



> Refrigeration System

- -70°C ultra-low temperature cold trap with full PTFE anti-corrosion treatment to freeze dry most organic solvents;
- Built-in coil condenser, direct ice capture, higher freeze-drying efficiency;
- Cold trap 300mm large opening design, water vapor capture pathway is larger;
- Original imported closed compressor, stable and reliable refrigeration efficiency.

> Control System

- 5.4-inch high-definition LCD touch screen, friendly human-computer interaction interface, the same screen display operating parameters, and equipment running status schematic, can clearly view the real-time operation of the various components of the equipment work;
- One-touch auto defrost for more efficient use;
- Automatic pressure relief prevents damage to samples and sensors caused by manually induced instability of the relief airflow;
- One-touch opening, main unit and vacuum pump linkage, no need for manual operation;



> Vacuum System

- Highly sealed vacuum freeze-drying chamber, equipped with a sample shelf for centrifuge tubes with special freeze-drying holes;
- Large flat flange silicone seal effectively ensures vacuum tightness without the need to apply any auxiliary sealing silicone grease;
- The automatic temperature-compensated vacuum sensor detects the vacuum level in the chamber accurately in all phases;
- 24V low voltage high vacuum control solenoid valve made of PTFE for fully automatic solenoid vacuum control;
- Highly reliable two-stage selector vane vacuum pump with oil mist filter and anti-oil return device as standard;
- Once-formed stainless steel vacuum pump hose, permanently anti-aging, to avoid vacuum leakage;



>ST7006 Technical Parameters

Ice condenser capacity	6kg	Vacuum control accuracy	≤0.1mbar
Ice condenser temperature	≤-70°C	Vacuum measurement range	0.001mbar ~ 1000mbar
Cold trap volume	10L	Vacuum pump	Pumping rate≥8m ³ /h (133L/min) Extreme vacuum: 5×10 ⁻³ mbar
Number of sample shelf levels	3 layers as standard, 3-10 layers available	Ambient temperature	+10°C ~ +25°C
Shelf with stainless steel	Φ260mm, Single layer area 0.055 m ²	Power supply	AC 220V,50Hz, 10A
Defrosting method	Hot air defrost	Power	1.1kw
Extreme vacuum	≤0.01mbar	Size	510*570*500mm

>>>>Common Configuration Scenarios<<<<

Figure I Regular type (standard)	3 layers of Φ260mm sample shelves, single layer area 0.055 m ² , spacing 100mm (adjustable)
Figure II Multi-manifold type	3 layers of Φ260mm sample shelves, single layer area 0.055 m ² , spacing 100mm (adjustable) Containing 12-port external valve (standard interface), can be connected to the round bottom / wide mouth lyophilized vials, ampoule adapters
Figure III/Figure IV T-frame type	Includes 12/24 port external valve (standard interface), can be connected to the round bottom / wide mouth lyophilized vials, ampoule adapters



Figure I



Figure II



Figure III



Figure IV