

# Sanat Pardaz Dena Co.LTD

## Laboratory Freeze Dryer

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

### **General features**

## Model FD-5003-BT

- -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.



| <b>Specifications</b>          | Model FD-5003-BT                       |
|--------------------------------|--|
| Condenser Temperature          | - 40°C                                 |
| Condenser Capacity in 24 Hours | 3 L                                    |
| Overall Condenser Capacity     | 9.5 L                                  |
| Condenser Type                 | Internal Coil<br>(316 Stainless Steel) |
| System Refrigerant             | CFC-Free                               |
| Defrost Method                 | Manual                                 |
| Controller (Automation)        | PLC Base LCD 3.7 inches                |
| Vacuum Indication              | Atmosphere to 0.001<br>Millibar        |
| PC Interface                   | RS485(Option)                          |
| Outer Dimensions: W x D x H*   | 400 x 620 x 450mm                      |
| Weight                         | 40 kg                                  |
| Standard Voltages              | 220V/50                                |

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#### **ACCESSORIES** DESCRIPTION

| Chamber Dryer | Chamber 200 mm Ø, with 3 trays<br>(for vials, serum bottles and raw material) |
|---------------|---|
| Vacuum Valve  | Rubber three way valves for flasks  |
| Vacuum Pump   | Rottary Oil Vacuum Pump   |

#### **Option**

| 8 Port Manifold    | Including 8 rubber three way valves for flasks   |
|--------------------|--|
| Stoppering Chamber | Glass cylindrical chamber with 3 non thermostatized shelves and manual vial closing device. Includes 3 trays )for vials and serum( |

10 Port Manifold

Ampoule cannecto

10 tube manifold Silicon



**Vacuum Pump** 



**Chamber Dryer** 



8 Port Manifold (Option)





**Stoppering Chamber** (OPTION)



20 Port Manifold

Ampoule cannector
(OPTION)

## www.denavacuum.ir

## www.freezedryer.ir

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