



# Thermologs

Reliable. Accurate. Always Alert.



## Overview

Thermologs is an advanced, IoT-enabled monitoring solution by Navtronicx designed for environments where temperature stability is critical such as laboratories, pharmaceutical storage areas, server rooms, equipment rooms, and cold storage facilities. It continuously records temperature data, alerts you to any deviations in real time, and ensures full compliance with environmental and quality standards.

## Key Features

### Continuous Temperature Logging

- Automatically captures temperature readings at predefined intervals (as frequent as every minute).
- Stores data locally and securely syncs with the cloud for easy access and analysis.
- Graphical dashboards and reports help you visualize temperature trends over time.

### Real-Time Alerts

- Instant notifications via SMS, email, or mobile app when temperature deviates beyond set limits.
- Configurable thresholds for different zones or equipment.
- Multi-user alert system ensures the right people are informed immediately.

### Cloud Connectivity & Data Access

- Access temperature records anytime, anywhere.
- Download detailed logs in Excel or PDF format for audits or regulatory reporting.
- Integrates with existing facility management or lab information systems.

### Smart Sensor Technology

- High-precision digital sensors with fast response times.
- Optional humidity or pressure monitoring add-ons for comprehensive environment tracking.
- Battery backup ensures uninterrupted operation during power outages.

### Compliance & Traceability

- Designed to meet GLP, GMP, and ISO requirements.
- Tamper-proof data logs with automatic time-stamping and calibration tracking.
- Supports audit trails for regulatory inspections.



## Applications

### Research Laboratories:

Protect sensitive biological samples and reagents.

### Equipment Rooms:

Prevent damage to instruments caused by overheating.

### Food & Beverage Quality Control:

Monitor production and storage environments for safety and compliance.

### Server Rooms & Data Centers:

Maintain optimal operating temperatures to avoid downtime.

### Pharmaceutical & Cold Chain Storage:

Ensure vaccines and medicines remain within safe temperature limits.



# Device Specifications

## Connectivity

- Wi-Fi: 2.4 GHz IEEE 802.11 b/g/n.
- Security: WPA2 secured connectivity.
- Protocol: Secure MQTT communication between field device and cloud platform.
- Cloud Integration: Native support for cloud-based data storage and visualization.

## Power Supply

- Primary Power: 5V DC via USB-C connector.
- Battery Type: Removable built-in Li-Ion 18650 cell.
- Backup Duration: Up to 12 hours of UPS operation under normal load.
- Charging: USB-C charging interface with built-in charge management.

## Sensing Interface

- Sensor Type: Industrial-grade PT100 RTD (Resistance Temperature Detector).
- Sensor Input: 3-wire or 4-wire configuration (optional).
- Measurement Range:  $-200^{\circ}\text{C}$  to  $+600^{\circ}\text{C}$  (depending on sensor type)
- Accuracy:  $\pm 0.1^{\circ}\text{C}$  typical (excluding sensor tolerance)

## Physical Characteristics

- Enclosure: Compact and robust design suitable for industrial environments.
- Mounting Options: Wall-mount.
- Dimensions: 90mm x 80mm x 25 mm.
- Weight: 150g.

## Environmental Specifications

- Operating Temperature:  $0^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  (device)
- Storage Temperature:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Relative Humidity: 10% to 90% (non-condensing)

## Compliance and Safety

- Wi-Fi Certification: IEEE 802.11 compliant.
- Safety: Overcharge, overcurrent, and reverse-polarity protection.
- Firmware Update: OTA (Over-the-Air) capable.

## Display & User Interface

- Display: 1.14-inch full-color IPS LCD display.
- Resolution: 135 x 240 pixels (approx.)
- Functions Displayed:
  - Real-time temperature readings.
  - Battery level and connectivity status.
  - Device name and sampling interval.

## Data Management

- Sampling Rate: Adjustable, starting from 1 sample per second.
- Data Storage: Cloud-based with time-series database architecture.
- User Management:
- Self-service creation of user accounts.
- Easy addition and deletion of devices.

## Applications

- Food and beverage process monitoring.
- Pharmaceutical storage and cold-chain tracking.
- Laboratory temperature logging.
- Industrial process control.
- Smart facility environmental monitoring.

## Security

ThermoLogs is designed with a security-first architecture to ensure the integrity, confidentiality, and privacy of all recorded data. The device does not contain any audio, video, location tracking, or personal data collection capabilities, making it safe for installation across regulated, privacy-sensitive environments such as laboratories, healthcare facilities, pharmaceuticals, and food manufacturing sites.

### Device Security

- **No Microphones or Cameras** – The device has no built-in microphones, cameras, or audio/video capture modules.
- **No GPS or Location Tracking** – ThermoLogs does not capture or transmit any location metadata.
- **Local Data Protection** – All device-stored data is minimal and encrypted before transmission.

### Cloud & Data Security

- **Secure Cloud Storage** – Data is stored in a secure cloud environment using industry-standard encryption
- **Role-Based Access Control (RBAC)** – User roles, device ownership, and sharing permissions ensure that only authorized users can access data.
- **Audit Logs** – All major actions (device binding, sharing, access) are logged for accountability.

### Privacy Protection

- **No Personal Data Collection** – ThermoLogs does not collect names, addresses, biometric data, voice recordings, or any PII.
- **User-Controlled Sharing** – Device data can only be shared by the registered owner via explicit email invitation.

## Contact Us



(+94) 11 2 850 383 | (+61) 405 151 390



Info@navitsa.com



www.navitsa.com



<https://www.facebook.com/NavitsaTechnologies>



<https://www.linkedin.com/company/navitsa-technologies>



Navitsa Technologies Pvt Ltd.

No.45/6, Nagahawatte Road, Maharagama,  
Sri Lanka.

Navitsa Pty Ltd.

Level 5, 33 Elkhorn Avenue Surfers Paradise,  
QLD 4217. Australia.