



The FD Series is a laboratory freeze-dryer specially developed for basic research in biotechnology and scientific institutes

### General features

Bench mounted table-top unit: It houses the refrigeration system and the vacuum pump. Constructed in a steel stove enamelled cabinet with front door for maintenance purposes

Air-cooled refrigeration system :  
Hermetically sealed. Ozone friendly .refrigerant

A top transparent acrylic lid provides viewing

of the ice forming process

PLC controlled system: a digital screen gives direct read-out of current condenser and vacuum temperatures during .the various stages of the cycle

### Model FD-5003-BT



Specifications	Model FD-5003-BT
Condenser Temperature	- 40C°
Condenser Capacity in 24 Hours	3 L
Overall Condenser Capacity	8 L
Condenser Type	Internal Coil(316 Stainless Steel)
System Refrigerant	CFC-Free
Defrost Method	Manual
Controller (Automation)	PLC Base LCD 3.7 inches
Vacuum Indication	Atmosphere to 0.001 Millibar
PC Interface	RS485(Optional)
Outer Dimensions: W x D x H*	400 x 650 x 450mm
Weight	40 kg
Standard Voltages	220V/50



<i>ACCESSORIES</i>	<i>DESCRIPTION</i>
Chamber Dryer	Chamber 200 mm Ø, with 3 trays (for vials, serum bottles and raw material)
10 Port Manifold Ampoule connector	10 tube manifold Silicon
Port Manifold 8	Including 8 rubber three way valves for flasks
Vacuum Pump	Rottary Oil Vacuum Pump
Stoppering Chamber	Glass cylindrical chamber with 3 non thermostated shelves and manual vial closing device. Includes 3 trays (for vials and serum)
Vacuum Valve	Rubber three way valves for flasks



Chamber Dryer



Vacuum Valve



Port Manifold 8



Vacuum Pump



Port Manifold 10 or 20  
Ampoule connector(OPTION)



Heated Shelves(OPTION)

No 13,16.5 honor Alley,17 (Kaveh Bolvar)  
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