RFPRHTEMP2000A
WIRELESS PRESSURE, HUMIDITY & TEMPERATURE DATA LOGGER

VALUTEMP PTE LTD
WARMS YOUR HEART

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

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 RFPRHTemp2000A features an LCD screen which provides instant access to the current reading, minimum, maximum and average statistics. Statistics can be reset directly on the keypad of the device, allowing customers to keep track of statistics over certain time periods. This feature does not erase the data recorded, and resets the statistics count. Other features include configurable alarms, battery life indicator and wall or surface mounting options.

This data logger allows users to select the desired units in which the data is displayed. The RFPRHTemp2000A has a wide range of units available for each channel: °C, °F, °R, K for the temperature channel, %RH, mg/mL, Dew Point for the humidity channel and mbar, PSI, inHg, mmHg, atm, Torr, Pa, m, kPa, MPa for the pressure channel. The unit is available for display on the LCD screen as well as in the software.
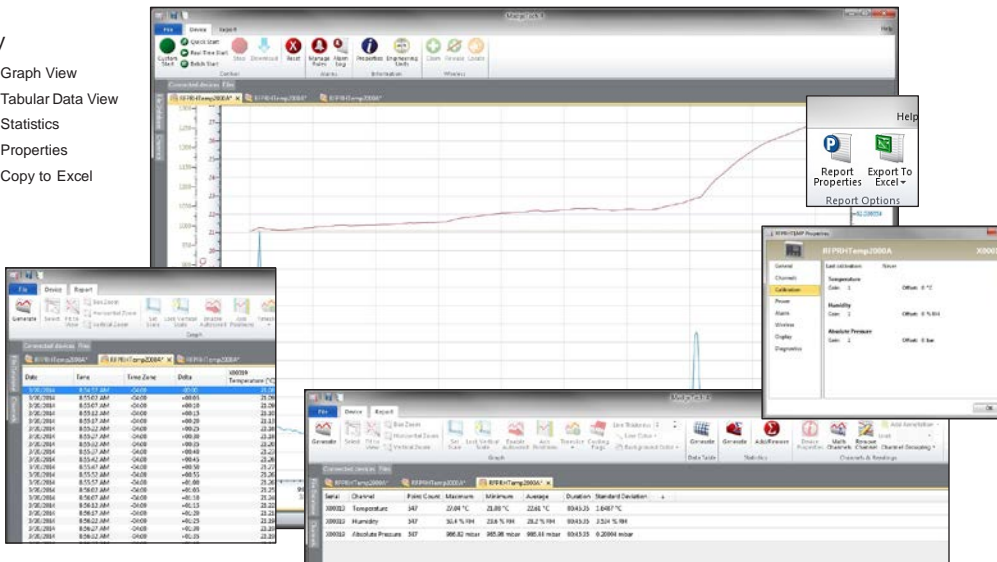
The RFPRHTemp2000A can be used as a standalone data logger, or used with the RFC1000 wireless transceiver to transmit data back to a central PC. The RFPRHTemp2000A transmits up to 500 ft line of sight to the RFC1000 transceiver. Multiple RFC1000s can be used as repeaters and transmit up to 1000 ft line of sight to other RFC1000s. This allows the data to be sent over a greater distance.

As with all MadgeTech 2000A wireless data loggers, the RFPRHTemp2000A can be used as a single wireless data logging system, or can be expanded to a large scale system, which can include hundreds of data loggers measuring different parameters such as temperature, humidity and more (additional MadgeTech wireless data loggers and transceivers may be required). The RFPRHTemp2000A utilizes the latest 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
- Graph View
- Tabular Data View
- Statistics
- Properties
- 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

RFPRHTEMP2000A SPECIFICATIONS*

Temperature

Measurement Range:	-20 °C to +60 °C (-4 °F to +140 °F)
Measurement Resolution:	0.01 °C
Calibrated Accuracy:	±0.5 °C (0 °C to +50 °C)

Humidity

Measurement Range:	0 %RH to 95 %RH non-condensing
Measurement Resolution:	0.1 %RH
Calibrated Accuracy:	±3 %RH

Pressure

Measurement Range:	250 mbar to 1300 mbar
Measurement Resolution:	0.02 mbar
Calibrated Accuracy:	±10 mbar

General

Reading Rate:	1 reading every second up to 1 reading every 24 hours
Memory:	10,752 readings per channel
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
Memory Wrap Around:	Yes
Start Modes:	Immediate Start & Delayed Start
Battery Type:	Ultralife 9V Lithium included; user replaceable
Battery Life:	Approximates 5 years typical for 15 minute reading rate
Approvals:	US (FCC), CA (IC), CE, South Korea (KCC), China (CMIIT), Japan (LCIE)
Time Accuracy:	±1 minute/month @ 25 °C

Computer Interface:	USB to mini USB, 250,000 baud for standalone operation or RFC1000/RFC1000-CE/RFC1000-IP69K required for wireless operation
Software:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 only)
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*
Weight	4.9 oz (0.3 lb)
Enclosure Material:	ABS Plastic
Alarm:	User configurable 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

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 data rate
Transceiver 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

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.

ORDERING INFORMATION

MODEL	DESCRIPTION
RFPRHTEMP2000A	Wireless Pressure, Humidity & 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.
U9VL-J	Replacement battery for RFPRHTemp2000A.
*NIST	*NIST Calibration Certificate.

*To order the product with the NIST certificate add -*CERT* to the end of the part number.

Countries approved for use, purchase and distribution of the RFPRHTemp2000A:

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, 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