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# OM-CP-TCTemp2000 Thermocouple Temperature Data Logger with LCD

## Product Notes

The OM-CP-TCTemp2000 is a thermocouple 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. For additional information refer to your OM-CP-TCTemp2000 manual and "Data Logger & Software Operating Manual".

### Backlight

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

### Programming Thermocouple Type

To change the thermocouple type in the Omega software:

- Select Thermocouple Type from the Device Menu.
- Click on the Change button in the Thermocouple Type window.
- Select the correct thermocouple type from the drop down list.
- Click on the Save button to store the thermocouple type in the device then click OK.

### Set Password

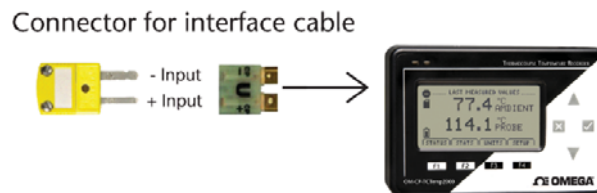
To password protect the device so that others cannot start, stop or reset the device:

- 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

The diagram shows how to connect the thermocouple.

*Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.*



## 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	OM-CP-TCTemp2000
Temperature Sensor	Semiconductor
Temperature Range	-20 to +60°C
Temperature Resolution	0.1°C
Remote Channel Temperature Sensor Range, Resolution & Accuracy	*See Table for Details
Cold Jct. Compensation	Automatic
Memory	131,071/channel
Sample Rate	2 second up to 24 hours
Channels	1 Internal & 1 Remote
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	-20 to +60°C 0 to 95%RH
Material	Black Anodized Aluminum
Dimensions	4.8" x 3.3" x 1.25" (122mm x 84mm x 32mm)
Approval	CE

\* Remote Channel Range, Resolution & Accuracy

Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1°C	±0.5°C
K	-260 to +1370	0.1°C	±0.5°C
T	-260 to +400	0.1°C	±0.5°C
E	-260 to +980	0.1°C	±0.5°C
R	-50 to +1760	0.5°C	±2.0°C
S	-50 to +1760	0.5°C	±2.0°C
B	+60 to +1820	0.5°C	±2.0°C
N	-260 to +1300	0.1°C	±0.5°C

### Battery Warning

**WARNING: DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN. DO NOT DISPOSE OF IN FIRE, RECHARGE, PUT IN BACKWARDS, DISASSEMBLE, OR MIX WITH OTHER BATTERY TYPES. MAY EXPLODE, FLAME, OR LEAK AND CAUSE PERSONAL INJURY.**



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