

RFRTDTEMP2000A SPECIFICATIONS*

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

Temperature**

Measurement Temperature Range:	18 Ω to 400 Ω -200 °C to +850 °C (-328 °F to +1562 °F) (Probe Dependent)
Temperature Resolution:	0.005 Ω 0.01 °C (0.018 °F) (Probe Dependent)
Calibrated Accuracy:	±0.015 Ω ±0.04 °C (±0.072 °F) (Probe Dependent)
Response Time:	Depending on type of RTD sensor.
Calibration Accuracy Range:	18.5 Ω to 175.9 Ω -200 °C to +200 °C (-328 °F to 392 F)

General

Reading Rate:	1 reading every second up to 1 reading every 24 hours
Memory:	21,504 readings
LED Functionality:	<ul style="list-style-type: none"> Green LED blinks every 5 seconds to indicate unit is logging Blue LED blinks every 15 seconds to indicate unit is in wireless mode Red LED blinks every 1 second to indicate alarm condition
Wrap Around:	Yes
Start Modes:	Immediate Start & Delayed Start
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	Ultralife 9V Lithium included; user replaceable
Battery Life:	4 years typical at 1 minute reading rate
Data Format:	<ul style="list-style-type: none"> For Display: °C, °F or Ω For Software: Date and time stamped °C, K, °F, °R or Ω

**Temperature specifications based on ideal 100 Ω Pt RTD compliant with IEC 751 (1983) and ITS-90, 5000 Ω FSR (accuracy based on 36 in lead wire RTD with 4 wire configuration)

BATTERY WARNING: Battery 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.

Time Accuracy:	± 1 minute/month
Computer Interface:	USB to mini USB, 250,000 baud for standalone operation or RFC1000/RFC1000-CE/RFC1000-IP69K required for wireless operation
Software:	MadgeTech 4: Windows XP SP3 or later
Operating Environment:	-20 °C to +60 °C (-4 °F to +140 °F) 0 %RH to 95 %RH non-condensing
Dimensions:	3.5 in x 3.25 in x 0.95 in (88.9 mm x 82.6 mm x 24.1 mm) - Data logger only
Weight	4.9 oz (140 g)
Enclosure Material:	ABS Plastic
Alarm:	Programmable high and low limits; alarm is activated when temperature reaches or exceeds set limits. 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.
Audible Alarm Functionality:	1 Beep per second for reading alarm above/below threshold
Approvals:	US (FCC), CA (IC), CE, South Korea (KCC), China (CMIIT), Japan (LCIE)

Wireless

RF Frequency:	2.45 GHz IEEE 802.15.4 ultra-low power wireless transceiver with fully bi-directional communication
Band:	ISM band 2.405-2.475 GHz Operation (channels 11 through 25) @ 250 kbps
Maximum Output Power:	+0dBm typical
Transceiver Sensitivity (RFC1000):	-95dBm typical
Transmission Distance (to data loggers)	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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

ORDERING INFORMATION

MODEL	PART NUMBER	DESCRIPTION
RFRTDTEMP2000A	901431-00	Wireless Precision RTD Based Temperature data logger
RFC1000	901383-00	Wireless RF transceiver/repeater. USB to mini USB adapter & power supply included
RFC1000-CE	901388-00	Wireless RF transceiver/repeater, CE approved for Europe. USB to mini USB adapter & power supply included
RFC1000-IP69K	901389-00	Wireless RF transceiver/repeater, splash proof with an IP69K rating. USB to mini USB adapter included
U9VL-J	901804-00	Replacement battery for RFRTDTemp2000A

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

Countries approved for use, purchase and distribution of the RFRTDTemp2000A:

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