

# Freeze Dryer

## Laboratory Freeze Dryer

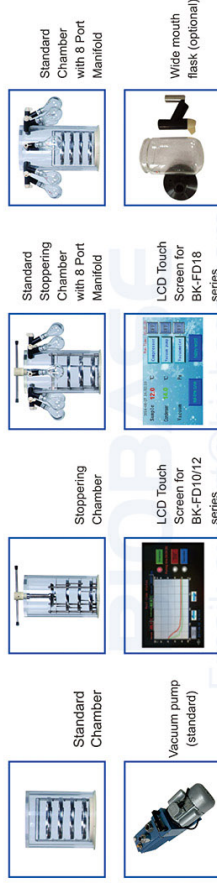
### Introduction

The lab series freeze dryer is suitable for freeze drying test of laboratory biomedical samples. Widely used in drugs, biological products, chemical and food industries. On the heat-sensitive substances such as antibiotics, vaccines, blood products, hormones and other biological tissue enzymes, freeze-drying technology is applied.

### Features

1. LCD touch screen.
2. With historical data inquiry function.
3. With USB interface to export the data.
4. Large capacity ice condenser trap and without coil inside.
5. With cascade refrigeration technology.
6. Pre-freezing shelf can be used as guide barrel to speed up the drying rate.
7. Ice condenser trap and operation panel are made by stainless steel.
8. Drying chamber is transparent which is visual and safe.
9. Shelves are stainless steel, which can be adjustable per the requirements.

### Accessories



## Pilot Freeze Dryer

### Introduction

Biobase vacuum freeze dryer (square cabinet) is suitable for laboratory samples of freeze drying test, and a small amount of production.

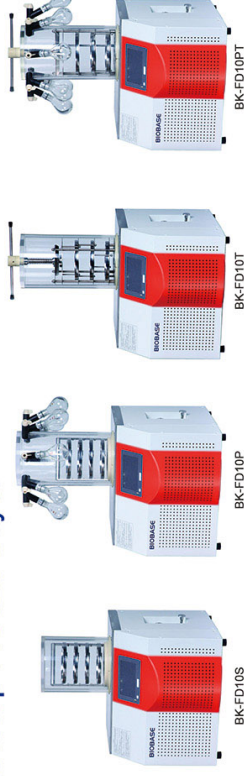
### Features

1. Pre-freezing, drying in-situ, easy to operate, good drying effect.
2. Inflatable (discharge) valve adopts safety diaphragm valve, which can be connected to inert gas source, and is filled with inert gas after drying to extend the shelf life of the material.
3. Freeze-drying curve optimization control technology, which can control the cooling rate during the pre-freezing stage, and control the heating rate of the sample and the vacuum value of the current stage in the sublimation and analytical drying stages.
4. 7-inch true color touch screen.
5. Can save hundreds of process recipes, each group contains 50 temperature control sections to improve process optimization rate.
6. Intelligent data recording system, real-time recording and display of cold trap temperature curve, sample temperature curve, vacuum degree curve, export data can be browsed and printed by computer and various operations to facilitate process optimization and drying effect verification.
7. Flexible manual + automatic control mode, manual mode used for groping process, automatic mode used for batch production.
8. Real-time alarm display and historical alarm query function for fault diagnosis and equipment maintenance.
9. User level and password can be set and decentralized for operation management.

### Accessories



## Tabletop Freeze Dryer



### Technical Parameters

Model	BK-FD10S	BK-FD10P	BK-FD10T	BK-FD10PT
Type	Standard chamber	Standard chamber with 8 port manifold	Stopping chamber	Stopping chamber with 8 port manifold
Freeze Drying Area	0.12m <sup>2</sup>			
Tray	4/6(Optional)pcs		0.09m <sup>2</sup>	
Height Between Trays	76/50mm		3pcs	
Cold Trap Temperature	-60℃		70mm	
Cold Trap Capacity	6.9L			
Cold Trap Size (Diameter*H)	Φ215*190mm			
Vacuum Degree	<10Pa			
Water Capture Capacity	3kg/24h			
Tray Size (D*H)	Φ200*20mm		Φ200*20mm	
Freeze Drying Time	24h			
Loading Capacity/Shelf (Liquid)	0.3L			
Total Loading Capacity (Liquid)	1.2L			
Drying Chamber Size (Diameter*H)	Lower circle Φ260mm Upper circle Φ240mm Height 450mm			
Total Qty. Of Vial Φ22	260		195	
Total Qty. Of Vial Φ16	480		360	
Total Qty. Of Vial Φ12	920		690	
Refrigerant	R600a+R290+R23			
Cooling System	Air cooling			
Power Consumption	0.9KW			
Power Supply	AC220V, 50/60Hz(single phase), 110V, 60Hz(single phase)			
Standard Accessory	Vacuum pump 2LUS, 8m3/h, Material tray, Material rack, PC cover (for all models)			
Optional Function & Accessory	Critical-mouth flask 500ml*3 pcs, Switch valve*8 pcs (only for model BK-FD10P/PT)			
External Size (W*D*H)	Electric defrost function, Nitrogen gas filling valve, Oil mist filter (for all models)	800ml Wide-mouth flask (for BK-FD10P/PT)		
Package Size (W*D*H) mm/	600*560*374/820mm		600*560*374/880mm	
Gross Weight	670*700*560 (80kg)			
	400*400*620 (15kg)			
	570*240*360 (22kg)			