RFPULSE2000A
WIRELESS PULSE DATA LOGGER

Features

- Wireless Two-Way Communication
- Battery Life Indicator
- Digital Display
- 3 year battery life at 15 Minute Reading Rate
- Direct USB Interface
- Configurable Alarms

Benefits

- Digital Display Provides Instant Access to Current Reading
- Minimal Long-Term Maintenance
- Readings displayed in users choice of measurement unit
- Time and Money Saving with Battery Management

Applications

- Wind Speed Monitoring
- Energy Monitoring
- Flow Rate Monitoring

The RFPulse2000A is a wireless data logger that records pulse output signals from various sensors such as flow meters and anemometers. When started, the data logger samples at 100Hz and at the user specified reading rate, recording the total number of pulses from the sample to memory.

The RFPulse2000A features an LCD screen which provides instant access to the current reading, minimum, maximum and average statistics. Through the software the device can be programmed to convert the pulse output into a different unit of measure such as gallons per minute or miles per hour. This information can be viewed on the LCD screen of the data logger as well as in the software.

The RFPulse2000A is unique in that it not only calculates pulse count, but it also calculates pulse rate. Engineering units can be programmed into the device as a rate, which allows the device to calculate the measurement unit in rates per second, minute, hour or per day. This provides more useful statistics to the user when data logging over long periods of time.

The RFPulse2000A can be used as a standalone data logger, or used with the RFC1000 wireless transceiver, to wirelessly transmit data back to a central PC. The RFPulse2000A transmits up to 500' line of sight to the RFC1000 transceiver. Multiple RFC1000's can be used as repeaters and transmit up to 1000' line of sight to other RFC1000's. This allows the data to be sent back over a greater distance.

The RFPulse2000A 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 a number of areas (additional MadgeTech wireless loggers and transceivers may be required). The RFPulse2000A 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 Properties
- E Copy to Excel

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

RFPulse2000A SPECIFICATIONS*

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY

General

Reading Rate:	Fastest: 1 reading every second Slowest: 1 reading every 24 hours
Memory:	16,128 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 Start & Delayed Start
Battery Type:	Ultralife 9V Lithium included; **user replaceable**
Battery Life:	5 years typical at 10 minute reading rate
Display Details:	Displays Pulse/Interval Count & Total Count
Approvals:	US (FCC), CA (IC), CE, South Korea (KCC)

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:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 only)
Operating Environment:	-20°C to +60°C (-4°F to +140°F) 0 to 95% RH non-condensing
Dimensions:	3.5" x 3.0" x 0.95" (88.9mm x 76.2mm x 24.1mm) - Data logger only
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

Measurement

Measurement Range:	Input Low <720mV, Input High >1.070V
Measurement Resolution:	<= 10uS microseconds
Calibrated Accuracy:	512 ±1 Pulses per second
Response Time:	10uS microseconds

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

RF Frequency:	2.45GHz IEEE 802.15.4 ultra-low power MadgeNET 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):	-95dBm typical
Transmission Distance (to other RFC1000's)	• RFC1000 4,000' max. outdoors - line of sight unobstructed 1,000' max. indoors - typical urban environment • RFC1000-CE 2,500' max. outdoors - line of sight unobstructed 700' max. indoors - typical urban environment • RFC1000-IP69K 4,000' max. outdoors - line of sight unobstructed 1,000' max. indoors - typical urban environment
Transmission Distance (to data loggers)	• RFC1000, RFC1000-CE & RFC1000-IP69K 2,000' max. outdoors - line of sight unobstructed 500' max. indoors - typical urban environment

ORDERING INFORMATION

MODEL	DESCRIPTION
RFPulse2000A	Wireless Pulse Data Logger
RFC1000	Wireless RF transceiver/repeater USB to mini USB adapter and power supply included.
RFC1000-CE	Wireless RF transceiver/repeater, CE approved for European markets. USB to mini USB adapter and 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 RFPulse2000A

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

MADGETECH
WE BUILD DATA LOGGERS

Contact:
Industrial Process Measurement, Inc.
3910 Park Avenue, Unit 7
Edison, NJ 08820
732-632-6400
support@instrumentation2000.com
http://www.instrumentation2000.com