THERM•A•LERT
TEMPERATURE MONITORING AND ALARMING SYSTEM WITH WIRELESS TWO-WAY COMMUNICATION

MADGETECH
WE BUILD DATA LOGGERS

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

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

Applications
- Calibration Chamber Monitoring
- Laboratory Monitoring
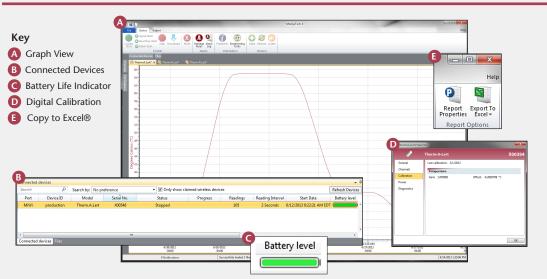- Hospitals
- Blood Banks
- Warehouse Mapping

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

Key
- **A** Graph View
- **B** Connected Devices
- **C** Battery Life Indicator
- **D** Digital Calibration
- **E** Copy to Excel®

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 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)

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

Transmission Distance (to data loggers)	• RFC1000, RFC1000-CE & RFC1000-IP69K
	  2,000 ft max. outdoors - line of sight unobstructed
	  500 ft max. indoors - typical urban environment

Transmission Distance (to other RFC1000's)	• RFC1000
	  4,000 ft max. outdoors - line of sight unobstructed
	  1,000 ft max. indoors - typical urban environment
	• RFC1000-CE
	  2,500 ft max. outdoors - line of sight unobstructed
	  700 ft max. indoors - typical urban environment
	• RFC1000-IP69K
	  4,000 ft max. outdoors - line of sight unobstructed
	  1,000 ft max. indoors - typical urban environment

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

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

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:	1 reading every 2 seconds up to 1 reading every 24 hours
Memory:	30,000 readings; software configurable memory wrap
Wrap Around:	Yes
Start Modes:	• Immediate start • Delay start up to 18 months
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)
Computer Interface:	USB to mini USB, 250,000 baud for standalone operation or RFC1000 required for wireless operation
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
Alarm:	Programmable high and low limits for temperature. Alarm is activated when temperature reaches or exceeds set limits.
Dimensions:	2.2 in x 5.25 in x 1.3 in (55 mm x 133 mm x 33 mm)
Weight:	3.7 oz (101 g)
Enclosure Material:	ABS Plastic
Approvals:	US (FCC), CA (IC), CE

ORDERING INFORMATION

MODEL	DESCRIPTION
Therm•A•Lert	Wireless Temperature data logger
RFC1000	Wireless RF transceiver/repeater. USB to mini USB adapter & power supply included.
RFC1000-CE	Wireless RF transceiver/repeater, CE approved for Europe. 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.
Calibration Certificate	Calibration Certificate available for data logger
TL-5104	Replacement battery for RFOT

For Quantity Discounts call (603) 456-2011 or email sales@madgetech.com

Countries approved for use, purchase and distribution of the Therm•A•Lert:

Australia, Austria, Belgium, Bulgaria, Canada, Chile, Columbia, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Honduras, Hungary, Iceland, Ireland, Israel, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, New Zealand, Norway, Peru, Poland, Portugal, Romania, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, The Netherlands, Turkey, United Kingdom, United States, Venezuela, Vietnam