

L-3523

Lyophilizer



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

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►► **Lyophilizer (Freeze Dryer):**

Freeze drying is the process of removing moisture from a biological product while maintaining the biological and chemical composition and the integrity of the activities. Freeze-drying techniques are used especially for the removal of moisture from the products of biological origin, without making any noticeable changes in the basic characteristics. Freeze drying is also the preferred process in the fields of pharmacy, chemistry and food conservation. Heat-sensitive biological materials can be freeze-dried without affecting their potency. Drying materials can be stored for years at room temperature without the loss of their original characteristics. Freeze-dried material can be transported and sent to small containers, and no provision is required for refrigeration en route.

In addition to normal drying applications, our freeze-drying micro-organisms, plants, tissues etc. are suitable for the use of various applications, which are in addition to various customized industrial and research applications.

Bacterial growth and enzymes are not in freeze-dried products. Protein do not coagulate. Due to drying and sealing of oxidation of many materials such as hemoglobin and vaccine, it is completely prevented.

►► **SPECIAL FEATURES:**

- The entire unit is placed on the steel frame, which has been fixed with the cast. See through the lid complete with the Perks, in which the entire unit is installed in the steel cabinet with cooling condenser, vacuum drum, sample pot vacuum pump.
- -80°C Temperature
- For the measurement of the temperature, the temperature controlled by the microprocessor-based digital temperature controller is at -80°C (ambient temperature of 25°C). And electronic digital vacuum indicators co-controller.
- Cooling is done by seamlessly compressed seal compressor (CFC free) and vacuum by double stages with 250 ltrs/min direct motor drive rotary vane type vacuum pump with air ballast and 1×10^{-3} torr at the pump head. The ultimate vacuum occurs.
- Vacuum Drum has 6 or 8 port.
- Main drying chamber is made of stainless steel non-magnetic grade with Perspex top cover.

- Simple to install and operate
- Audio visual alarm
- Precise vacuum control
- Corrosion resistant construction
- HCFC/CFC refrigeration system

►► **APPLICATIONS:**

- Laboratories
- Microbiology and Tissue culture lab
- Food industry
- Biotechnology
- HCFC/CFC refrigeration system
- Pharmaceutical industry
- R&D and industrial sectors
- Bacteria & virus handling
- Research Institute

►► Specifications:

Model:	L-3523
Max. ice Capacity	7L
Ice condenser Performance	4.5L/24Hr.
Cold trap Temperature	-80°C
Constructions	Exterior: GI Sheet Powder Coated Exterior Top: Stainless Steel-316 Drying Chamber: Stainless Steel-304 Cold Trap Chamber: Stainless Steel-304 Lids: Acrylic
Tray	3 nos. stainless steel
Temperature Sensor	PT-100
Controls	Refrigeration ON/OFF Vacuum ON/OFF
Controller	Microprocessor based PID controller
Display	LED display
Refrigeration System	HCFC/CFC Free,
Compressor	Double compressor (Imported compressor- Emerson/Embraco/Danfoss/Tecumseh)
Refrigerant/gas	R-507A/R-404A
Alarms	Audio & visual
Compressor	1/3 HP (hermetically sealed)
Insulation	High density PUF insulation
Defrost	Hot gas solenoid system or heater defrosting
Pressure Control	Automatic or Manual
Drain connection	Side mounted
Accessories	- Two stages cooling system - Vacuum pump - Port:- 6/8 ports - Manifold:- 4/6 nos. - Caster wheels
Power Supply	220/240 Volts AC, 50/60hz, single phase

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HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

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3007



Optima Gas
Chromatograph
2979 Plus



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Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Particle
Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
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Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

Regulatory compliances



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Analytical Foundation

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2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

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