

# PHTEMP2000

## pH & TEMPERATURE DATA LOGGER WITH LCD DISPLAY



### Features

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

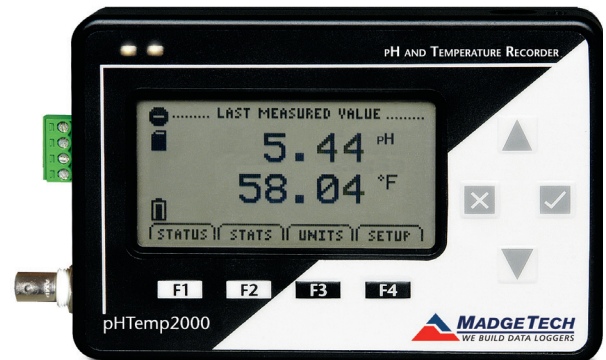
### Applications

- 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

The pHTemp2000 is a battery powered, stand alone pH and temperature logger with an LCD. This all-in-one compact, portable, easy to use device will measure and record up to 131,071 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.

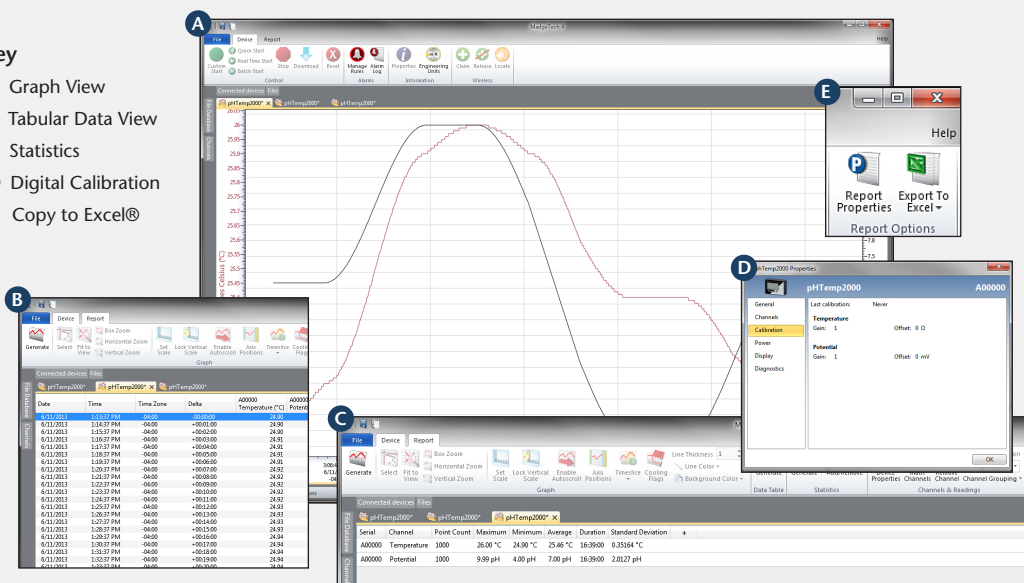
The pHTemp2000 makes data retrieval quick and easy. Simply plug it into an empty USB port and our user-friendly software does the rest.



## MADGETECH DATA LOGGER SOFTWARE

### Key

- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- 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
- Multilingual

# PHTEMP2000 SPECIFICATIONS\*

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

## Temperature\*\*

<b>Measurement Range:</b>	-40 °C to +110 °C (80 Ω to +145 Ω)
<b>Resolution:</b>	0.01 °C (0.001 Ω)
<b>Calibrated Accuracy:</b>	±0.15 °C @ 25 °C ambient (±0.015 Ω)***
<b>Input Connection:</b>	Removable screw terminal; 2, 3 or 4-wire interface****

## pH/ORP/ISE

<b>Input Connection:</b>	Female BNC
<b>Measurement Range:</b>	-2.00 to 16.00
<b>Resolution:</b>	0.01/0.001 pH
<b>pH Accuracy:</b>	±0.01 pH
<b>pH EMI Susceptibility:</b>	<0.2 pH@3 V/M, 80 MHz to 1 GHz
<b>ORP/ISE Accuracy:</b>	±0.1 mV
<b>ORP/ISE EMI Susceptibility:</b>	<10 mV@3 V/M, 80 MHz to 1 GHz
<b>Input Impedance:</b>	10 <sup>12</sup> Ω typical
<b>ORP/ISE Measurement Range:</b>	±1.25 V

\*\*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

## DOT-MATRIX LCD

<b>Dimensions:</b>	2.5 in x 1.375 in (63 mm x 35 mm)
<b>Text:</b>	Configurable channel text size
<b>Indicators:</b>	Power, status, memory
<b>Backlight:</b>	Configurable w/auto shut-off and contrast adjustment
<b>Memory:</b>	131,071 readings per channel
<b>Reading Rate:</b>	1 reading every 2 seconds up to 1 reading every 24 hours
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	9V lithium or alkaline battery included; <b>user replaceable</b>
<b>Battery Life:</b>	1 year battery life at 1 minute reading rate with display off. 30 days typical with continuous display use. Optional AC adapter available.
<b>Data Format:</b>	Date and time stamped °C, °F, °K, °R, Ω; pH, V, mV, engineering units specified through software
<b>Time Accuracy:</b>	±1 minute/month (at +25 °C (+77 °F); RS232 cable not in use)
<b>Computer Interface:</b>	USB (interface cable required); 115,200 baud
<b>Software:</b>	XP SP3/Vista/Windows 7/Windows 8
<b>Operating Environment:</b>	-5 °C to +50 °C (+23 °F to +122 °F), 0 %RH to 95 %RH (non-condensing)
<b>Dimensions:</b>	4.8 in x 3.3 in x 1.25 in (122 mm x 84 mm x 32 mm)
<b>Weight:</b>	16 oz (440 g)
<b>Approvals:</b>	CE

**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.

## ORDERING INFORMATION

MODEL	DESCRIPTION
PHTEMP2000	pH and Temperature Recorder with LCD Display
IFC200	Software, manual and USB interface cable
NIST	NIST Calibration Certificate
U9VL-J	Replacement battery for pHTemp2000

**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