

# THERM•A•LERT-P

## TEMPERATURE MONITORING AND ALARMING SYSTEM WITH WIRELESS TWO-WAY COMMUNICATION



Your Automation Site !

### Features

- Wireless Two-Way Communication
- Precision RTD Sensing Element
- View Data in Real-Time
- 2 Year Battery Life
- Battery Life Indicator
- NIST Traceable
- Field Upgradeable

### Benefits

- Fast Installation
- Minimal Long-Term Maintenance
- Full Communication From One PC

### Applications

- Refrigerator/Freezer Monitoring
- Calibration chamber monitoring
- Laboratory monitoring
- Hospitals
- Blood Banks
- HVAC

The Therm•A•Lert-P is a temperature monitoring and alarming system, designed specifically for laboratories, warehouses and other environments where temperature monitoring is critical. The system can be used to monitor a single location, or expanded to monitor hundreds of locations over a broad area (additional wireless loggers and transceivers may be required).

The Therm•A•Lert-P provides real time wireless, or wired, notification of temperature. The data logger features user programmable alarms that can be configured to send a message via text message (standard SMS rates apply), on-screen alarm and/or via e-mail if an alarm condition is met. The standard Therm•A•Lert-P includes an RTD probe with a 9' lead wire and a 4.5" probe sheath.

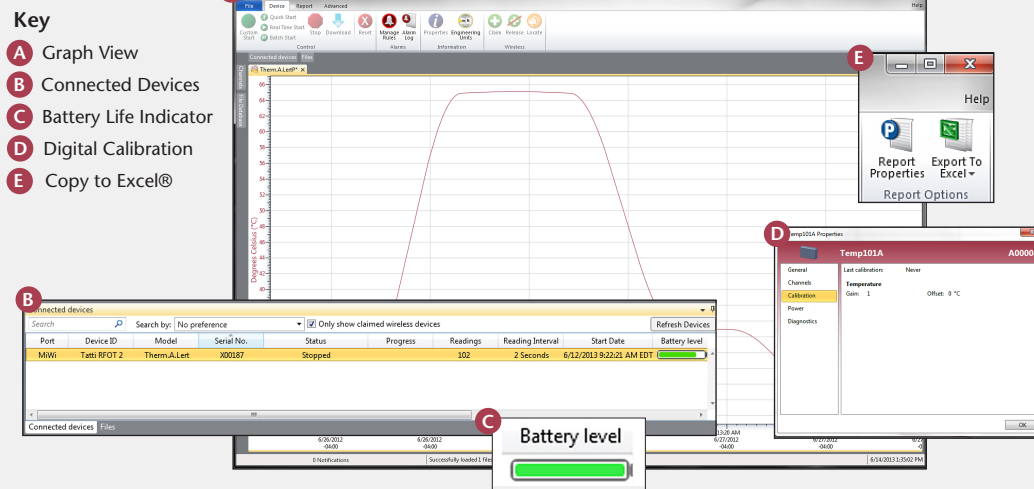
The Therm•A•Lert-P device is equipped with two-way wireless communication. Wireless systems offer a flexible and robust integration for many applications. One PC can provide control and communication to all the wireless loggers within range, or the system can be divided into smaller subnets (using a different RF channel). In addition to the data being transmitted wirelessly, the Therm•A•Lert-P also stores each reading to non-volatile internal memory for a secure backup. Customers can set up automatic archiving preferences, ensuring all data is saved and retained to comply with federal regulations.

The Therm•A•Lert-P probe can be mounted inside an ethylene glycol bottle. When placed in a chamber, the temperature of the ethylene glycol is measured rather than air temperature. This more accurately represents the temperature of the contents inside the chamber, and prevents false alarm triggers when the chamber door is opened and closed. The glycol bottles are available in 30ml, 60ml and 250ml sizes.



Ethylene glycol bottle (optional)

## DATA LOGGER SOFTWARE



### Software Features:

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view
- Multilingual



# THERM•A•LERT-P SPECIFICATIONS\*

## Temperature\*\*

**Probe Temperature Range:** -200°C to +260°C (-328°F to +500°F)

**Lead Wire Range:** -200°C to +200°C (-328°F to +392°F)

**Glycol Bottle (optional) Range:** -50°C to +80°C (-58°F to +176°F)

**Resolution:** 0.01°C (0.018°F)

**Probe Calibrated Accuracy:**  
 $\pm 0.1^\circ\text{C}/\pm 0.18^\circ\text{F}$   
 (-20°C to +80°C/-4°F to +176°F)  
 $\pm 0.5^\circ\text{C}/\pm 0.9^\circ\text{F}$   
 (outside of specified range)

## Wireless

**RF Frequency:** 2.45GHz IEEE 802.15.4 ultra-low power wireless transceiver with fully bi-directional communication

**Band:** ISM band 2.405-2.48 GHz

**Maximum Output Power:** +0dBm typical

**Receiver Sensitivity (RFC1000):** -95dBm typical

**Range:** 2000' max. outdoors (line of sight unobstructed)  
 500' max. indoors (typical urban)

\*\*Temperature specifications based on ideal 100  $\Omega$  Pt RTD compliant with IEC 751 (1983) and ITS-90, 5000 $\Omega$ .

**BATTERY WARNING:** Do not recharge, disassemble, heat above 100°C (212°F), incinerate or expose contents to water. Vent, rupture or explosion may result and cause severe burns.

## General

**Reading Rate:** One reading every two seconds to one every 24 hours

**Memory:** 30,000 readings; software configurable memory wrap

**Wrap Around:** Yes

**Start Modes:** • Immediate start

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device

**Battery Type:** 3.6V lithium battery included; **user replaceable**

**Battery Life:** 2 years typical

**Data Format:** Date and time stamped °C, °F, K, °R

**Time Accuracy:**  $\pm 1$  minute / month (at 25°C)

**Computer Interface:** RFC1000 required

**Software:** XP SP3/Vista/Windows 7/Windows 8

**Operating Environment:** -20°C to +80°C (-4°F to +176°F), 0%RH to 95%RH non-condensing

**Data Logger:**  
 2.2" x 5.0" x 1.3" (55mm x 127mm x 33mm)  
 Wire: 9'  
 Probe: 3/16" dia x 4.5"

### Dimensions:

**Glycol bottle:**  
 30ml: 2.5" x 1.5" x 1.5" (63mm x 38mm x 38mm)  
 60ml: 3.3" x 1.6" x 1.6" (84mm x 41mm x 41mm)  
 250ml: 5.7" x 2.3" x 2.3" (145mm x 58mm x 58mm)

**Enclosure Material:** ABS Plastic

**Approvals:** CE

## ORDERING INFORMATION

MODEL	DESCRIPTION
THERM•A•LERT-P	Temperature data logger with wireless transceiver equipped with precision RTD probe
THERM•A•LERT-P-30	Temperature data logger with wireless transceiver equipped with RTD probe and 30ml glycol bottle.
THERM•A•LERT-P-60	Temperature data logger with wireless transceiver equipped with RTD probe and 60ml glycol bottle.
THERM•A•LERT-P-250	Temperature data logger with wireless transceiver equipped with RTD probe and 250ml glycol bottle.
RFC1000	Wireless RF receiver/repeater for use with Therm•A•Lert-P. USB to mini USB adapter and power supply included.
RFC1000-IP69K	Splash Proof Wireless Transceiver. USB to mini USB adapter and power supply included.
RFC1000-CE	CE approved wireless RF receiver/repeater for use with Therm•A•Lert-P. USB to mini USB adapter and power supply included.
*NIST	NIST Calibration Certificate
TLH-5903	Replacement battery for Therm•A•Lert-P

ASK ABOUT OUR OTHER DATA LOGGERS

Temperature  
 Humidity  
 Pressure  
 pH  
 Level  
 Shock  
 LCD Display  
 Pulse/Event/State  
 Current  
 Voltage  
 Wireless  
 Intrinsically Safe  
 Spectral Vibration  
 Motion

\*To order the product with the NIST certificate add -CERT to the end of the part number.

