

Freeze Dryer

Laboratory Freeze Dryer

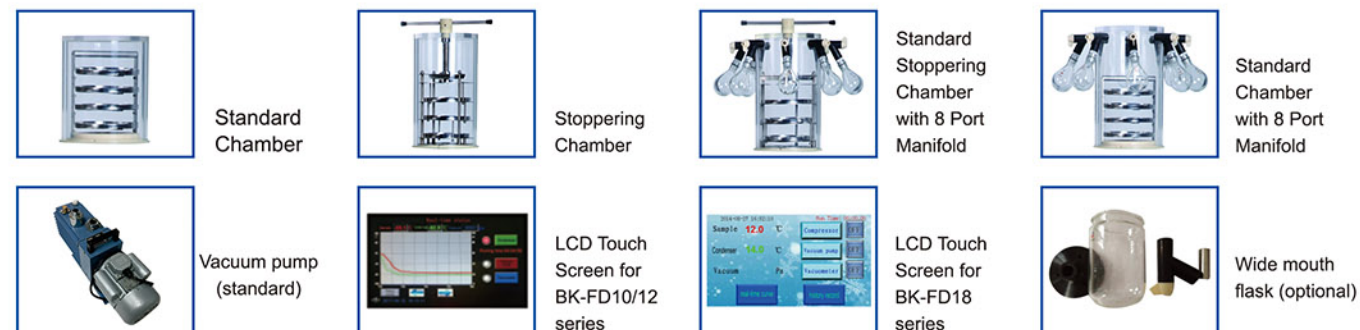
Introduction

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

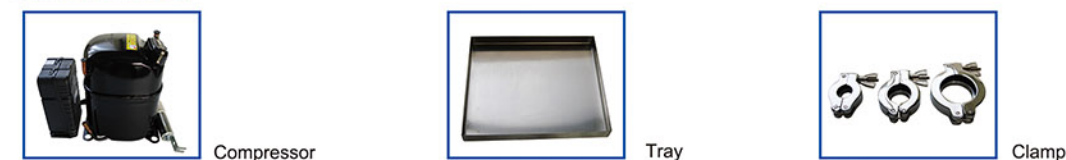
Introduction

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	Stoppering chamber	Stoppering chamber with 8 port manifold
Freeze Drying Area	0.12m²		0.09m²	
Tray	4/6(Option)pcs		3pcs	
Height Between Trays	76/50mm		70mm	
Cold Trap Temperature	-60℃			
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		0.9L	
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 2L/S, 8m3/h, Material tray, Material rack, PC cover (for all models) Conical-mouth flask 500ml*8 pcs, Switch valve*8 pcs (only for model BK-FD10P/PT)			
Optional Function & Accessory	Electric defrost function, Nitrogen gas filling valve, Oil mist filter (for all models) 800ml Wide-mouth flask (for BK-FD10P/PT)			
External Size (W*D*H)	600*560*374/820mm		600*560*374/880mm	
Package Size	Main Body	670*700*560 (80kg)		
(W*D*H) mm/	Drying Chamber	620*400*400 (15kg)		
Gross Weight	Vacuum Pump	570*360*240 (22kg)		

Vertical Freeze Dryer



BK-FD12S



BK-FD12P



BK-FD12T



BK-FD12PT

Technical Parameters

Model		BK-FD12S(-60/-80)	BK-FD12P(-60/-80)	BK-FD12T(-60/-80)	BK-FD12PT(-60/-80)
Type		Standard chamber	Standard chamber with 8 port manifold	Stoppering chamber	Stoppering chamber with 8 port manifold
Freeze Drying Area		0.12/0.18m²		0.09m²	
Tray		4/6(Optional)pcs		3pcs	
Height Between Trays		76/50mm		70mm	
Cold Trap Temperature		≤-60℃/-80℃(Option)			
Cold Trap Capacity		9.3L			
Cold Trap Size(Dr*H)		Φ217*250mm			
Vacuum Degree		<10Pa			
Water Capture Capacity		4kg/24h			
Tray Size (D*H)		Φ200*20mm			
Freeze Drying Time		24h			
Loading Capacity/Shelf(Liquid)		0.3L			
Total Loading Capacity(Liquid)		1.2/1.8L		0.9L	
Drying Chamber Size(D*H)		Lower circle φ260mm Upper circle φ240mm Height 450mm			
Can Load Vials Qty	Φ22mm	260		195	
	Φ16mm	480		360	
	Φ12mm	920		690	
Refrigerant		R600a+R290+R23			
Cooling System		Air cooling			
Consumption		-60℃: 0.9kW -80℃: 1.5Kw (Option)			
Power Supply		220V/50Hz,60Hz (single phase);110V/60Hz (single phase, only for -60℃)			
Standard Accessory		-60℃ Cold trap, Vacuum pump 2L/S, 8m3/h, Material tray, Material rack, PC cover (for all models) Conical-mouth flask 500ml*8 pcs, Switch valve*8 pcs (only for model BK-FD12P/PT)			
Optional Function & Accessory		-80℃ Cold trap, Electric defrost function, Nitrogen gas filling valve, Oil mist filter (for all models) 800ml Wide-mouth flask (for BK-FD12P/PT)			
External Size(W*D*H)		480*620*920/1370mm			
Package Size	Main Body	730*600*1180mm (80kg)			
	Drying Chamber	620*400*400mm (15kg)			
Gross Weight	Vacuum Pump	570*360*240 (22kg)			



BK-FD18S



BK-FD18P



BK-FD18T



BK-FD18PT

Technical Parameters

BK-FD18S(-55/-80)	BK-FD18P(-55/-80)	BK-FD18T(-55/-80)	BK-FD18PT(-55/-80)
Standard chamber	Standard chamber with 8 port manifold	Stoppering chamber	Stoppering chamber with 8 port manifold
0.18m ² 4 pcs 70mm ≤-56℃/-80℃(Option)		0.09m ² 3 pcs	
23L Φ270*400mm <5 Pa 6kg/24h			
Φ240*18mm		Φ200*18mm	
18-36h			
0.45L		0.3L	
1.8L		0.9L	
Φ300*445mm	Φ300*465mm	Φ300*540mm	Φ300*570mm
-		183	
-		345	
-		615	
R600a+R23 Air cooling			
-56℃: 1.4kW, -80℃: 2.1.kW		-56℃: 1.4kW, -80℃: 2.1.kW	
AC220V, 50/60Hz(single phase), 110V, 60Hz(single phase)			
-56℃ Cold trap ,Vacuum pump 4L/S, 14.4m3/h, Material rack, Material tray (for all models) Flasks 100mlx2, 250mlx2, 500mlx2, 1000mlx2 (only for model BK-FD18P/PT)			
-80℃, -110℃ Cold trap, Anti-reverse oil stop valve, Oil mist filter, Import vacuum pump (for all models) Conical-mouth flask and wide-mouth flask (for BK-FD18P/PT)			
630×580×970/1415mm	630*580*970/1435mm	630×580×970/1510mm	630×580×970/1810mm
790*690*1200mm (148kg)			
420*420*560/mm (14kg)	430*430*660mm (26kg)		
620*370*450 (32kg)			