MADGETECH
WE BUILD DATA LOGGERS

RFPulse2000A

Wireless Pulse Data Logger



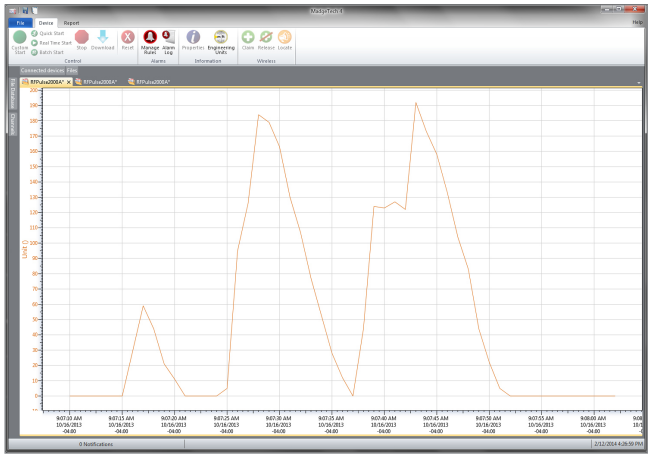
The RFPulse2000A is a wireless data logger that records pulse output signals from various sensors such as flow meters and anemometers. When started, the data logger samples at 100Hz and at the user specified reading rate, recording the total number of pulses from the sample to memory.

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.

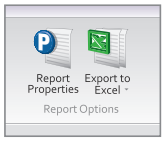
The RFPulse2000A can be used as a single, wireless data logging system, or it can be expanded to a large scale system, which can include hundreds of data loggers measuring a number of areas (additional MadgeTech wireless data loggers and transceivers may be required). The RFPulse2000A is compatible with the latest MadgeTech 4 Software.

MadgeTech 4 Software Features

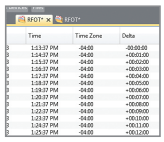


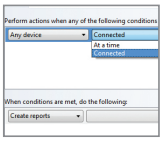


Cooling Flags



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

- 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

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	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 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	5 years typical at 10 minute reading rate
Data Format	**Display**: Pulses / 5 sec **Software**: Date and time stamped
Time Accuracy	± 1 minute/month
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 4.1.8.0 or later Secure Software version 4.1.7.0 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 3.0 in x 0.95 in (88.9 mm x 76.2 mm x 24.1 mm) - Data logger only
Material	ABS Plastic
Weight	4.4 oz (125 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

MEASUREMENT

Measurement Range	Input Low <720 mV, Input High >1.070 V
Resolution	<= 10 microseconds
Response Time	10 microseconds

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

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

RFPulse2000A	PN 901420-00	Wireless Pulse 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, CE approved for Europe
Power Adapter	PN 901839-00	Replacement USB universal power adapter
U9VL-J	PN 901804-00	Replacement battery for RFPulse2000A

WP WPLS
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