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# OM-CP-RTDTemp2000

## Precision RTD Based Temperature Data Logger with LCD

# OM-CP-RTDTemp2000

## Product Notes

The OM-CP-RTDTemp2000 is precision RTD-based temperature data logger with LCD display. The convenient LCD provides access to the current temperature reading, as well as minimum, maximum and average statistics.

### Backlight

The backlight uses a significant amount of battery life. Refer to the manual to configure the auto shut-off when not in use.

### Set Password

To password protect the device so that others cannot start, stop or reset the device:

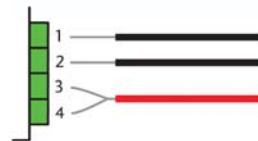
- Click Identify Device and Read Status, then select the Device Detail Tab.
- Choose Set Password.
- Enter and confirm the password and click OK

## Wiring the Diagram

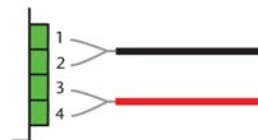
For 4-wire RTD probes, connect the four lead wires to your RTD logger as shown in the figures below.



For 3-wire RTD probes, short inputs 3 and 4 together, then connect the lead wires to inputs 1, 2 and 3.



For 2-wire RTD probes, short inputs 3 and 4 together and inputs 1 and 2 together, then connect the RTD lead wires to inputs 2 and 3. *Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.*



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: 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. Click on Drivers and Third Party Tools, then Install USB Interface Drivers. Click Install to install the USB drivers. Plug the OM-CP-IFC200 cable into an available USB port on the computer.

### 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	RTDTemp2000
Temperature Sensor	100Ω Platinum RTD
Temperature Range	-200 to +850°C
Temperature Resolution	0.01°C
Calibrated Accuracy	±0.05°C (-200 to +260°C) ±0.3°C (+260 to +850°C)
Memory	174,762
Sample Rate	2 seconds up to 24 hours
Required Interface Package	IFC200
Typical Battery Life	1 year at 1 minute reading rate with display off, 30 days typical with continuous LCD display use
Baud Rate	115,200
Operating Environment	-20 to +60°C 0 to 95%RH (non-condensing)
Materials	Black anodized aluminum
Dimensions	4.8" x 3.3" x 1.25" (122mm x 84mm x 32mm)
Approvals	-

### **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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3. Repair instructions and/or specific problems relative to the product.

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