

RFVOLT2000A

WIRELESS VOLTAGE DATA LOGGER



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
- 160mV Model Measures Differential Voltage

Benefits

- Digital Display Provides Instant Access to Current Readings and Statistics
- Minimal Long-Term Maintenance
- Readings displayed in users selected measurement unit
- Time and Money Saving with Battery Life Management
- Continuous monitoring
- E-mail, text message and audible alerts provides assurance and quality control

Applications

- Battery Usage Studies
- Solar Cell Monitoring
- Cathodic Protection Monitoring
- Applications that require an external sensor:
 - Pressure Monitoring
 - CO2 Monitoring
- 160mV Model Measures Radio or Electromagnetic Frequency Interference

The RFVolt2000A is a wireless data logger designed to measure and record DC voltage signals. The data logger can connect directly to DC voltage sources which makes it ideal for battery usage studies, solar energy monitoring and other DC voltage monitoring applications. The RFVolt2000A can also be interfaced with a wide range of voltage output sensors, including pressure sensors and CO2 sensors, as well as transmitters and other transducers. The RFVolt2000A is available in a 2.5V, 15V, 30V or 160mV measurement range.

The RFVolt2000A 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 with engineering units, which convert the voltage signals into a different unit of measure such as PSI, % or PPM. The engineering unit is available for display on the LCD screen as well as in the software. The statistics can be reset through the keypad of the device, allowing customers to keep track of statistics over certain time periods. This feature does not erase the data recorded, but only resets the statistics count.

The RFVolt2000A can be used as a standalone data logger, or used with the RFC1000 wireless transceiver, to transmit data back to a central PC. The RFVolt2000A 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 over a greater distance.

The RFVolt2000A-160mV model is a wireless, differential voltage data logger. The device is equipped with a three position terminal block to allow for a positive, negative and ground connection. This allows the measurement of the voltage difference between two signals tied to the same ground.

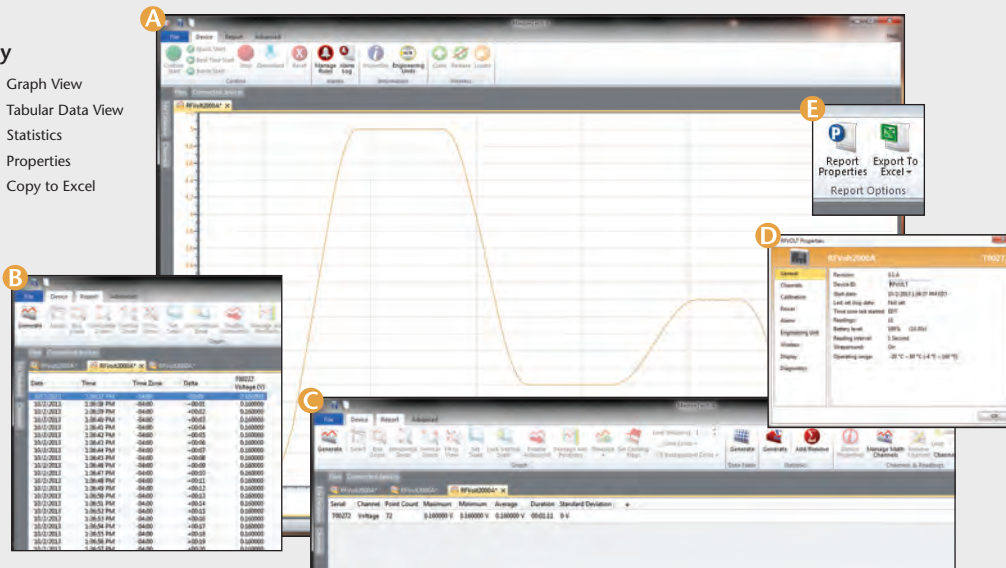
The RFVolt2000A can be used as a single, wireless data logging system, or can be expanded to a large scale system, which can include hundreds of data loggers measuring different parameters such as temperature, humidity and more (*additional MadgeTech wireless data loggers and transceivers may be required*). The RFVolt2000A 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

- 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 (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view

RFVolt2000A SPECIFICATIONS*

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

General

Reading Rate:	Fastest: 1 reading every second Slowest: 1 reading every 24 hours
Memory:	32,256 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
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)
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
Weight:	4.1 oz (0.2563 lbs)
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:	-3VDC to +3VDC for 2.5V -8VDC to +24VDC for 15V -8VDC to +32VDC for 30V -160mVDC to +160mVDC for 160mV
Measurement Resolution:	2.5VDC (0.1mVDC) 15VDC (0.5mVDC) 30VDC (1.0mVDC) 160mVDC (5uV)
Response Time:	150mS at sensor

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	PRICE (U.S.)
RFVolt2000A	Wireless Voltage Data Logger (2.5V, 15V, 30V, 160mV)	\$289.00
RFC1000	Wireless RF transceiver/repeater USB to mini USB adapter and power supply included.	\$199.00
RFC1000-CE	Wireless RF transceiver/repeater, CE approved for European markets. USB to mini USB adapter and power supply included.	\$199.00
RFC1000-IP69K	Wireless RF transceiver/repeater, splash proof with an IP69K rating. USB to mini USB adapter included.	\$299.00
*NIST	NIST Calibration Certificate	\$60.00
U9VL-J	Replacement battery for RFVolt2000A	\$15.00

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

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

*To order the product with the NIST certificate add -CERT to the end of the part number and add \$70.00 to the price.