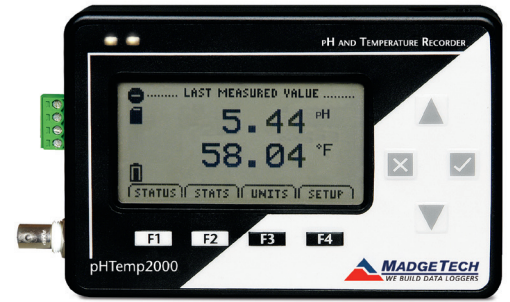


# pHTemp2000

## pH and Temperature Data Logger with LCD Display



The pHTemp2000 is a battery powered, stand alone pH and temperature data logger with an LCD. This all-in-one compact, portable, easy to use device will measure and record up to 131,072 readings per channel. The pHTemp2000 will directly connect to many commonly used pH, ORP and ISE electrodes through a female BNC connector mounted on its side. Temperature is measured by directly connecting an RTD to the pHTemp2000. Temperature compensation is automatically done internally to the unit.

The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer.

The pHTemp2000 makes data retrieval quick and easy. Simply plug it into an empty USB port and our user-friendly software does the rest.

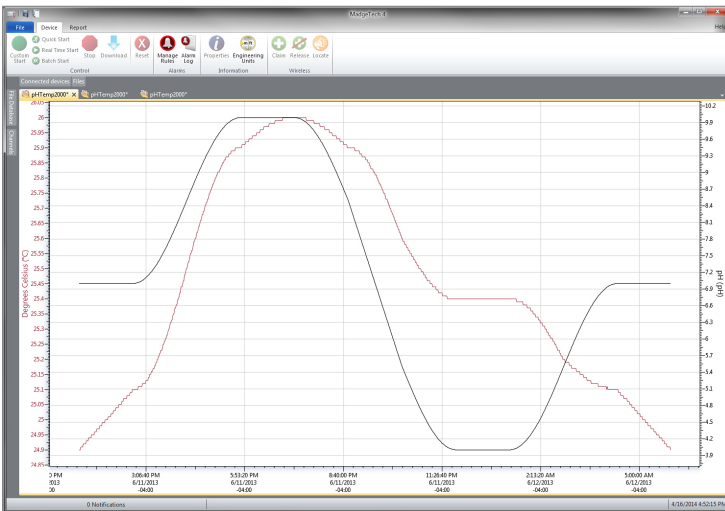
### Features

- Large LCD Display
- User-friendly
- Automatic temperature compensation
- Programmable start time
- Real time operation
- Programmable engineering units

### Applications

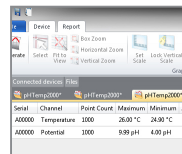
- Surface and ground water quality monitoring
- Environmental and wetlands monitoring
- Industrial influent and effluent
- Water districts and municipal water systems
- Process water quality
- Recreation and park management
- Pulp and paper industry
- Wastewater monitoring

### MadgeTech 4 Software Features

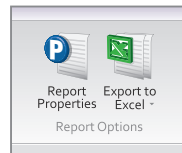


Graph View

- 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



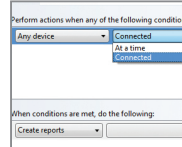
Statistics



Export to Excel

Time	Time Zone	Data
1:13:37 PM	-04:00	-05:00:00
1:14:37 PM	-04:00	-05:00:00
1:15:37 PM	-04:00	-05:00:00
1:16:37 PM	-04:00	-05:00:00
1:17:37 PM	-04:00	-05:04:00
1:18:37 PM	-04:00	-05:05:00
1:19:37 PM	-04:00	-05:06:00
1:20:37 PM	-04:00	-05:07:00
1:21:37 PM	-04:00	-05:08:00
1:22:37 PM	-04:00	-05:09:00
1:23:37 PM	-04:00	-05:10:00
1:24:37 PM	-04:00	-05:11:00
1:25:37 PM	-04:00	-05:12:00
1:26:37 PM	-04:00	-05:13:00
1:27:37 PM	-04:00	-05:14:00
1:28:37 PM	-04:00	-05:15:00

Tabular Data View



Automation

## SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to [madgetech.com](http://madgetech.com) for details.

TEMPERATURE*	
Measurement Range	80 Ω to 145 Ω -40 °C to +110 °C (-40 °F to 230 °F)
Temperature Resolution	0.001 Ω, 0.01 °C (0.018 °F)
Calibrated Accuracy**	±0.015 Ω, ±0.04 °C (±0.072 °F)
Input Connection***	Removable screw terminal; 2, 3 or 4-wire interface

\*Temperature specifications based on ideal 100 Ω Pt RTD compliant with IEC 751 (1983) and ITS-90, 5000 Ω FSR (accuracy based on 36" lead wire RTD with 4 wire configuration)

\*\*Calibrated accuracies based on standard MadgeTech calibrations for 0 Ω to 200 Ω range.

\*\*\*100 Ω, 2 or 4 wire RTD probes are recommended for the most accurate performance. Most 100 Ω, 3 wire RTD probes will work, but MadgeTech cannot guarantee the accuracy. To determine whether or not the 3-wire RTD probe will work, the resistance between the two same colored wires should be less than 1 Ω. (Note: Please contact the manufacturer of the RTD probe for questions on the resistance)

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

pH/ORP/ISE	
Input Connection	Female BNC
Measurement Range	-2.00 to 16.00
Resolution	0.01 pH
pH Accuracy	±0.01 pH
pH EMI Susceptibility	<0.2 pH@3 V/M, 80 MHz to 1 GHz
ORP/ISE Accuracy	±0.1 mV
ORP/ISE EMI Susceptibility	<10 mV@3 V/M, 80 MHz to 1 GHz
Input Impedance	10 <sup>12</sup> Ω typical
ORP/ISE Measurement Range	±1.25 V

DOT-MATRIX LCD	
Dimensions	2.5 in x 1.375 in (63 mm x 35 mm)
Text	Configurable channel text size
Indicators	Power, status, memory
Backlight	Configurable w/auto shut-off and contrast adjustment

GENERAL	
Start Modes	Software programmable start time and date, up to six months in advance
Stop Modes	Programmable stop time
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.
Memory	131,072 readings per channel
Wrap Around	Yes
Reading Rate	1 reading every 2 seconds up to 1 reading every 24 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	9 V lithium or alkaline battery included; user replaceable
Battery Life	1 year battery life at 1 minute reading rate with display off. 30 days typical with continuous display use.
Data Format	Date and time stamped °C, °F, °K, °R, Ω; pH, V, mV, engineering units specified through software
Time Accuracy	±1 minute/month at 25 °C (77 °F); RS232 cable not in use
Computer Interface	USB (interface cable required); 115,200 baud
Operating System Compatibility	Windows XP SP3 or later
Operating Environment	-5 °C to +50 °C (+23 °F to +122 °F) 0 %RH to 95 %RH (non-condensing)
Dimensions	4.8 in x 3.3 in x 1.25 in (122 mm x 84 mm x 32 mm)
Weight	16 oz (440 g)
Material	Black anodized aluminum case
Approvals	CE

**BATTERY WARNING:** MAY LEAK AND/OR FLAME IF OPENED, RECHARGED, CONNECTED IMPROPERLY, OR DISPOSED OF IN FIRE.

## Ordering Information

pHTemp2000	PN 900988-00	pH and Temperature Data Logger with LCD display and AC adapter
IFC200	PN 900298-00	USB interface cable
U9VL-J	PN 901804-00	Replacement battery for the pHTemp2000