

LABORATORY FREEZE DRYER

Condenser capacity 5 kg

-55°C for water solutions

-100°C for low freezing point solvents

Refined solution for laboratory and R&D freeze drying:

- Preservation of bacteria and viruses
 - Vegetables & fruits (Strawberry, Figs, Beans...)
 - Dairy product (milk, starter cultures, yogurts, probiotics, ice-cream,...)
 - Fish & meat
- Research
- Floral





Cylindrical AISI 304 stainless steel condenser, polished to Ra(0,5µm with flat connecting flange for simple installation of accessories

8 port manifold for freeze drying from glass flasks

Transparent cylinder with 6 trays
Each tray Ø 250 mm

Transparent cylinder with 2 heated and temp. controlled shelves
Each tray Ø 200 mm

Transparent cylinder with 4 stoppering shelves and guard trays
Ø 200 mm

Fully enclosed design with powder coated exterior

Touch screen based controller with user friendly interface, history graph advance settings options RS-232, USB or Ethernet communication ports

Pirani vacuum gauge for pressure monitoring and control

Vacuum control for ultimate performance (optional)



Trolley for lio-5P Lio-5PLT

Drain and vacuum break valve

Vacuum control valve (optional)

Vacuum pump equipped with oil mist filter and all necessary connection tubes and clamps

Technical data:

	LIO-5 P	LIO-5 PLT
		
External dimensions (WxHxD) in mm	470 x 353 x 622	470 x 650 x 613
Condenser temperature (°C)	-55	-100
Condenser capacity	2,3 kg / 24 h 5 kg / total	2,3 kg / 24 h 5 kg / total
Condenser volume (L)	7,2	7,2
Temperature measuring range (°C)	-120...+100	-120...+100
Temperature display resolution (°C)	0.1	0.1
Temperature display unites	°C or °F	°C or °F
Vacuum measuring range (mbar)	0.001...100	0.001...100
Vacuum display resolution (mbar)	0.001	0.001
Vacuum display unites	mbar or kPa or mmHg	mbar or kPa or mmHg
Power supply	230V 50/60Hz	230V 50/60Hz
Wattage (W)	350	800
Interface	RS 232 USB (accessory)	RS 232 USB (accessory)
Noise (dBA) @ 1 m distance	<50	<50
Weight (kg)	48	75

Ordering information and accessories:

Description	Part no.
Freeze dryer Lio-5P (-55°C)	1401
Freeze dryer Lio-5PLT (-100 °C)	1413
8 port manifold for freeze drying from glass flasks	1407
Transparent cylinder with 6 trays each tray Ø 250 mm	1480
Transparent cylinder with 2 heated and temperature controlled shelves each tray Ø 200 mm	1481
Transparent cylinder with 4 stoppering shelves and guard trays Ø 200 mm	1482
Vacuum control	1469
Vacuum pump with oil mist filter and connecting tube and clamps (RV-5)	1705
Trolley for Lio-5P or Lio-5PLT	1479
Software for Monitoring & History	1450
USB interface	1466
Ethernet interface	1716

