DATASHEET

RFPRHTemp2000A

MadgeTech

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MADGETECH
WE BUILD DATA LOGGERS

RFPRHTemp2000A

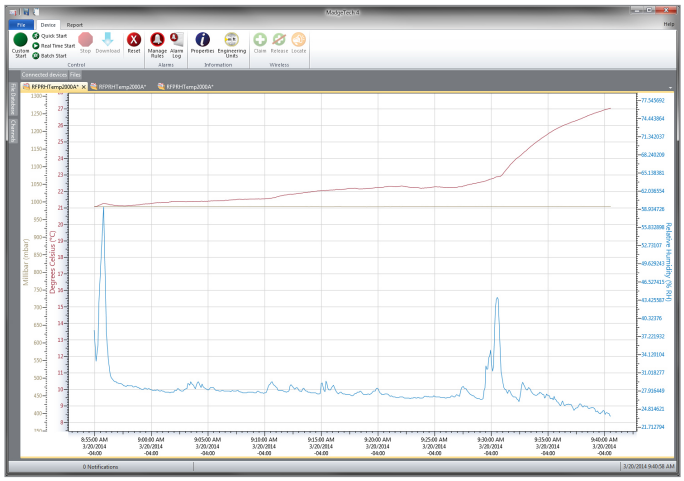
Wireless Pressure, Humidity & Temperature Data Logger

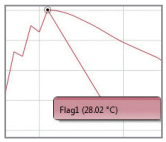
The RFPRHTemp2000A is a wireless data logger that measures and records ambient pressure, humidity and temperature. This dynamic data logger is ideal for monitoring weather data, measuring barometric pressure in high-rise buildings or monitoring storage or warehouse environments that contain sensitive material. Clinical laboratories and clean rooms can utilize the RFPRHTemp2000A to measure and maintain critical pressure, humidity or temperature levels, all with one device.

The convenient digital display provides instant access to the current reading. Minimum, maximum and average statistics are also provided for a convenient snap shot of the logged data. 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. Through the software, email and text message alarms can also be sent.

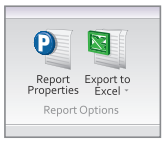
The RFCurrent2000A can be used as a single, wireless data logging system, or it can be expanded to a large scale system, which can include hundreds of data loggers measuring a number of areas (additional MadgeTech wireless data loggers and transceivers may be required). The RFCurrent2000A is compatible with the latest MadgeTech 4 Software.

MadgeTech 4 Software Features

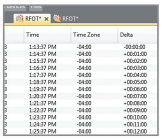


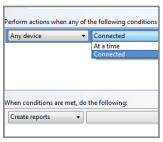


Cooling Flags



Export to Excel


Tabular Data View


Automation

- 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
- Summary view

FEATURES

- Battery Life Indicator
- Digital Display
- Direct USB Interface
- AC Power connection via USB
- Configurable Alarms
- Ability to manually reset statistics
- 5 year battery life at 15 Minute Reading Rate
- NIST Traceable Calibration

BENEFITS

- Digital Display Provides Instant Access to Current Readings and Statistics
- Minimal Long-Term Maintenance
- Readings Displayed in User Selected Measurement Unit
- Time and Money Saving with Battery Life Management
- Continuous Monitoring
- E-mail, Text Message and Audible Alerts Provide Assurance and Quality Control

APPLICATIONS

- Measuring Weather Data
- Warehouse Monitoring
- Measuring Barometric Pressure in High-Rise Buildings (Elevators)
- Clean Rooms
- Clinical Laboratories
- Growth Management in Mushroom Cultivation

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Specifications

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call **(603) 456-2011** or go to **madgetech.com** for details.

GENERAL

Reading Rate	1 reading every second up to 1 reading every 24 hours
Memory	10,752 readings
LED Functionality	**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 and delay start
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	9 V lithium or alkaline battery included; user replaceable with any 9 V battery
Battery Life	Approximate 5 years typical at 15 minute reading rate
Data Format	**Display**: °C or °F, %RH, mbar **Software**: Date and time stamped °C, K, °F, or °R , %RH, mg/mL, Dew Point - °C / K / °F / °R, mbar, PSI, inHg, mmHg, atm, Torr, Pa, m, kPa, MPa
Time Accuracy	± 1 minute/month @ 25 °C
Computer Interface	USB to mini USB, 250,000 baud for standalone operation or RFC1000 required for wireless operation
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.1.10.0 or later Secure Software version 4.1.9.0 or later
Operating Environment	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing 0.002 PSIA to 100 PSIA
Dimensions	3.5 in x 3.0 in x 0.95 in (88.9 mm x 76.2 mm x 24.1 mm) - Data logger only
Material	ABS Plastic
Weight	4.9 oz (140 g)
Approvals	US (FCC), CA (IC), CE, South Korea (KCC), China (CMIIT), Japan (LCIE)
Alarm	User configurable high and low audible, on-screen, email and text (SMS) alarms. 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

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.

TEMPERATURE

Temperature Range	-20 °C to +60 °C (-4 °F to +140 °F)
Resolution	0.01 °C (0.018 °F)
Calibrated Accuracy	±0.5 °C at 0 °C to +55 °C (± 0.9 °F at 32 °F to 131 °F)
Response Time	t63 - 302 seconds to 63% of change t90 - 710 seconds to 90% of change

HUMIDITY

Humidity Range	0 %RH to 95 %RH non-condensing
Resolution	0.1 %RH
Calibrated Accuracy	±3 %RH
Specified Accuracy Range	25 %RH to 75 %RH +20 °C to +40 °C Hysteresis Error 1 % typical, 3 % Maximum
Response Time	t63 - 302 seconds to 63% of change t90 - 710 seconds to 90% of change

PRESSURE

Measurement Range	260 mbar to 1260 mbar
Resolution	0.02 mbar
Calibrated Accuracy	±10 mbar (0 °C to 55 °C)

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
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

Ordering Information

RFPRHTemp2000A	PN 901415-00	Wireless Pressure, Humidity and Temperature data logger
RFC1000	PN 901383-00	Wireless RF receiver/repeater. USB to mini USB adapter & power supply included
RFC1000-CE	PN 901338-00	Wireless RF transceiver/repeater, CE approved for Europe. USB to mini USB adapter & power supply included
RFC1000-IP69K	PN 901389-00	Wireless RF transceiver/repeater, splash proof with an IP69K rating. USB to mini USB adapter included
RFC1000 Cloud Relay	PN 901900-00	MadgeTech Cloud Services Data Logging Hub
RFC1000-CE Cloud Relay	PN 901901-00	MadgeTech Cloud Services Data Logging Hub
Power Adapter	PN 901839-00	Replacement USB universal power adapter
U9VL-J	PN 901804-00	Replacement battery for RFPRHTemp2000A

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

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