



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 dryingand 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 x 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.

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- •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

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- •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
Тгау	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, Validation, Trainings and Preventive Maintenance :

HPLC Servicir	ng :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 Maintenace 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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Instruments :Instruments :We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.



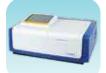


#### **About Analytical Technologies**

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

## **Our Products & Technologies**

Infra FTIR







**Optical Emission** Spectrophotometer





Optima Gas Chromatograph 3007



Chemistry Analyzer







Flash

Chromatograph



Atomic Absorption

Spectrophotometer

URINOVA 2800

Urine Analyzer



Liquid Partical Counter



Total Organic Carbon 3800





Fully Automated CLIA

NOVA-2100 Chemistry Analyzer

PCR/Gradient PCR/ RTPCR

TOC Analyzer

Laser Particle Size Analyzer

Ion Chromatograph

Water purification system



Optima Gas Chromatograph 2979 Plus



HEMA 2062 Hematology













#### **Regulatory compliances**



#### **Corporate Social Responsibility**

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



1.Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

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

3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.





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