

# THERM-A-LERT-RH WIRELESS HUMIDITY & TEMPERATURE MONITORING AND ALARMING SYSTEM



## Features

- Wireless Two-Way Communication
- Precision RTD Sensing Element
- View Data in Real-Time
- 2 Year Battery Life
- Battery Life Indicator
- N.I.S.T. Traceable
- Field Upgradeable

## Benefits

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

## Applications

- Calibration chamber monitoring
- Laboratory monitoring
- Hospitals
- Blood Banks
- Warehouses
- Museums

The Therm•A•Lert-RH is a humidity and temperature monitoring and alarming system, designed specifically for laboratories, warehouses and other environments where temperature and humidity 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 MadgeTech wireless loggers and transceivers may be required).



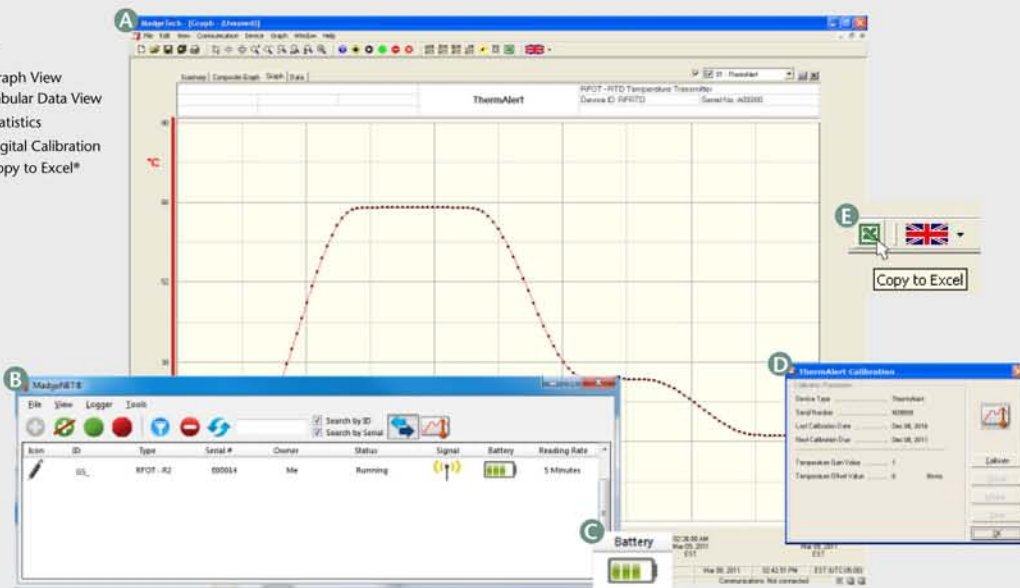
The Therm•A•Lert-RH provides real time wireless, or wired, notification of humidity and temperature. The data logger features user programmable alarms that can be configured to send a message via text message (standard SMS rates apply), on-screen alarm and/or via e-mail if an alarm condition is met.

The Therm•A•Lert-RH device is equipped with two-way wireless communication. PTC's® 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-RH also stores each reading to non-volatile internal memory for a secure backup. Customers can also set up automatic archiving preferences, ensuring all data is saved and retained to comply with federal regulations.

## DATA LOGGER SOFTWARE

### Key

- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel\*



### Software Features:

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations ( $F_0$ , 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-RH SPECIFICATIONS\*

## Temperature\*\*

<b>Temperature Range:</b>	-20°C to +80°C ( -4°F to +176°F)
<b>Temperature Resolution:</b>	0.01°C (0.018°F)
<b>Temperature Calibrated Accuracy:</b>	±0.5°C/±0.9°F (0°C to +50°C/32°F to 122°F)

## Humidity

<b>Humidity Range:</b>	0%RH to 95%RH non-condensing
<b>Humidity Resolution:</b>	0.1%RH
<b>Humidity Calibrated Accuracy:</b>	±3.0%RH (±2%RH typical at 25°C/77°F)

## Wireless

<b>RF Frequency:</b>	2.45GHz IEEE 802.15.4 ultra-low power MadgeNET wireless transceiver with fully bi-directional communication
<b>Band:</b>	ISM band 2.405-2.48 GHz
<b>Maximum Output Power:</b>	+0dBm typical
<b>Receiver Sensitivity (RFC1000):</b>	-95dBm typical
<b>Range:</b>	Line-of-sight 400', indoors 150'

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

## General

<b>Reading Rate:</b>	One reading every two seconds to one every 24 hours
<b>Memory:</b>	15,000 readings per channel; software configurable memory wrap
<b>Wrap Around:</b>	Yes
<b>Start Modes:</b>	<ul style="list-style-type: none"> <li>• Immediate start</li> <li>• Delay start up to 18 months</li> </ul>
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	3.6V lithium battery included; <b>user replaceable</b>
<b>Battery Life:</b>	2 years typical
<b>Data Format:</b>	Date and time stamped °C, °F, K, °R
<b>Time Accuracy:</b>	±1 minute / month (at 25°C/77°F)
<b>Computer Interface:</b>	RFC1000 required
<b>Software:</b>	XP SP3/Vista/Windows 7
<b>Operating Environment:</b>	-20°C to +80°C (-4°F to +176°F), 0%RH to 95%RH non-condensing
<b>Dimensions:</b>	2.2" x 5.25" x 1.3" (55mm x 133mm x 33mm)
<b>Enclosure Material:</b>	ABS Plastic
<b>Approvals:</b>	CE

**BATTERY WARNING:** Do not recharge, disassemble, heat above 125°C (257°F), incinerate or expose contents to water. Vent, rupture or explosion may result and cause severe burns.

## ORDERING INFORMATION

MODEL	DESCRIPTION
THERM•A•LERT-RH	Humidity and temperature data logger with wireless transceiver
RFC1000	Wireless RF Inreface Cable Package
RFC1000-REPEATER	Wireless RF Transceiver and Repeater

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- Current
- Voltage
- Wireless
- Intrinsically Safe
- Spectral Vibration
- Motion



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