

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.

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).

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

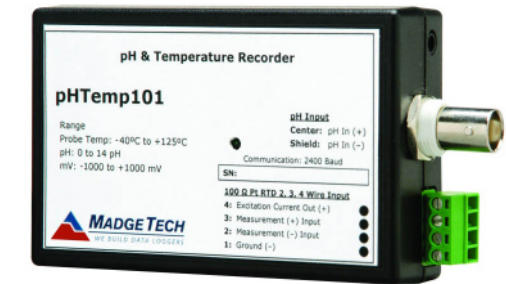
Additional:
As Found Data \$15.00 per parameter/channel
Verification Point \$15.00 per point

To send the devices back, visit www.madgetech.com, select Services then RMA Process.

Part Number	pHTemp101
pH Input Connection	Female BNC jack
pH Range	0 to 14pH (±1000mV)
pH Resolution	0.01pH
pH Accuracy	±0.1pH
Temperature Sensor	2, 3 or 4 Wire 100W, platinum RTD
Probe Temperature Range	-0 to +100°C
Temperature Resolution	0.01°C
Accuracy	±0.1°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

Specifications subject to change.

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



pHTemp101
pH and Temperature Recorder

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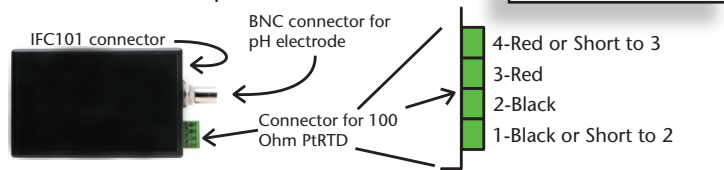
Product Notes

LEDs

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

Using the pHTEMP101

1. The pH electrode should have a BNC output connection, or an appropriate adapter. Select a probe with an output impedance less than 300 megaohms at the desired temperature. The OMEGA PHE-4200 Series of probes satisfy this condition above 0 °C (32 °F), and have a BNC output connection.
2. The temperature probe must be a 100 ohm platinum RTD, in the standard 2-,3- or 4-wire configuration. The pHTEMP101 is designed to achieve exceptional accuracy with the 4-wire probe, but will still yield measurements better than required for a pH-measurement with the 2- or 3-wire probes.
3. Insure that the probe you select can be connected to the Phtemp101 RTD input by selecting a probe with lead wires, or by attaching an adapter that will allow you to connect wire leads to the probe. OMEGA's PR-10 and PR-11 series of probes have the proper leads for direct connection to the Phtemp101.
4. Connect the probes to the data logger.
5. Refer to the description of your pH probe for a calibration procedure.



Engineering Units

Engineering units are used to convert one measurement reading to another. Please refer to the app note "Engineering Units", found on the MadgeTech website, for information on how to manage Engineering Units.

Installation Guide

Installing the Interface cable

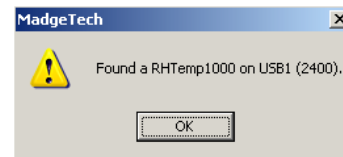
- IFC200, IFC202 or IFC300
Refer to the "Quick Start Guide" included in the package.
- IFC110, IFC102 or IFC103
Plug the serial cable into the port and verify it is secure.
- USB-1 or USB-101
Install the USB drivers from the CD provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

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 instructions provided in the Wizard.

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 similar to the following will appear;



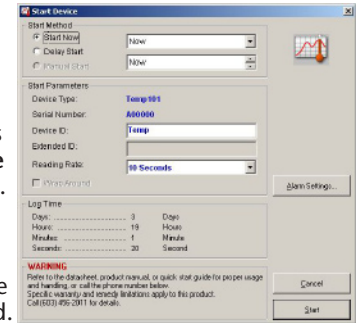
- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

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 to measure.

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 all recorded data onto the PC.

Technical Support

Visit www.madgetech.com, or call (603) 456-2011. Technical support is also available by e-mailing support@madgetech.com

Additional product information is available by e-mailing info@madgetech.com.