

# Lab Freeze Dryer



## N Series Freeze Dryer

### Scope of Application

Delivers large-scale freeze-drying flexibility with a 40% smaller space than conventional systems. Engineered to process diverse sample types — from bulk pharmaceuticals to temperature-sensitive biologics.



**MD-10N/A**



**vacuum pump**



#### **A: Ordinary type**

Suitable for the drying of liquid and solid of bulk materials.



#### **B: Pressure cap type**

Suitable for the drying of materials in penicillin vials, and can achieve vacuum seal packaging of samples. It includes the functions of Ordinary type.



#### **C: Ordinary manifold type**

Suitable for lyophilizing bulk or small materials, and can be used with lyophilized bottles, vials, and wide-mouth bottles.

## ■ Key Features



### **Smart Process Control**

7-inch LCD displays real-time/historical freeze-drying curves while auto-saving all data;  
USB export enables easy access to stored drying profiles for analysis.



### **Premium Chamber Design**

Polycarbonate drying chamber offers better visibility and leak-proof sealing-ideal for visual monitoring of sensitive samples.



### **Longevity Optimization**

Configurable cold trap temperature reduces vacuum pump stress;  
Inert gas filling valve minimizes product oxidation post-drying.



### **Precision Upgrade**

(For Model 10ND) PID-based intelligent heating ensures  $\pm 0.5^{\circ}\text{C}$  accuracy and ultra-stable ramp control for critical applications.

## ■ Optional Function

- Imported vacuum pump
- Automatic nitrogen filling interface
- Eggplant bottle T-frame
- Eutectic point test
- Cold trap electric heating defrost
- Condenser temperature configurations with  $-80^{\circ}\text{C}$
- Mobile app remote control

## Specifications



Model		MD-10N			MD-10ND		
Type		MD-10N/A	MD-10N/B	MD-10N/C	MD-10ND/A	MD-10ND/B	MD-10ND/C
Dryer Area (m <sup>2</sup> )		0.12	0.08	0.12	0.12	0.08	0.12
Ability To Capture Water (Kg/batch)		3					
Schering Bottle Quantity	Φ12mm	920	560	920	920	560	920
	Φ16mm	480	285	480	480	285	480
	Φ22mm	260	165	260	260	165	260
Eggplant Shape Bottle		0	0	8	0	0	8
Plate Load Capacity (L)		1.5	1	1.5	1.5	1	1.5
Plate Size (mm)		Φ200	Φ180	Φ200	Φ200	Φ180	Φ200
Plate Distance (mm)		70					
Tray Quantity (pc)		4	3	4	4	3	4
Cold Chamber Size (mm)		Φ250×150			Φ250×150		
Cold Trap The Lowest temperature (°C )		≤-56 (No load)					
Ultimate Vacuum (Pa)		≤5 (No load)					
Power Supply		110V~ /50/60Hz   220-240V~ /50/60Hz					
Amibient Temperature (°C )		≤25					
Exterior Dimension (W*D*H)mm		610×482×455+440			610×482×455+440		
Weight (kg)		55	61	57	59	65	61
Heating Temperature (°C )		NO			Yes		