



## LARGE SCALE FREEZE DRYER LLFD-A12

www.labtron.com

info@labtron.com

Large Scale Freeze Dryer LLFD-A12 is designed to handle lyophilization requirements for large scale production. Equipped with 120 kg condenser capacity and a temperature of-70 °C it increases the shelf life of the product without destroying the original structure. The temperature controllable shelves designed for complete moisture removal and storage facilities of various biological materials. Precise vacuum control enables faster freeze drying and reproducible results.

## **Features**

- Ice condenser capacity is 120 kg / 24 h
- □ Condenser temperature (- 70 °C)
- ☐ Freeze and drying process both made on the shelf
- ☐ Built in nitrogen inflation valve
- Vacuum pump oil return
- Oil mist filtration system
- Easy to clean and anti-corrosion cold trap
- □ Display of sample temperature , vacuum curve degree , cold trap temperature curve
- ☐ High vial capacities for more number of samples
- External USB port to view data in excel
- Alarm indication for high condenser and shelf temperature
- Beep indication for completion of process

## **Application**

Large Scale Freeze Dryer used in Bio-Pharma industry to freeze dry and store drug and medicinal product, materials, other biomaterials. Also used in food industry to freeze dry fruits and vegetables, fish and meat, Processed and raw food material to increase their shelf life and maintain quality.

## **Specifications**

Model	LLFD-A12
Condenser temperature	- 70 °C
Condenser capacity	120 kg / 24 h
Freeze drying area	7.75 m <sup>2</sup>
Bulk capacity	120 L
Vial capacity Φ 12 mm	49000 pieces
Vial capacity Φ 16 mm	34800 pieces
Vial capacity Φ 22 mm	17800 pieces
Shelves	8 shelves
Shelves dimension	Ф 100 mm
Shelf temperature	-50 °C to 70 °C
Final Vacuum	< 10 Pa
Voltage	220 V / 50 Hz
Power	18 W
Dimensions	5000 x 1500 x 2800 mm
Weight	6000 kg