





## PILOT SCALE FREEZE DRYER PSFQ 9210

# **Product Catalogue**

#### Pilot Scale Freeze Dryer PSFQ 9210

Pilot Scale Freeze Dryer PSFQ 9210 is a small scale production unit for drying in bulk. It is equipped with inert gas inflation valve and powerful sensor calibration function to fill the inert gas after drying to keep products for a longer time and to ensure accuracy of measured values in long-term use.

#### Design

It is equipped with colorless, transparent acrylic door, LCD touch screen to display freeze-drying curves, for observation and save data. The inner wall of drying chamber, condenser, shelf, trays are made of 304 stainless steel. The products is not needed to move as both pre-freezing and drying process are finished on shelf itself. To operate easily and to increase drying speed, it is provided with flexible manual and automatic control mode and with shelf electricity heating function respectively.

#### Controller System

Equipped with CFC-free refrigerant, branded low noise efficient Compressor, Condenser with uniform and good ice capture function. The curves and records, storage cycles can be checked and modified in real time respectively. It is provided with programming on touch screen to control shelf temperature, USB port to output freeze drying data, open and view in excel format. It can store hundred of recipe and set up to 36 segments.

#### Security System

Provided with safety system and alarms such as to control shelf-heating rate, real-time alarm display, historical alarm query function for any fault diagnosis and equipment maintenance. To prevent unauthorised access effectively, it is set up with multilevel password protection, user level, operation management.

### Optional Accessories

Vacuum control valve, Intake backfilling filter, Air inlet filter for pump, Eutectic point test device, Electricity heating defrosting, Exhaust filter/oil mist filter for pump, Automatic backfilling / drainage system, Cascade refrigeration, Condenser temperature -80°C, Check valve for pump to prevent oil sucked into chamber, Leybold pump or other international brand vacuum pump, External manifold ports to connect round bottom flasks and wide-neck flask, RS232 and software: Check and keep freeze drying data on computer, control freeze dryer through PC.

## Applications

Used in pharmaceutical, biotechnology, bacteriology, ceramics, microbiology, biochemistry, food and agriculture based industries for drying processes of large-scale production units.

Model No.	PSFQ 9210
Freeze Drying Area	0.4m <sup>2</sup>
Shelf Size	300*340 mm
Shelf Number	4 layers
Shelf Spacing	50 mm
Tray Size	295*335 mm
Tray Number	4 pc
Condenser Temperature	-55°C
Shelf Temperature	-50~+80°C
Bulk Capacity	4 Litre (10mm thickness)
Final Vacuum	<10 Pa
Vacuum Pump Flow Rate	6 L/S
Ice condenser capacity	8kg /batch
Cooling	Air cooling, ambient temperature≤25°C
Voltage	220V/50 Hz/1phase
Power	2800W
Defrosting	Off Cycle Defrosting
Dimensions	890*660*1210mm
Weight	310 kg