

# RFTEMP2000A

## WIRELESS TEMPERATURE DATA LOGGER



### Features

- Wireless Two-Way Communication
- Ambient Temperature Monitoring
- View Data in Real-Time
- 5 Year Battery Life
- Battery Life Indicator
- NIST Traceable
- Field Upgradeable
- Audible and LED Alarm Indicators
- Cumulative Alarm Delay

The RFTemp2000A is a wireless data logger featuring a digital display. The device measures ambient temperatures, making it ideal for monitoring perishable goods, chemicals and more. Starting, stopping and downloading from the device are all performed wirelessly using the RFC1000 wireless transceiver, allowing the user to spend less time maintaining the data logger. Data can be provided in real time back to a central PC, or the device may be downloaded at periodic intervals.



### Benefits

- Fast Installation
- Minimal Long-Term Maintenance
- Full Communication From One PC
- Time and Money Saving with Battery Management
- Easily Isolate Critical Data
- Reduction of False Alarms

The convenient digital display provides the current reading as well as minimum, maximum and average statistics for a convenient snap shot of the logged data. For instant, out of range notification, an audible buzzer as well as LED alarm indicator notifies users when the temperature is above or below the user specified alarm setting. Through the software, email and text message alarms can also be sent.

### Applications

- Clean Rooms
- Laboratories and Hospitals
- Medical and Pharmaceutical
- Warehouse mapping
- Storage of Perishable Goods
- Chemical Storage
- Incubator Monitoring

The RFTemp2000A can be used as a single, wireless data logging system, yet can be expanded to a large scale system, which can include hundreds of data loggers measuring a number of areas (additional MadgeTech wireless loggers and transceivers may be required). The RFTemp2000A utilizes the new MadgeTech 4 Software. Data can be viewed in graphical or tabular formats and summary and statistics views are available for further analysis. The software features export to Excel®, data annotation, digital calibration and more.

## MADGETECH DATA LOGGER SOFTWARE

**Key**

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

The screenshot displays the MadgeTech 4 software interface. The main window shows a graph of temperature data over time. A data table is visible in the bottom left, showing columns for Date, Time, Time Zone, Data, and Temperature (°C). A statistics window is open in the bottom right, showing various parameters for the selected device. A digital calibration window is also visible, allowing for manual adjustment of the device's readings. A copy to Excel window is shown in the top right corner.

### 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

# RFTEMP2000A SPECIFICATIONS\*

\*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.

## General

<b>Reading Rate:</b>	1 reading every second up to 1 reading every 24 hours
<b>Memory:</b>	32,256
<b>LED Functionality:</b>	<ul style="list-style-type: none"> <li>Green LED blinks every 5 seconds to indicate unit is logging</li> <li>Blue LED blinks every 15 seconds to indicate unit is in wireless mode</li> <li>Red LED blinks every 1 second to indicate alarm condition</li> </ul>
<b>Wrap Around:</b>	Yes
<b>Start Modes:</b>	Immediate Start
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	9V lithium battery included; <b>user replaceable</b>
<b>Battery Life:</b>	5 years typical at 1 minute reading rate
<b>Data Format:</b>	<ul style="list-style-type: none"> <li>For Display: °C or °F</li> <li>For Software: Date and time stamped °C, K, °F, or °R</li> </ul>

<b>Time Accuracy:</b>	± 1 minute/month
<b>Computer Interface:</b>	USB to mini USB, 250,000 baud for standalone operation or RFC1000 required for wireless operation
<b>Software:</b>	XP SP3/Vista/Windows 7/8 (MadgeTech 4 only)
<b>Operating Environment:</b>	-20°C to +60°C (-4°F to +140°F) 0 to 95% RH non-condensing
<b>Dimensions:</b>	3.5" x 3.25" x 0.95" (88.9mm x 82.6mm x 24.1mm) - Data logger only
<b>Enclosure Material:</b>	ABS Plastic
<b>Alarm:</b>	<p>Programmable high and low limits; alarm is activated when temperature reaches or exceeds set limits.</p> <p>Alarm Delay: A cumulative alarm delay may be set in which the device will activate the alarm (via LED) only when the device has recorded a user specified time duration of data.</p>
<b>Audible Alarm Functionality:</b>	1 Beep per second for reading alarm above/below threshold

## Temperature

<b>Internal Channel Temperature Range:</b>	-20 to +60°C (-4°F to +140°F)
<b>Temperature Resolution:</b>	0.01°C (0.018°F)
<b>Calibrated Accuracy:</b>	±0.50°C/± 0.9°F (0°C to +55°C/32°F to 131°F)
<b>Response Time:</b>	10 minutes free air

**BATTERY WARNING:** May leak, flame or explode if disassembled, shorted, charged, connected together, mixed with used or other batteries, exposed to fire or high temperature. Discard used battery promptly. Keep out of reach of children.

## 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>	2000' max. outdoors (line of sight unobstructed) 500' max. indoors (typical urban)

## ORDERING INFORMATION

MODEL	DESCRIPTION	PRICE (U.S.)
RFTEMP2000A	Wireless temperature data logger with LCD	\$269.00
RFC1000	Wireless RF receiver/repeater USB to mini USB adapter and power supply included	\$199.00
*NIST	NIST Calibration Certificate	\$60.00
U9VL-J	Replacement battery for RFTemp2000A	\$15.00

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 and add \$60.00 to the price.

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