

LGJ-S50 Standard type

Vacuum freeze dryer



Main features

- Structural design in compliance with biopharmaceutical standards. The inner corner, Surface roughness, shelf flatness and inner material of the freeze-dried cavity all meet the pharmaceutical standards;
- The control system is stable and reliable. PLC programmable logic control system and 7-inch color, color touch screen, the system runs more stable and reliable, human-computer interaction friendly, Chinese and English language conversion, can achieve mobile phone, computer remote control, with three levels of authority;
- real-time display and record vacuum degree, cold trap temperature, material temperature and shelf temperature, and form freeze-drying curve. Data are stored every minute, which can continuously record material and equipment status data, support data offline browsing, analysis, printing and storage, configure USB communication interface and TCP interface;
- The lyophilization process is controllable. The freeze-drying process is automatically controlled by programmable program, semi-automatic or full-automatic control can be switched in real time to realize the whole process parameter control;
- The separation design of freeze-drying Chamber and cold trap cavity realizes the standard of drug-grade pilot machine and improves the efficiency and capability of water-catching;
- The use of intermediate medium circulation technology. Partition Board temperature control, board temperature uniformity, controllability, board level, good heat and cold conduction;
- Double-machine cascade refrigeration technology. Imported full-enclosed compressor unit and International Standard Green Refrigerant, cooling fast, cold trap temperature low, strong water catching capacity;
- With compressor secondary start-up protection and pressure Overload Protection System;
- The drying chamber is made of high-pressure-resistant and low-temperature-resistant aviation acrylic material with high transparency door, which can observe the whole process of freeze-drying;
- Shelf silicone oil refrigeration and heating, with temperature, speed adjustable, controllable, the use of Pid Mold and control calculation, in-situ pre-freezing and sublimation function;
- Cold Trap With Automatic Frost Function;
- configure the hydraulic system;
- OPTIONAL NEGATIVE PRESSURE AIR ENTRAINMENT system interface. Built-in 0.2 m filter to reduce the secondary pollution of the sample, can be filled with nitrogen or inert gas;
- Optional Clean Room installation method, and provide clean room installation solution;
- real-time monitoring and chart recording of Optional Computer Host Computer;
- Optional Intermediate Isolation Butterfly Valve: for pressure rise test and vacuum adjustment.

Technical Specification

- Standard cold trap temperature (no load) : $\leq -80^{\circ}\text{C}$ ambient temperature $\leq 30^{\circ}\text{C}$
- limit cold trap temperature (no load) : $\leq -83^{\circ}\text{C}$ ambient temperature $\leq 25^{\circ}\text{C}$
- vacuum up to standard (no load) : $\leq 10\text{Pa}$
- ultimate vacuum: $\leq 1\text{Pa}$
- maximum catch: 15kg
- Material Tray, freeze-drying capacity: bulk materials can be loaded 4L 4+1 shelf, layer spacing 70mm, freeze drying area 0.69m², 16 xilin about 1870, 22 xilin about 980.
- Shelf size (length and width): 360mm×480mm
- Shelf temperature range: $-50^{\circ}\text{C} \sim 70^{\circ}\text{C}$ (temperature control accuracy: 0.5°C)
- MATERIAL TEMPERATURE PROBE: 1 unit per shelf
- Main engine dimensions (length, width and height) : 1290mm×820mm×1700mm
- Overall power: 5500w
- Applicable power supply: AC380V25A50Hz
- Machine weight: 550kg
- Applicable Environment: Ambient Temperature $\leq 30^{\circ}\text{C}$
- Main configuration: one main engine and one vacuum pump

Optional match

Vacuum adjustment, imported vacuum pump, high-speed vacuum pump oil, vacuum pump inlet dust filter, vacuum pump outlet oil mist filter, inert gas charging interface, Eutectic Point Tester, GMP clean room installation