

MEDICAL / LAB REFRIGERATOR



APPLICATIONS

- **Hospitals and Diagnostic Centres:**
Storage of vaccines, insulin, injectable drugs, and diagnostic reagents. PCR reagents, diagnostic kits
- **Pharmaceutical Industry:**
Preservation of chemical formulations, biological samples, and quality control materials.
- **Research Laboratories:**
Safe storage of reagents, cell culture media, enzymes, and temperature-sensitive samples.
- **Blood Banks and Pathology Labs:**
Maintenance of plasma, blood derivatives, and reagents at precise temperatures.
- **Public Health & Immunization Programs:**
Reliable storage for vaccines as part of cold chain management systems.

KEY FEATURES

1. Durable Construction:

- **Interior:** Stainless steel (SS 304 grade) for corrosion resistance and easy cleaning.
- **Exterior:** Powder-coated mild steel or stainless steel finish for durability. Adjustable, removable wire/solid shelves for flexible storage options.

2. Microprocessor Temperature Control System:

Maintains precise temperature between +2°C to +8°C with high accuracy. The controller automatically adjusts compressor cycles and fan speed to ensure consistent cooling.

3. Uniform Cooling Distribution:

Forced-air circulation ensures uniform temperature distribution throughout the chamber, preventing hot or cold spots.

4. Temperature Monitoring & Display:

Equipped with a Digital LED /LCD display showing real-time internal temperature and available with Temp Indicator only

5. Safety and Alarm System:

Built-in audio-visual alarms activate during high/low temperature deviations, door opening, power failure, or sensor malfunction. (Optional)

6. High-Performance Insulation:

Constructed with CFC-free, high-density polyurethane foam (PUF) insulation for minimal thermal loss and higher energy efficiency.

7. Eco-Friendly Refrigeration System:

Utilizes non-CFC refrigerants such as R134a or R600a to ensure environmental compliance and reduce greenhouse gas emissions.

8. Defrost Mechanism:

Available in both manual and auto-defrost versions to prevent frost accumulation and maintain optimal cooling performance.

9. Lighting & Accessibility:

Interior LED illumination for easy visibility. Lockable glass or solid door options ensure sample safety while allowing clear viewing.

TECHNICAL MATRIX

Model No	PTE-LR-513	PTE-LR-514	PTE-LR-515	PTE-LR-516	PTE-LR-517	PTE-LR-518	PTE-LR-519
Approx. Capacity	100 Litre	200 Litre	300 Litre	350 Litre	400 Litre	450 Litre	500 Litre
MOC	Outer Mild Steel Duly powder coated and Inner Chamber Stainless steel OR Outer Body is of ABS plastic and Inner Chamber is Galvanized Aluminium						
Temp Controller	Controlled By Microprocessor Based Digital Temperature Controller OR Digital Temperature Controller						
Temperature Range	+2°C to 8°C						
Temperature Accuracy	± 1°C.						
Display	LED Display for Set Value(SV) and Process Value (PV)						
Relay	Solid State electronic Relay with heat sink						
Insulation	High Density PUF insulation						
Operations	Silent operation						
Supply	220/230 volts AC supply						

OPTIONAL ADD ONS

Chart Recorder: Continuous temperature recording on paper charts.

Data Logger: USB port for PC interface

Battery Backup: For controller and alarm system operation during power outages.

Glass Door with Anti-Condensation Heater: Prevents fogging and improves visibility.

Stainless Steel Exterior Finish: For hygiene-sensitive or corrosive environments.

Voltage Stabilizer : For Preventing the Breakdown of Compressor due to high / low voltage

Customized Different Capacities are also Available