

### Features

- Multiple transmitter configurations
- Memory wrap around
- Software configurable
- Real-time operation
- Programmable start time
- Miniature size
- User-friendly
- N.I.S.T. traceable

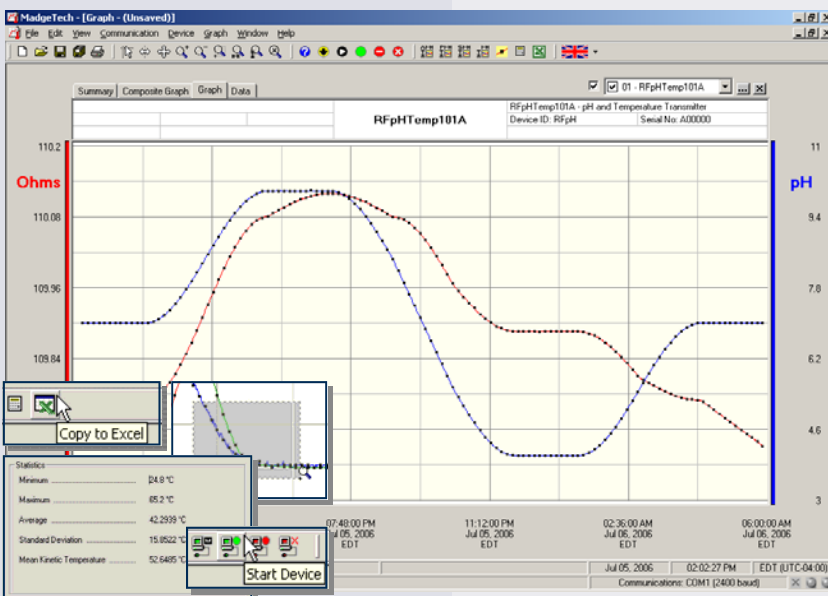
### Applications

- Surface and ground water quality monitoring
- Environmental and wetlands
- Industrial influent/effluent
- Water districts and municipal
- Process water quality
- Recreation and park management
- Pulp and paper industry
- Wastewater monitoring

The RFpHTemp101A is a battery powered pH and temperature recorder with a wireless transmitter. This is an all-in-one compact, portable, easy to use device that will measure and record up to 13,107 measurements per channel. The RFpHTemp101A combines the features from

the standard product line and adds the convenience of a wireless transmitter. When enabled, the wireless transmitter will transmit readings back to the host computer where the data can be analyzed in real time. These readings are also logged to the device's memory for added data security. The convenient slide switch allows the transmitter to be turned on or off without affecting the operation of the device.

The device can be started, stopped and configured directly from your computer. Its small size allows it to fit almost anywhere. In addition to the wireless communications, the RFpHTemp101A makes data retrieval quick and easy. Simply plug the device into an empty COM port and our user-friendly software will handle the rest.



MadgeTech Data Recorder Software displays pH and temperature data in an easy to use graph.

The Windows<sup>®</sup>-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.

Click [MadgeTech Software](#) for more information or to download the software.

# RFPHTemp101A SPECIFICATIONS \*

## Temperature\*\*

Measurement Range: -40 to +125°C (0 to +500 Ω)  
 Resolution: 0.01°C (0.001 Ω)  
 Calibrated Accuracy: ±0.1°C @25°C ambient (±0.015 Ω)  
 Input Connection: Removable screw terminal; 2,3 or 4-wire interface

## pH

Measurement Range: 0.00 to 14.00pH (-1000 to +1000mV)  
 Resolution: 0.01pH (0.1mV)  
 Calibrated Accuracy: ±0.1pH (±1mV)  
 Input Connection: Female BNC jack  
 Input Resistance: 10<sup>12</sup>Ω typical

Start Time: Software programmable start time and date, up to six months in advance

Real Time Recording: May be used with PC to monitor and record data in real time

Memory: 13,107 readings per channel; 26,214 total readings; software configurable memory wrap

Reading Rate: 1 reading every 30 seconds to 1 every 12 hours

Calibration: Digital calibration through software

Data Format: Date and time stamped °C, °F, K, °R, Ω; pH, V, mV, engineering units specified through software

Time Accuracy: ±1 minute/month (20 to 30 °C)

Computer Interface: PC serial or RS232 (interface cable required); 57,600 baud

RF Carrier Frequency: 418 ± 0.075MHz

RF Baud Rate: 4,800 baud

Output Power: <0dBm typical (<1mW)

Receiver Sensitivity (RFC101A) : -90dBm typical

Range: Line-of-sight: up to 120 ft., Urban: up to 40 ft.

Approvals: US (FCC), CA (IC)

Battery Type: 9V lithium or alkaline battery included; user replaceable

Battery Life: 1 year typical (1 min reading rate @ 25 °C)

Software: Windows 95/98/ME/NT/2000/XP/Vista based software

Operating Environment: -5 to +50 °C, 5 to 95%RH (non-condensing)

Dimensions: 4.5" x 2.4" x 1.0" + 2.0" antenna (114mm x 61mm x 25mm + 51mm antenna)

Weight: 4 oz (120 g)

Material: ABS plastic

\*\*Temperature specifications based on ideal 100 Ω Pt RTD compliant with IEC 751 (1983) and ITS-90, 5000 Ω FSR

\*\*\*For use in harsh environments, this device must be well protected from weather, steam and harsh chemicals

**BATTERY WARNING:** DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN. DO NOT DISPOSE OF IN FIRE, RECHARGE, PUT IN BACKWARDS, DISASSEMBLE, OR MIX WITH OTHER BATTERY TYPES. MAY EXPLODE, FLAME, OR LEAK AND CAUSE PERSONAL INJURY.

## SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from several units or deployments; easily switch to a single data series

Statistics: Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button

Graphical Cursor: One click displays readings by time, value, parameter or sample number

Export Data: Export data in a variety of common formats, or switch to Excel \* with a single click

Data Table: Instantly access tabular view for detailed dates, times, values, and annotations

Calibration: Automatically calculate and store calibration parameters

Scaling Options: Autoscale function fits data to the screen, or allows user to manually enter their own values

Logger Configuration: Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID

Formatting Options: Change colors, line styles, plotting options, show or hide channels quickly

Communications: Automatically sets up communications port, or lets user select configuration

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

## ORDERING INFORMATION

| Model        | Description   | Price (U.S.)     |
|--------------|---|------------------|
| RFPHTEMP101A | pH and Temperature Recorder and Wireless Transmitter                        | \$449.00         |
| RFC101A      | Software, manual, wireless receiver, power supply and RS232 interface cable | \$199.00         |
| RFC200A      | Software, manual, wireless receiver, power supply and USB interface cable   | \$249.00         |
| NIST         | N.I.S.T. Calibration Certificate  | Call for Pricing |
| U9VI-J       | Replacement battery for RFPHTemp101A  | \$15.00          |

### ASK ABOUT OUR OTHER DATA RECORDERS

|             |                    |
|-------------|--------------------|
| Temperature | Pulse/Event/State  |
| Humidity    | Low Level Current  |
| Pressure    | Low Level Voltage  |
| pH          | RF Transmitters    |
| Level       | Intrinsically Safe |
| Shock       | Spectral Vibration |
| LCD Display |                    |

