# 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

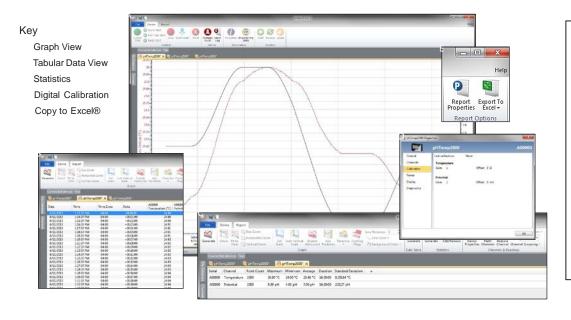


directly connecting an RTD to the pHTemp2000. Temperature compensation is automatically done internally to the unit.

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



#### 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\*

## Temperature\*\*

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

## pH/ORP/ISE

Input Connection:	Female BNC
Measurement Range:	-2.00 to 16.00
Resolution:	0.01/0.001 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:	$10^{12}$ Ω typical
ORP/ISE Measurement Range:	±1.25 V

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

\*\*\*\*\*100  $\Omega$ , 2 or 4 wire RTD probes are recommended for the most accurate performance. Most 100  $\Omega$ , 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  $\Omega$ . (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

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
Memory:	131,071 readings per channel
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:	9V 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. Optional AC adapter available.
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
Software:	XP SP3/Vista/Windows 7/Windows 8
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)
Approvals:	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

<sup>\*</sup>To order the product with the NIST certificate add -CERT to the end of the part number.



<sup>\*\*\*</sup>Calibrated accuracies based on standard MadgeTech calibrations for 0  $\Omega$  to 200  $\Omega$  range.