

LPVT-72-HG

Product Description

Our Precision Series Lab Touchscreen Refrigerators deliver superior cooling to laboratory environments. Engineered with variable speed compressors (VSCs), these units feature ultra-quiet operation and significant energy savings. VSCs optimize energy consumption by self-adjusting to cooling demands. These compressors also deliver enhanced system performance and provide a longer lifespan than other compressor variations.

This touchscreen line showcases our most elite features including state-of-the-art touchscreen controllers, advanced alarm systems and data logging capabilities. All units are powered by microprocessor temperature control. These units also utilize natural, hydrocarbon refrigerants for environmental health and energy efficiency. Upgrade your laboratory with these advanced units and welcome energy savings, noise reduction, smooth operation, and improved system performance to your work environment.

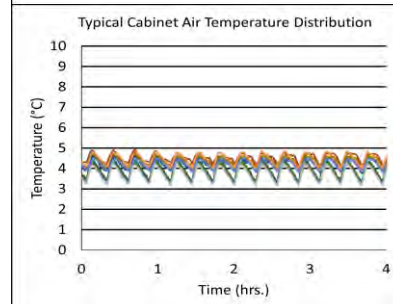
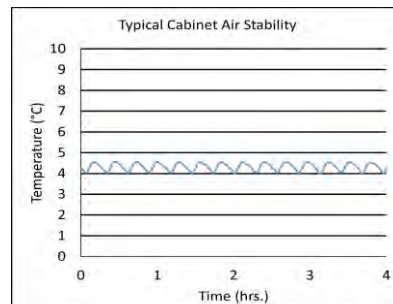
Images



| Temperature Probes ^{1,2} | | | |
|-----------------------------------|-----|-----|-----|
| Probe | Ave | Min | Max |
| 1 | 5.2 | 4.8 | 5.6 |
| 2 | 4.9 | 4.3 | 5.5 |
| 3 | 5.1 | 4.5 | 5.6 |
| 4 | 5.4 | 4.9 | 5.9 |
| 5 | 5.1 | 4.6 | 5.5 |
| 6 | 5.7 | 5.3 | 6.1 |
| 7 | 5.3 | 4.9 | 5.7 |
| 8 | 5.4 | 4.7 | 5.8 |
| 9 | 5.1 | 4.6 | 5.4 |
| 10 | 4.8 | 4.4 | 5.1 |
| 11 | 4.5 | 4.0 | 4.9 |
| 12 | 4.5 | 4.0 | 4.9 |
| 13 | 4.8 | 4.3 | 5.2 |
| 14 | 5.2 | 4.8 | 5.5 |
| 15 | 4.4 | 3.8 | 5.0 |
| Ball | N/A | N/A | N/A |
| Bag | N/A | N/A | N/A |



Temperature Charts ³



Certifications



General Description and Application

| | |
|----------------------------------|---|
| Storage capacity (cu. ft) | 72 Cu. Ft. |
| Door | Triple, glass, swing, right and left hinged doors |
| Shelves | Fifteen adjustable shelves with guard rail on back |
| Drawers | Optional pull-out drawers available |
| Mounting and installation | Six preinstalled swivel casters, front casters locking |
| Interior lighting | Shielded, switched LED lighting, full coverage, balanced spectrum |
| Airflow Management | Forced air technology |
| External probe access | Rear wall port (3/4" dia. |
| Insulation | Cabinet is foamed-in-place with EPA compliant high density urethane foam |
| Exterior materials | White powder coated steel |
| Access control | Keyed door lock |
| General warranty | Three (3) year parts and labor warranty |
| Compressor warranty | Seven (7) year compressor warranty |
| Product Weight (lbs) | 728 |
| Shipping Weight (lbs) | 880 |
| Rated Amperage | 5 Amps |
| Power Plug/Power Cord | NEMA 5-15 plug |
| Facility Electrical Requirement | 110-120V AC: 15 A (minimum) |
| Agency Listing and Certification | ETL, C-ETL listed and certified to UL471 standard, hydrocarbon refrigerant safety |

Performance

| | |
|---|----------------------|
| Uniformity ¹ (Cabinet air) | ±0.86 |
| Stability ² (Cabinet air) | ±0.61 |
| Maximum temperature variation (Cabinet air) | ±1.15 |
| Energy Consumption (KWh/day) | 2.02 |
| Average Heat Rejection (BTU/hr) | 625 |
| Noise Pressure Level (dBA) | 47 or less installed |
| Pull down time to nominal operating temp | 80 min |

Features

| | |
|----------------------------|--|
| Data Logging and Reporting | Customizable Data Capture Intervals: Logs data every 5, 10, or 15 minutes. Alarm History with Timestamped Logs: Captures and stores all alarms (door ajar, power loss, temperature deviations). |
| Real-Time Graphing | View temperature trends over 24 hours or 7 days with zoom/scroll capabilities. Statistics Summary: Displays minimum, maximum, average, and number of samples in selected time ranges. |

Performance data acquired at 22°C ambient, 4°C nominal set point in an empty cabinet with shelves using air probes, during stabilized steady state operation and a DAQ sampling rate of one measurement every 10 seconds

- 1 - Uniformity is defined as the maximum variance in temperature across all probes at any point in time over the testing period.
- 2 - Stability is defined as the maximum variance in temperature experienced by any single probe over the testing period.
- 3 - Charts are representative of the product and actual performance may vary slightly.

| Refrigeration System | |
|----------------------|--|
| Compressor | Hermetic, variable speed (VSC). Rated speed range: 1600-4000 rpm |
| Refrigerant | EPA SNAP compliant, R290 |
| Condenser | Anti-fouling tube and grid design, ultra-quiet multi-speed fan |
| Evaporator | Fin and tube design, high efficiency fan |
| Defrost | Cycle optimized, zero energy |

| Controller, Configuration, Alarms and Monitoring | |
|--|---|
| Controller technology | Microprocessor with color touchscreen (8in) input and display, C or F |
| Battery Backup | 12V high-capacity battery, controller, all alarms active, temperature monitoring DAQ and event logging active on battery backup, touch screen display |
| Controller probe | Bottle with glass bead thermal media |
| Data Transfer | USB port for temperature and alarm log download. Data and time stamps in .csv and .pdf |
| Reliability and Compliance | Battery Reset Reminder: Alerts users to replace the battery proactively. New Power Supply with Low Voltage Shutoff: Reduces risk of damage from power fluctuations. |
| Adjustable Temperature Range | 1°C to 10°C |
| External alarm connection | State switching remote alarm contacts |
| Alarm Management | Audible & Visual Alarms: Customizable sounds and volumes; silent mode with visual persistence. Alarm Delays: Adjustable settings for door, temperature, and power loss alarms to prevent nuisance alerts. Ring-Back Functionality: Audible alarms re-engage after a preset delay if the condition persists. |
| Security and Access | Multi-Level Password Protection: User, Supervisor, and Admin roles for access and control. Automatic Logout: Enhances security by requiring re-login after inactivity. Customizable Passwords/PINs: Ensures tailored access for your team. |

| | |
|---------------------------|--|
| Advanced Controls | Calibration Adjustments: Fine-tune temperature offsets for precise measurements. Defrost Options: Force defrost and cycle settings for freezers. Cycle Control: Adjustable intervals and duration for various operational conditions |
| Visual and User Interface | Intuitive Touch Screen: Pinch-to-zoom, scrollable graphs, and customizable display options. Dual Temperature Probes (Optional): Displays readings for up to two zones. Adjustable Display Settings: Screen brightness, real-time temperature comparison to alarm points, and selectable °C/°F display with 0.1 resolution. |

| Dimensions | | | | | |
|------------|-------------|-------------|--------------|------------------|------------------------|
| | Width (in.) | Depth (in.) | Height (in.) | Door Swing (in.) | Total open Depth (in.) |
| Exterior | 81" | 36.25" | 81.5" | 22.875" | 59.125" |
| Interior | 76.5" | 25" | 58.875" | | |

