

## LG-1 Food Type Freeze Dryer



This LG-1 Food Type Freeze Dryer is widely used in medicine, pharmacy, biology research, chemical industry and food production, etc. After the freeze drying process, long term preservation is much easier. They can be restored to the original state and maintain their chemical and biological characteristics after being watered.

LG-1 Food Type Freeze Dryer achieves continuous lyophilization through optimized structure, and 50% efficiency increased. It can memorize freeze-dried curves for users to observe the lyophilization process of materials.

## Features:

• Pre-freezing and drying of separate structures are performed at the same time, which improves the freeze-drying efficiency and shortens the freeze-drying time.

• Space alloy separator material, double-sided radiation heating, emissivity above 90%, good temperature uniformity.

• Highly efficient mixed refrigerant medium, lower freezing point and higher boiling point, high heat exchange efficiency and long service life.

• The drying curve optimization control algorithm can control the heating rate and vacuum value in the drying stage.

• The patented gas diversion design and control technology have the strong ice catching ability and high drying efficiency.

• Industrial-grade embedded touch screen + dedicated SH-HPSC-III modular controller, the system is stable and reliable, with high control accuracy.

• The professionally designed FD-MANAGER control system can save multiple sets of process recipes, and can adjust the process in real time during the drying process to improve the process optimization rate.

• Flexible manual + automatic control mode, manual groping process, and automatic batch production.

• Accurate sensor calibration function ensures the accuracy of long-term use of process parameters.

• Setting user level and password, and decentralizing operations and management.

• Optional powerful LYO-MEGA main unit control system can record, save up to ten years of operating data, curves and alarm records, improve product traceability; at the same time convenient observation, operation and fault diagnosis.

• Non-standard freeze dryers can be customized as requested.

## **Technical parameters:**

| models<br>parameters    | unit   | LG-1                    | LG-5           | LG-10          |
|-------------------------|--------|-------------------------|----------------|----------------|
| freeze drying area      | m²     | 1                       | 5              | 10             |
| shipping weight         | kg     | 10                      | 50             | 100            |
| shelf numbers           | layers | 4+1                     | 7+1            | 9+1            |
| shelf dimensions        | mm     | 400*625                 | 600*1200       | 1000*1120      |
| shelf spacing           | mm     | 60                      | 80             | 80             |
| temperature range       | °C     | room temperature~+100°C |                |                |
| ice collecting capacity | kg/B   | ≥15                     | ≥75            | ≥150           |
| cold trap temperature   | °C     | ≤-60                    | ≤-50           | ≤-65           |
| cooling mode            | —      | wind cooled             | water cooled   | water cooled   |
| defrosting mode         | —      | water soaked            | water soaked   | water soaked   |
| ultimate vacuum         | Pa     | ≤5Pa                    |                |                |
| power                   | kw     | 9                       | 20             | 45             |
| dimensions (L*W*H)      | mm     | 1900*1200*1700          | 2000*3500*2100 | 5000*2000*2500 |
| overall weight          | kg     | 900                     | 2500           | 6000           |