Laboratory Refrigerator

ISO 9001:2015 CERTIFIED

+91 800 800 1805

info@labiconics.com

www.labiconics.com

To meet requirements of general cooling applications in various medical and other laboratories, we design, manufacture and supply refrigerators from small to large capacities with temperature range from **2°C to 8°C**. These **Laboratory Refrigerators** offer excellent temperature control and comes with number of optional features that assist you in making your research comfortable.

A range of sizes are available from **100 litres to 1000 litres** or more with either single or double outer doors, under counter or upright (vertical type) designs. All models are constructed with powder coated mild steel (stainless steel optional) and stainless-steel interiors and each have high and low temperature audible alarms.

Features:

- *Microprocessor based, PID Digital Temperature Indicator and Controller.*
- *Temperature Range: +2°C up to 8°C*
- *Accuracy: ±0.5°C*
- *Resolution: ±0.1°C*
- *Capacity from 100 to 1000 Litres*
- *Forced air circulation for uniform temperature.*
- *CFC-free refrigeration system.*
- *Inner chamber made of Stainless Steel 304*
- *See Through Glass – Optional*

- *Outer surface made of Mild Steel with 7 Cycle powder process coats; SS Optional Safety Features: Low & high temperature cut-off settable thermostats.*
- *High grade Polyurethane foam Insulation (PUF) insulation*
- *Stainless steel adjustable trays*
- *Heavy duty castor wheels for easy movement.*
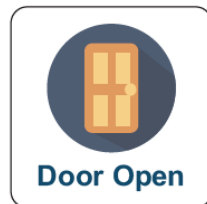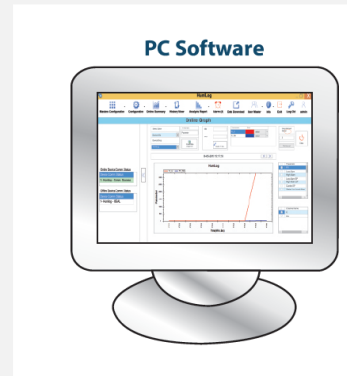- *Micro PLC controller and 21 CFR Part 11 Compliance software - optional*

Technical Specification:

Models	LIT-LR-110	LIT-LR-210	LIT-LR-300	LIT-LR-430	LIT-LR-600	LIT-LR-800	LIT-LR-1000
Capacity in Litres	110	210	300	430	600	800	1000
Inner Chamber Size W x H x D in (mm)	455 X610 X 410	800X 515 X 515	1200 X 500 X 500	1200 X 600 X 600	1200 X 700 X 700	1200 X 800 X 800	1500 X 800 X 800
No. of Shelves	2	3	3	3	3	4	5
Temperature Range	Adjustable temperature range from 2˚C to 8˚C with an increment of 0.1˚C.						
Temperature Accuracy	±0.5°C						
Temperature Resolution	0.1°C						
Controller	Microprocessor based, PID Digital Temperature Indicator with LED Display cum Controller						
Sensor	PT 100						
Construction	Exterior: Powder Coated Mild Steel / SS (Optional); Interior: Stainless Steel						
Door	Standard hinged Single / Double doors with double gasket						
Insulation	High Density Polyurethane Insulation (PUF)						
Trays	Perforated trays made of stainless steel						
Refrigeration	CFC Free compressor						
Alarm	1) Audio-visual alarm for high/low temperature. 2) Power Failure Alarm 3) Door Ajar Alarm						
Air Circulation	Forced air circulation						
Power	Single Phase 230 V AC, 50 Hz						

Optional Accessories

- Stainless Steel exterior
- Inbuilt Thermal Printer
- Chart Recorder
- Voltage stabilizer
- Digital Timer
- Datalogger with inbuilt storage.
- Micro PLC Controller and 21 CFR PART 11 Compliance Software

Micro PLC Controller and 21 CFR Part 11 Software

PC Software

Standby

Recording

SMS Alert

Door Open

Power Fail

Features

- *7" TFT, 65536 Color Touch Screen Display*
- *5 Temperature Channels for Control & Mapping*
- *Universal Input: Thermocouples, RTD Pt100, mA, V*
- *On-Off & Self Tune PID Temperature Control*
- *Settable 'Heat - Only', 'Cool - Only' & 'Heat + Cool' Control*
- *SSR or DC LINEAR (V / mA) Control Outputs*
- *Programmable Timer Delay for Compressor Switching*
- *In-built Programmable Timer*
- *Comprehensive Alarm System (Process Deviations, Door Open, Mains Fail)*

- *Standby Control Gadgets Interface (Optional Digital Outputs)*
- *Date / Time Stamped Process & Event Data Recording*
- *Password Protected Door Opening & Status Monitoring*
- *(Digital Input for Door Switch & Digital Output for Door Lock Solenoid)*
- *Mains-Fail Detection & Automatic Change Over to Battery / Inverter*
- *Serial Port for PC Interface with 21 CFR Compliant Software*
- *Optional GSM Interface Module for SMS Alert*

PC Interface with 21 CFR Compliant Software

Supported Operating Systems (OS)	• **Windows Vista, Windows 7, Windows 10** • **32 bit / 64 bit Windows 8 32 bit / 64 bit Pentium Dual Core**
Minimum PC Configuration Requirements	• 2.8 GHz Clock Speed 2 GB RAM • 40 GB Hard Disk
PC Software Features (21 CFR Part 11 Compliant)	• Supports Multiple Equipment on Single Installation • Auto Start-up on PC Power-up • Online Display of Process Values & Stored Records in Graphical & Tabular Forms with Alarm Indications • SMS and/or Email Alerts on Alarm Conditions • Mean Kinetic Temperature (MKT) Computation • Automatic Periodic Downloading of Records Stored in controller • Access Control According to Authority Level • User Actions with Signing & Authorization • Automatic Password Expiry • Manual & Auto Back-up Facility with Archiving • Data Log Reports with User Configurable Title, Footer & Header • Data Log Report, Alarm Log Report, History Graph & Audit Trail • Report in PDF & EXCEL formats • Audit Trail History of Critical Events & User Actions

Data Recording

Storage Device	• In-built Flash Memory
Record Capacity	• 5,000 Records
Recording Interval	• User Programmable (1 to 250 Minutes)

Recording Data (Date/Time Stamped)	• Process Values
	   • Measured Control & Mapping Temperatures
	• Events
	   • Power-up
	   • Process Value Alarm Toggle
	   • Change in Control SP
	   • Change in Date/Time Settings
	   • Change in Recording Interval
	   • Equipment Door Open/Close
	   • Mains Power Fail/Resumption

LAB ICONICS

For details, please contact:

LAB ICONICS

LAB ICONICS TECHNOLOGIES LLP
Flat No.412 Emerald Block
My Home Jewel Apartments
Madinaguda, Hyderabad – 500049
India

M: +91 800 800 1805
L: +91 40 4012 0110
E: info@labiconics.com
W: www.labiconics.com

LAB ICONICS