24 YEARS
SINCE 1996

BACTERIOLOGICAL INCUBATORS

Labtop Bacteriological Incubators are none refrigerated versions of Cooling incubators (BOD) and they are specially designed to conduct life cycle testing, Shelf life studies , general incubation. Temperature range adjustable from 5.0°C above ambient to 60.0°C with Micro controller based temperature controller. Chambers are exclusively used for seed testing, Biological studies etc..

CABINET CONSTRUCTION

The cabinet of Labtop Chambers are insulated with high density CFC free Poly Urethane Foam. Interior of the chambers are mirror finish stainless Steel (304 SS, 0.8 mm thick). The exterior is white powder coated (1.0 mm thick) mild steel and the door has magnetic gasket with a keyed door lock. Specially designed solid stainless steel wire mesh trays ensure even temperature distribution and storage inside. GMP models are in total stainless steel (Inside S. S 304 with mirror finish and outside. S.S 304 dull finish and inner S.S316 is also available on request at extra cost)

SAFETY FEATURES :

- Miniature circuit breaker to protect electronic components in case of abnormal power supply
- Audio visual alarm when temperature deviates from set temperature
- Provision for remote alarm at security gate
- Safety cut off when temperature crosses 60.0 °C.
- Provision for mobile alert via GSM technology

TEMPERATURE CONTROL SYSTEM

- Micro-control based Temperature controller
- 4 digit, 7 segment LED display
- Audio visual alarm when the temperature deviates from the set temperature.
- Password protected keypad lock
- Visual alarm for faulty Sensor
- Display of set value and process value
- High quality PT-100 Sensor for better accuracy
- Programmable temperature Hi-low alarm setting

PROGRAMMABLE LOGIC CONTROLLER (PLC) SYSTEM

A **programmable logic controller (**PLC**)** is a digital computer used for automation of controlling electromechanical processes, such as **control** of Temperature, Speed, Door open/Close , Time and other event management with less maintenance hence no moving parts.

- 4.3" HMI with color Display and touch screen
- Configurable access for 72 users
- Privilege based grouping
- Multi level Password protected **H**uman **M**achine **I**nterface (HMI)
- Data storage to record set values, process values, date & time with variable time intervals
- Display of set value and process value
- High speed Ethernet connectivity
- 1- 999 Minutes timer
- Incorrect password attempt and user lock
- Online data can be printed with date and time stamp
- Non operational screen auto logout
- Configurable maintenance reminder pop up alarm
- Individual Alfa numeric user ID and password
- User operation will be recorded and saved in memory
- Online and offline Log reports on HMI
- Safety cut off for over shoot and under shoot
- Programmable alarms with event management
- Precise control of temperature by using PID control action
- Data storage capacity up to 200000 readings
- Self diagnostic system with error messages

ALERT MANAGEMENT

- SMS alert message can be send to 5 users with notifications
- Email alert can be sent to 15 users with notifications
- Call alert can be send to 5 users with voice messages with notifications

SALIENT FEATURES :

- Unidirectional air flow system ensures even temperature distribution and quick recovery after door openings.
- Foamed in place CFC free PUF insulation ensures temperature stability and reduced power consumption.
- Safety cut off in case of temperature over shoot
- Specially designed solid stainless steel wire mesh trays ensure even temperature distribution.
- Chamber illumination with LED fluorescent light
- U shaped Stainless Steel tubular heater
- 50 mm Validation port for external validation
- Caster wheels for ease of mobility
- Various accessories are available as option
- Transparent Acrylic inner door
- High quality PT-100 Sensor for better accuracy

TECHNICAL SPECIFICATIONS

Cat. No.	LBI-100	LBI-200	LBI-300	LBI-400	LBI-600	LBI-800	LBI-1000	LBI -1500	LBI-2000
	LBI-100G	LBI-200G	LBI-300G	LBI-400G	LBI-600G	LBI-800G	LBI-1000G	LBI-1500G	LBI-2000G
	LBI-100P	LBI-200P	LBI-300P	LBI-400P	LBI-600P	LBI -800P	LBI-1000P	LBI-1500P	LBI-2000P
	LBI-100GP	LBI-200GP	LBI-300GP	LBI-400GP	LBI-600GP	LBI-800GP	LBI-1000GP	LBI-1500GP	LBI-2000GP
Volume	100 Liters	200 Liters	300 Liters	400 Liters	600 Liters	800 Liters	1000 Liters	1500 Liters	2000 Liters
Temperature range	5 ºC above ambient to 60 ºC								
Accuracy	± 0.5ºC								
Uniformity	± 1.0ºC								
Control system	Micro control / PLC								
No. Doors	Single	Single	Single	Single	Single	Double	Double	Double	Double
No. Of tray	2	3	4	4	4	8	8	10	10
Power	500 W	500 W	500W	500 W	750 W	1000 W	1500 W	1500 W	1500 W
Voltage	230 VAC , 50/60Hz								
Dimensions (W x D x H) in mm and weight									
Internal Dim	435x400x600	505x400x1005	565x450x1205	635x530x1205	745x670x1205	1120x600x1205	1150x670x1300	1300x890x1300	1500x1030x1300
External Dia	580x845x1275	650x880x1680	710x935x1885	780x1010x1880	890x1150x1960	1370x1075x1920	1400x1145x1920	1550x1365x1920	1750x1505x1920
Packing size	707x972x1478	777x1007x1883	837x1062x2088	907x1137x2083	1017x1277x2163	1497x1202x2123	1527x1272x2123	1677x1492x2123	1877x1632x2123
Net Weight	120	145	200	255	280	310	335	360	380
Gross Weight	175	225	275	325	350	400	425	450	480

Note: P Models are with Programmable logic control (PLC)

      G Models are made out of Stainless steel 304 (GMP)

LABTOP DATALINX SOFTWARE

Title 21 CFR Part 11 is the part of Title 21of the code of Federal Regulations that establishes the United States Food and Drug Administration (FDA) regulations on electronic records and electronic signatures (ERES). Part 11, as it is commonly called, defines the criteria under which electronic records and electronic signatures are considered trustworthy, reliable, and equivalent to paper records.

- 21CFR-PART 11 compliance.
- Web based software
- Multiple chamber data acquisition on single software.
- Reports in Tabular and Graphical form
- Mean Kinetic Temperature Report.
- Automatic Back up Provision.
- Privilege based Group creation
- Privilege based user creation
- Trend analysis report
- Equipment audit trial report
- User ID with Alfa numeric password protection
- Multi user environment (LAN)
- Multiple level password with automatic expiry
- Electronic signature
- Separate reports for alarm and events
- Remote integrations with Control systems.
- Software audit trial report
- Email, SMS and call alert in case of system failure
- Online and offline trends

OPTIONAL ACCESSORIES

PLC system
Programmable Logic Control with Safety controller, auto changeover of Standby systems & other event managements with 4.3" Color HMI with touch screen, Ethernet connectivity and security lock for prevention of unauthorized tampering

Data Scanner
Eight/Sixteen Channel programmable temperature Data Scanner for record, store and print the data online and off line with variable print time intervals, suitable for 80 col. Dot matrix printer.

PC interface communication
Micro controller based PID controller to record, store and print the set values, process values, Date & time with variable print time intervals with RS-485 communication

Software
"LABTOP DATALINX " CFR 21 Part 11 compliance web based communication software for data management. Complete with RS-485 multi dropping to monitor chambers to one software.

Timer
Micro controller based programmable cyclic timer of 999 Hrs for controlling of various conditions

Light bank
Chamber Illumination with LED Light bank for photosynthesis studies

Ultra violet lamp
Chamber illumination with UV-C lamp to sterilize the interior

Mobile alert
Mobile alert via GSM Technology in case of system failure

Door access
Biometric magnetic door access for secured door opening and closing with PC interface communication

Power Backup
Uninterrupted online power supply for PLC in case of power failure

Trays
Additional rack and tray suitable for above equipment as per your requirement

DOCUMENTATION
GMP complaint models LABTOP offers IQ, OQ, PQ and DQ validation calibration and test certificates. with documentation, reports,

CALIBRATION
The equipment is calibrated with the help of master calibrator, which is certified for its accuracy by Electronics Regional Testing Laboratory (ERTL West) Government of India recognized testing laboratory with reference to National Physical Laboratories (NPL).

SERVICE AND SUPPORT

The training undertaken by our Channel partners and engineers is of the highest standard in the industry, ensuring that our customers are supported by the highest level of technical expertise and as such can be assured that their equipment will perform to the standards required at all times.

Our wide network of Engineers/Technicians enables us to respond to any technical query, ensuring that our customers receive the maximum benefit from their equipment.

NB: Specifications are subject to change without prior notice.