# THERM • A • LERT-RH WIRELESS HUMIDITY AND 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
- NIST 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

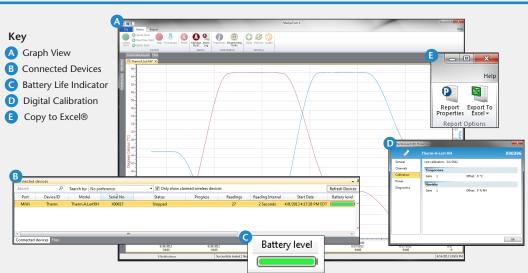
The MadgeTech Therm•A•Lert is a temperature monitoring and alarming system, designed specifically for laboratories, warehouses and other environments where temperature monitoring is critical. The system can be used to monitor a single location, or expanded to monitor hundreds of locations over a broad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

The Therm•A•Lert 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 Therm•A•Lert device is equipped with two-way wireless communication. MadgeTech 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 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.



### MADGETECH 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-RH SPECIFICATIONS\*

### **Temperature\*\***

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

### **Humidity**

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

## **Wireless**

RF Frequency:	2.45 GHz 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:	+0 dBm typical
Receiver Sensitivity (RFC1000):	-95 dBm typical
Range:	<ul> <li>2000 ft max. outdoors (line of sight unobstructed)</li> <li>500 ft max. indoors (typical urban)</li> </ul>

Reading Rate:	One reading every two seconds to one every 24 hours
Memory:	15,000 readings; software configurable memory wrap
Wrap Around:	Yes
Start Modes:	<ul><li>Immediate start</li><li>Delay start up to 18 months</li></ul>
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:	±1 minute / month (at 25 °C/77 °F)
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
Dimensions:	2.2 in x 5.25 in x 1.3 in (55 mm x 133 mm x 33 mm)
Enclosure Material:	ABS Plastic
Approvals:	CE

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

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. S.

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.

# **ORDERING INFORMATION**

MODEL	DESCRIPTION	
THERM•A•LERT-RH	Humidity and temperature data logger with wireless transceiver	
RFC1000	Wireless RF transceiver/repeater. USB to mini USB adapter & power supply included.	
RFC1000-IP69K	Wireless RF transceiver/repeater, splash proof with an IP69K rating. USB to mini USB adapter included.	
RFC1000-CE	Wireless RF transceiver/repeater, CE approved for Europe. USB to mini USB adapter & power supply included.	
*NIST	NIST Calibration Certificate	
TL-5104	Replacement battery for Therm•A•lert-RH	

General