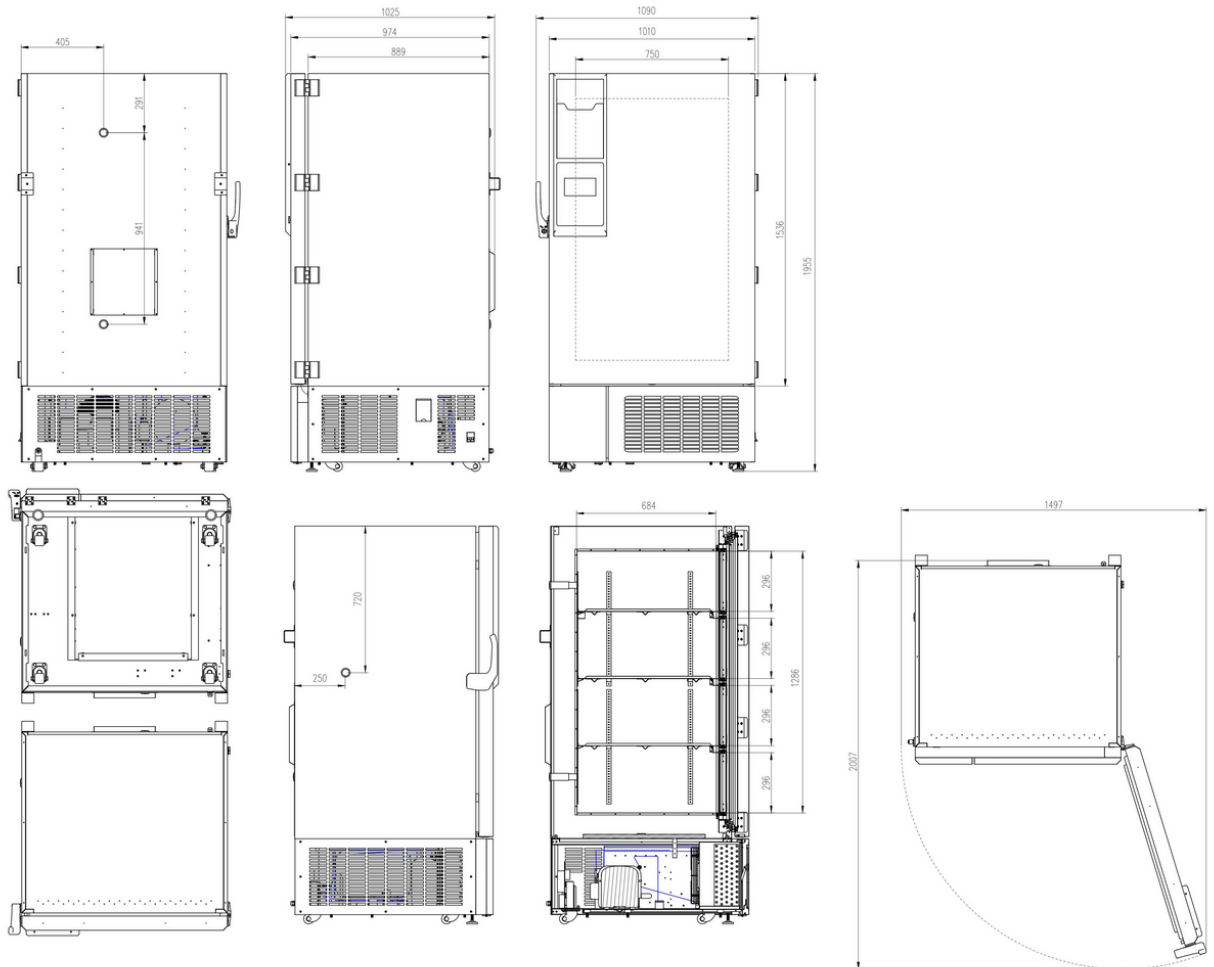
Human-oriented

- The door with new-type assisting door handle to be opened easily;
- Door handle with lock for safety operation;
- SUS304 interior, low temperature resistance anti-corrosion for long service life and easy cleaning;

Performance Data / Cooling Curve



External Dimension



Specifications

-86°C Ultra-low Temperature Freezer	
Model	TI- HL-678
Cabinet Type	Upright
Capacity(L)	678
Internal Size(W*D*H)mm	750*696*1286
External Size(W*D*H)mm	1090*1025*1955
Package Size(W*D*H)mm	1203*1155*2171
NW/GW(Kgs)	330/420
Performance	
Temperature Range	-40~-86°C
Ambient Temperature	16-32°C
Cooling Performance	-86°C
Climate Class	N
Controller	Microprocessor
Display	HD Intelligent Touch Screen
Refrigeration	
Compressor	2pcs
Cooling Method	Direct Cooling
Defrost Mode	Manual
Refrigerant	HC
Insulation Thickness(mm)	130
Construction	
External Material	Cold rolled steel sheet
Inner Material	Stainless steel
Shelves	3(stainless steel)
Door Lock with Key	Yes
Padlock	Yes
Access Port	3pcs. Ø 25 mm
Casters	4+(2 leveling feet)
Data Logging/Interval/Recording Time	USB/Record every 5 minutes / 10 years
Backup Battery	Yes
Alarm	
Temperature	High/Low temperature,High ambient temperature
Electrical	Power failure,Low battery
System	Sensor failure,Main board communication error, Condenser overheating alarm,Door ajar
Electrical	
Power Supply(V/HZ)	220-240~/50
Rated Current(A)	9.62
Accessories	
Standard	Remote alarm contact, RS485
Options	Chart recorder, CO ₂ backup system