

# ULDF-3000 series

## Ultra Low Deep Freezers (-86°C)



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

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

ATL's new range of Ultra-Low Temperature freezers are specially designed for faster temperature pull down & optimized cryopreservation. Highly sensitive microprocessor control ensures precise temperature management at -86°C

## ►► **Salient Features :**

- Efficient insulation with high core density reduces temperature loss
- Optimized compressor run ensures energy efficiency
- Hot line across the door assembly to prevent frost formation
- Efficient dual refrigeration system ensures fast temperature pull down
- Quadruplicate step silicon rubber gasket for complete insulation
- Independent internal foamed doors with plastic handle
- Smart Handle with LED door closure indication
  - » Temperature high / low
  - » Power failure
  - » Door Open
  - » Compressor on (only visual)
  - » Power on (only visual)
- Settable points of
  - » Temperature high / low
  - » High / low temperature alarm point
  - » Buzzer off time
- Rounded inner chamber for easy cleaning
- Attractive door profile
  - (i) Touch screen display ( TFT ) with additional features(Details overleaf)
  - (ii) Validation protocol with IQ, OQ, PQ Documentation

## ►► **LCD Display Features :**

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Power failure and resumption recorded with date and time
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm
- PC communication through RS-485 with data acquisition software
- ATL 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## ►► Touch Screen Display Features :

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Standby refrigeration (optional)
- Memory of 10,000 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- PC communication through ATL Datasoft
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)

## ►► ATL 'Data Soft' Features :

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with Lan connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers

## ►► Optional Accessories To be Ordered separately :

- Data logger for 8 Point temperature recording with sensor printer interface and software
- Seven days circular chart recorder
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature and humidity at any one set point for 24 hours on empty and loaded condition
- GSM alert through SIM card

## ►► Technical Parameters :

Particulars	ULDF-3090	ULDF-3185	ULDF-3360
Internal Volume (Liters)	90	185	360
No. of trays	2	3	6
No. of Internal Doors	1	2	4
Internal Dimensions WxDxH (mm)	400 x 400 x 580	510 x 510 x 730	700 x 510 x 1000
External Dimensions W x D x H (mm)	711 x 877 x 1405	820 x 987 x 1560	1010 x 987 x 1830
Operating Temperature Range	-45°C to -86°C		
Insulation (CFC free polyurethane foam)	Body : 150 mm sides, 300 mm Back, Door : 110mm		
Temperature Control	Microprocessor with PT-100 sensor		
Display	4" LCD		
Power Failure Alarm	Audio Visual Alarm		
Door Open Alarm	Audio Visual Alarm in case door open for over one minute		
Internal Body Material	S.S. 304 (AISI Grade, Non Corrosive, Non Magnetic)		
External Body Material	Powder Coated CRCA Steel		
Noise Level	Less Than 65 db(A)		
Battery Backup	Rechargeable, Back Up 8 hrs (for alarm system & temperature recorder)		
Recommended Voltage Stabilizer	VS 05	VS 06	VS 07

Supply: 220-240 Volts, 50 Hz Single Phase.

## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

**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.

**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, Manufacturing, 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



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Flash  
Chromatograph



Atomic Absorption  
Spectrophotometer



Liquid Particle  
Counter



Optical Emission  
Spectrophotometer



DSC/TGA



Semi Auto Bio  
Chemistry Analyzer



HEMA 2062  
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Analyzer



Micro Plate  
Reader/Washer



URINOVA 2800  
Urine Analyzer



Total Organic  
Carbon 3800



Fully Automated  
CLIA



NOVA-2100  
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Analyzer



Laser Particle  
Size Analyzer



Ion Chromatograph



Water purification  
system



## Regulatory compliances



## Corporate Social Responsibility

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



**Analytical**  
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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 personalities 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](mailto:Info@analyticalfoundation.org)

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

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

## Reach us @



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