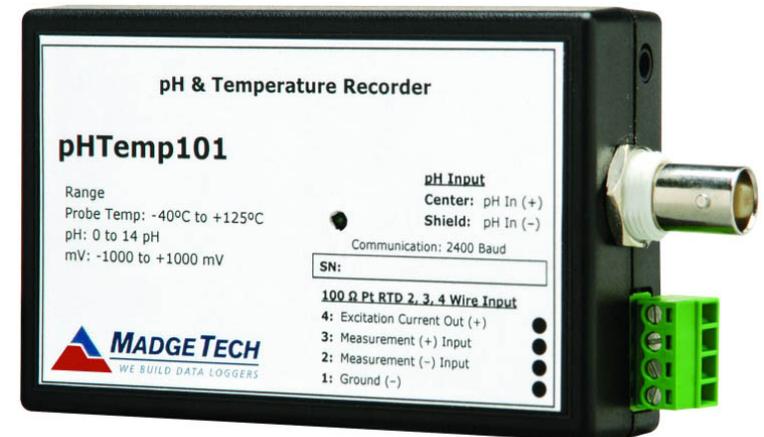


Part Number	pHTemp101
pH Input Connection	Female BNC jack
pH Range	0 to 14pH ($\pm 1000\text{mV}$)
pH Resolution	0.01pH
pH Accuracy	$\pm 0.1\text{pH}$
Temperature Sensor	2, 3 or 4 Wire 100 Ω , platinum RTD
Probe Temperature Range	0 to +100°C
Temperature Resolution	0.01°C
Accuracy	$\pm 0.1^\circ\text{C}$
Memory	13,107/channel
Sample Rate	2 seconds up to 12 hours
Required Interface Package	IFC110 or IFC200
Baud Rate	2,400
Typical Battery Life	1 year
Operating Environment	-5 to +50°C 0 to 95%RH (non-condensing)
Materials	ABS plastic
Dimensions	2.4" x 4.5" x 1.0" (61mm x 115mm x 26mm)
Approvals	CE



pHTemp101
pH and Temperature Data Logger

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 60°C (140°F).

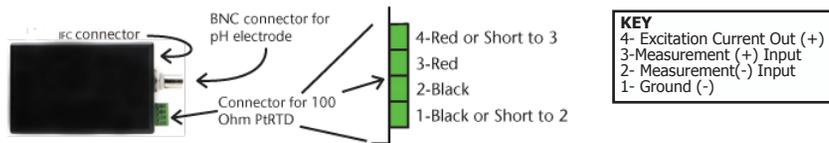
Specifications subject to change.

See MadgeTech's terms and conditions at www.madgetech.com

Product Notes

Using the pHTEMP101

1. The pH electrode being used is required to have a BNC output connection. Select a probe with an output impedance less than 300 megaohms at the desired temperature.
2. The temperature probe must be a 100 Ohm platinum RTD and MadgeTech recommends using a 4-wire configuration. 2 and 3 wire configurations may work, but MadgeTech cannot guarantee the accuracy of the probe.
3. Insure that the probe you select can be connected to the pHTemp101 RTD input by selecting a probe with lead wires.
4. Connect the probes to the data logger.
5. Refer to the description of your pH probe for a calibration procedure.



100 Ohm, 2 or 4 wire RTD probes are recommended for the most accurate performance. Most 100 Ohm, 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 Ohm. (Note: Please contact the manufacturer of the RTD probe for questions on the resistance)

LEDs

Once started, the LED will flash at the selected reading rate to indicate that the device is running.

Device Maintenance

Battery Replacement

Materials:

Small Phillips Head Screwdriver

Replacement Battery (U9VL-J)

- Puncture the center of the back label with the screw driver and unscrew the enclosure.
- Remove the battery by pulling it out of the terminal snaps.
- Snap the new battery into the terminals and verify it is secure.
- Screw the enclosure back together securely.

Note: Be sure not to over tighten the screws or strip the threads.

Recalibration

The pHTemp101 standard calibration is performed at 50 Ohms and 150 Ohms for the RTD channel and 0mV and 250mV for the pH channel.

Note: MadgeTech does not offer calibration of pH inputs in combination with a pH electrode or probe.

Pricing:

Recalibration traceable to NIST	\$90.00
Recalibration	\$70.00

Additional Services:

As Found Data	\$15.00 per parameter/channel
Verification Point	\$15.00 per point

Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com. To send the devices back, visit www.madgetech.com, select Services then RMA Process.

Installation Guide

Installing the Interface cable

- IFC200
 - Refer to the "Quick Start Guide" included in the package.
- IFC110
 - Plug the serial cable into the port and verify it is secure.

Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on Autorun.exe. Follow the onscreen instructions.

Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the Communication Menu, then Auto Configure Port.
- After a moment, a box will appear stating a device has been found.
- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to your "Data Logger & Software Operating Manual".

Device Operation

Starting the data logger

- Click **Device Menu** then **Start Device**.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for your application.
- Enter in any other desired parameters and click **Start**.
- A box will appear stating the data logger has been started. Click **OK**.
- Disconnect the data logger from the interface cable and place it in the environment.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Connect the data logger to the interface cable.
- Click the **Device Menu** then **Read Device Data**. This will offload data onto the PC.