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OM-CP-pHTemp2000 pH and Temperature Data Logger with LCD

#### **Product Notes**

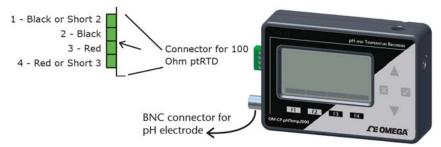
The OM-CP-pHTemp2000 is a pH and temperature data logger with LCD display. The convenient LCD provides access to the current pH and temperature readings, as well as minimum, maximum and average statistics.

#### **Backlight**

The backlight uses up a significant amount of battery life, it can be configured to auto shut-off when not in use. Refer to the manual for more details.

#### Using the OM-CP-pHTemp2000

- 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.
- 2. The temperature probe must be a 100 ohm platinum RTD, in the standard 2-, 3- or 4-wire configuration. The OM-CP-pHTemp2000 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 OM-CP-pHTemp2000 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.
- 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 Omega 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)

## **Device Maintenance**

# **Battery Replacement Materials:**

3/32" HEX Driver (Allen Key) and a Replacement Battery (OM-CP-BAT103)

- Remove the back cover from the device by unscrewing the four screws.
- Remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and verify it is secure.
- Replace the cover taking care not to pinch the wires. Screw the enclosure back together securely.

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

#### **Installation Guide**

#### Installing the Interface cable

- OM-CP-IFC200: Refer to the "Quick Start Guide" included in the package.

#### **Installing the software**

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



Part Number	OM-CP-pHTemp2000
pH input Connection	Female BNC jack
pH Range	-2.00 to +16.00pH
pH Resolution	0.01pH (0.1mV)
Calibrated Accuracy	<u>+</u> 0.01pH
Temperature Sensor	2, 3, or 4 wire $100\Omega$ platinum RTD
Temperature Range	-40 to +110°C
Temperature Resolution	0.01°C
Calibrated Accuracy	±0.15°C @ 25°C Ambient
Memory	131,071/channel
Sample Rate	2 seconds to 24 hours
Required Interface Package	OM-CP-IFC200
Baud Rate	115,200
Typical Battery Life	1 year with display off, 30 days with continuous LCD and no backlight
Operating Environment	−5 to +50°C, 0 to 95%RH (non-condensing)
Material	Black Anodized Aluminum
Dimensions	4.8" x 3.3" x 1.25" (122mm x 84mm x 32mm)
Approvals	CE

#### **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).



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WARNING: These products are not designed for use in, and should not be used for, human applications.



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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order number under which the product was PURCHASED,
- 2. Model and serial number of the product under warranty, and
- 3. Repair instructions and/or specific problems relative to the

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order number to cover the COST of the repair,
- 2. Model and serial number of the product, and
- 3. Repair instructions and/or specific problems relative to

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