



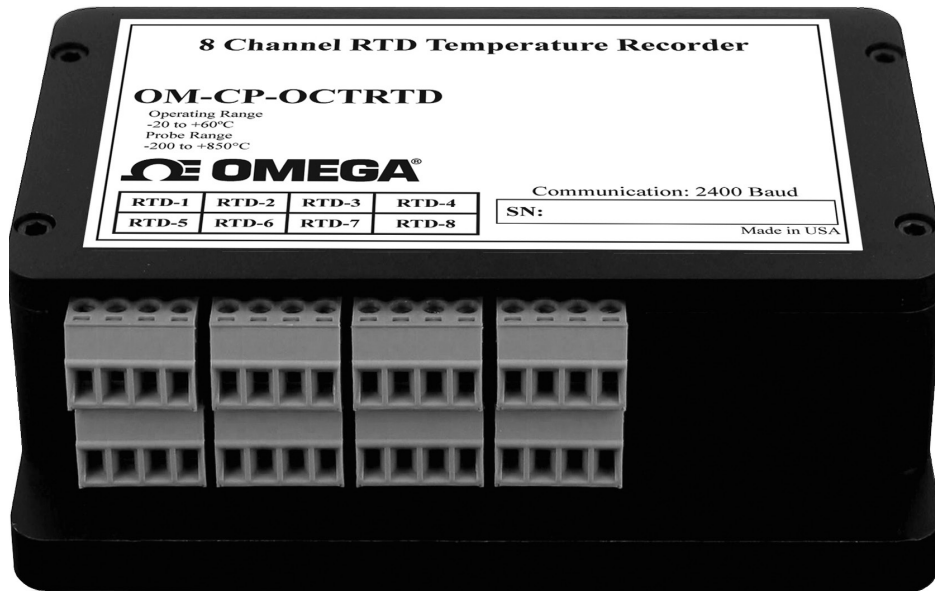
OM-CP-OCTRTD

8-Channel RTD Based Temperature Data Logger

INSTRUCTION
SHEET

MQS5099/1216

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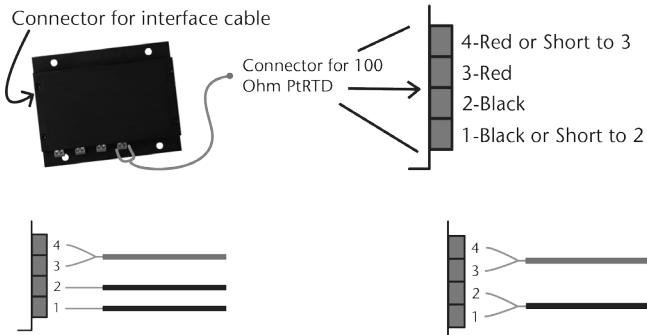
Wiring Options

Wiring Options

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

KEY

- 4- Excitation Current Out (+)
- 3- Measurement (+) Input
- 2- Measurement(-) Input
- 1- Ground (-)



For 3-wire RTD probes, short inputs 3 and 4 together, then connect the lead wires to input 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 Ω , 2 or 4 wire RTD probes are recommended for the most accurate performance. Most 100 Ω , 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 Ω . (Note: Please contact the manufacturer of the RTD probe for questions on the resistance)

Installation Guide

Installing the Interface cable

- OM-CP-IFC200
Insert the device into a USB port. The drivers will install automatically.
- OM-CP-IFC110
Plug the serial cable into the port and verify it is secure.

Installing the software

Insert the Omega Software Flash Drive in an open USB port. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Installation Wizard.

Device Operation

Connecting and Starting the data logger

1. Once the software is installed and running, plug the interface cable into the data logger.
2. Connect the USB end of the interface cable into an open USB port on the computer.
3. The device will appear in the **Connected Devices** list, highlight the desired data logger.
4. For most applications, select "**Custom Start**" from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click "**Start**". ("**Quick Start**" applies the most recent custom start options, "**Batch Start**" is used for managing multiple loggers at once, "**Real Time Start**" stores the dataset as it records while connected to the logger.)
5. The status of the device will change to "**Running**", "**Waiting to Start**" or "**Waiting to Manual Start**", depending upon your start method.
6. 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

1. Connect the logger to the interface cable.
1. Highlight the data logger in the Connected Devices list. Click "**Stop**" on the menu bar.
2. Once the data logger is stopped, with the logger highlighted, click "**Download**". You will be prompted to name your report.
3. Downloading will offload and save all the recorded data to the PC.

Product Maintenance

Battery Replacement

Materials:

3/32" HEX Driver (Allen Key)

Replacement Battery (OM-CP-BAT103)

1. Remove the cover from the device by unscrewing the four screws.
2. Remove the battery from its compartment and unsnap it from the connector.
3. Snap the new battery into the terminals and verify it is secure.
4. 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.

Recalibration

The OM-CP-OCTRTD standard temperature calibration is at 2 points, 50 Ω and 150 Ω .

Recalibration is recommended annually for any Omega data logger; a reminder is automatically displayed in the software when the device is due.

OM-CP-OCTRTD General Specifications

Description	OM-CP-OCTRTD
Temperature Sensor	External: 2, 3 or 4 wire 100Ω platinum RTD
Temperature Range	-200 °C to +850 °C (-328 °F to +1562 °F)
Temperature Resolution	0.01 °C (0.018 °F)
Calibrated Accuracy	+/-0.1 °C
Memory	10,922/channel
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours
Channels	8
LED Indicator	None
Required Interface Package	OM-CP-IFC110 or OM-CP-IFC200
Baud Rate	2,400
Battery Life	9V lithium or alkaline battery included, user replaceable
Typical Battery Life	1 year
Operating Environment	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH (non-condensing)
Material	Anodized Aluminum
Weight	15.9 oz (450 g)
Dimensions	3.5 in x 4.4 in x 1.5 in (89 mm x 112 mm x 39 mm)

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 150°C (302°F).

*Specifications subject to change.
See Omega's terms and conditions at www.omega.com*



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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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