

## LABORATORY REFRIGERATOR (2°C to 8°C)

**elte Vertical Laboratory Refrigerators** are used for maintaining and monitoring the temperature between 2°C to 8°C consistently. Predominantly these refrigerator is used for storing the vaccines, pharmaceutical supplies, samples and other temperature sensitive specimens at a steady temperature. There are 10 different models based on the volume and user convenience.

### Salient Features

The outer body has a robust construction of 1 mm thick mild steel with epoxy powder coating whereas the inner chamber is made of corrosion resistant 1 mm thick Stainless Steel 304 Grade. An ergonomic outer door with lock and key is provided in order to prevent unauthorized access. There is also a provision of an inner transparent door with latches for easy display of materials kept inside the refrigerator. Sturdy castor wheels are fixed at the bottom for mobility of the unit with ease. Stainless Steel shelves are provided. Drain condensate outlet also available in order to drain of condensed water from the bottom of the chamber. Magnetic door gasket ensures complete sealing of the main door.



The refrigerator runs on standard 230 V AC Single Phase 50 Hz power supply. A MCB is present for better electrical safety. Microcontroller based graphic LCD display is provided for easy visibility of internal temperature from a distance. The control panel is placed at an easily accessible height for operation. The controller has a readability as well as set temperature increments of 0.1 °C. Audio as well as visual alarms are indicated whenever there is large variation in set temperature, sensor failure, door kept open, etc. Interior chamber LED lighting gets activated automatically when the door is opened and turns off when the door is closed. The User Interface is password protected in order to prevent parameter tampering.

Eco-friendly refrigeration system comprises of a low noise highly efficient heavy duty hermetically sealed compressor. The powerful refrigeration system ensures temperature stability even in high external ambient conditions. It uses an environmentally friendly HFC refrigerant gas R-134 A which is CFC and HCFC free. The high-density PUF insulation helps to maintain the interior temperature even when there is ambient temperature variation. PT 100 sensor is used for accurate temperature feedback of the inner chamber. Maintenance free blower fans enable forced air circulation in order to achieve uniform temperature distribution and maintain vital operational temperature of 2°C to 8°C inside the chamber. The blower fans turn off when the door is opened to avoid loss of chilled air blowing out of the unit. Provision of hot line reduces the condensation on the outer door openings.

## Technical Specification :

MODEL NO.	ELR-100	ELR-200	ELR-300	ELR-400	ELR-500	ELR-600	ELR-700	ELR-800	ELR-900	ELR-1000
Inner Dimensions(mm)	450x450x500	500x450x900	550x500x1100	600x560x1200	600x700x1200	650x750x1250	700x750x1350	1040x600x1300	1040x600x1450	1050x660x1450
External Dimensions(mm)	570x650x920	620x690x1320	670x700x1550	720x780x1670	710x810x1870	770x850x1950	820x890x1950	890x160x2070	1160x1000x2070	1370x1030x2070
Temp. Accuracy	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C	±0.5°C
Storage Volume	100 Ltrs	200 Ltrs	300 Ltrs	400 Ltrs	500 Ltrs	600 Ltrs	700 Ltrs	800 Ltrs	900 Ltrs	1000 Ltrs
No. of Shelves	3	4	5	5	6	6	6	8	8	8
No. of Chamber Blowers	1 Axial Fan	1 Motor	2 Motors	2 Motors	2 Motors	2 Motors	2 Motors	2 Motors	2 Motors	2 Motors

## Optional Features:

- Manufacturing as per CE standards.
- GMP Models also available (Outer SS 304 1 mm thick & Inner SS 304 1 mm thick)
- Auto/ Manual Defrost system.
- Glass door.
- Self Closing Doors
- Height adjustable shelves
- Battery Backup for display for 10 Hours along with Power Failure Alarm.
- 8/4 Channel temperature data scanner with sensors, interfacing RS 232 to RS 485 or USB Port.
- 21 CFR Part 11 Compliant Software for Data Management.
- Mobile alert via GSM incase of system malfunction.
- IQ, OQ, PQ, DQ, calibration, validation and traceability documentation can be provided as per FDA protocols.

## Calibration :

All models are calibrated with the help of master calibrator which is certified for its accuracy by Electronic Regional Test Laboratory Mumbai.

**Refrigerator can also be manufactured as per user-customised specification.**

**'Walk In Models Available Upto 20,000 Liters Capacity'**

