



# PRODUCT CATALOG



## LABORATORY BENCHTOP FREEZE DRYER BEA-3301

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## FREEZE DRYER

The vacuum freeze drying technology, which is also called sublimation drying, is a technical method that freezes the samples in advance, and then sublimates its moisture under vacuum state. The model is a bench-top machine, suitable for drying products in bulk and in flasks. After the freeze drying process, a long term preservation for material is much easier. They can be restored to original state and maintain their chemical and biological characteristics after being watered.



Control panel display in English  
 Vacuum can be displayed in Pa  
 Condenser with uniform and good ice capture function  
 Acrylic drying Chamber is safe and easy to view sample status  
 Small and compact structure , with easy and convenient operation  
 Vacuum pump with high pumping speed , to reach good final vacuum  
 Big opening condenser with external coiling tubes, has pre-freezing function  
 Color LCD touch screen displays running time, display sample temperature, condenser temperature , vacuum degree, and save data automatically  
 Display sample temperature curve, condenser temperature curve and vacuum curve  
 CFC-free refrigerant, international famous brand compressor, low noise, good effi

## SPECIFICATIONS

Model	BEA-3301
Minimum Condenser Temperature	-80°C
Final Vacuum	<10 Pa
Freeze-drying area	0.09 m <sup>2</sup>
Condenser ice capture	6 kg/24h, Max 8kg
Bulk Capacity	0.9L (10mm thickness)
Tray	φ200mm, 3 layers, stainless steel 304
Manifold	8 ports
Flask specification	Round bottom flask 1000ml, 500ml, 250ml, 100ml, each with 2pcs (wide-neck flask as option)
Display	LCD touch screen, English
Display parameters	Temperature and vacuum degree
USB	USB port to output drying data
Accessories	With vacuum pump and connection accessory
Refrigerant	CFC free
Voltage	230V / 50 Hz, Single phase
Power	1800W
Defrosting	Electric heating defrosting
Dimension	850 x 680 x (400-460) mm, D*W*H
Alt Name	Freeze Dryer

## FEATURES

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vacuum degree, and save data automatically  
Display sample temperature curve, condenser temperature curve and vacuum curve  
CFC-free refrigerant, international famous brand compressor, low noise,good efficiency  
Condenser, trays, drying shelf and pre-freezing shelf are made of stainless steel 304, anti-corrosion  
Stainless steel air inlet valve (drain valve) is safe, anti-corrosion , no leak  
With USB port to output freeze drying data, open and view data in Excel format  
With vacuum control system  
PLC smart control with touch screen with capacity to issue lyophilization recipes  
Condenser material AISI316L  
REFRIGERATION UNIT, Number of compressors 2  
Refrigeration power (at 35°C) -800 W  
Refrigerant (free of CFCs) - R-507 / R-23  
VACUUM PUMP ULVAC WITH EXHAUST FILTER,8.1 m3/h with exhaust oil mist filter  
Chamber with 8-Port Manifold , to connect flask  
Cylindrical methacrylate chamber with 3 heated shelves and 3 trays for raw material

## APPLICATIONS

Freeze dryer is widely used in medicine, pharmacy, biology research, chemical industry and food production ,etc.



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