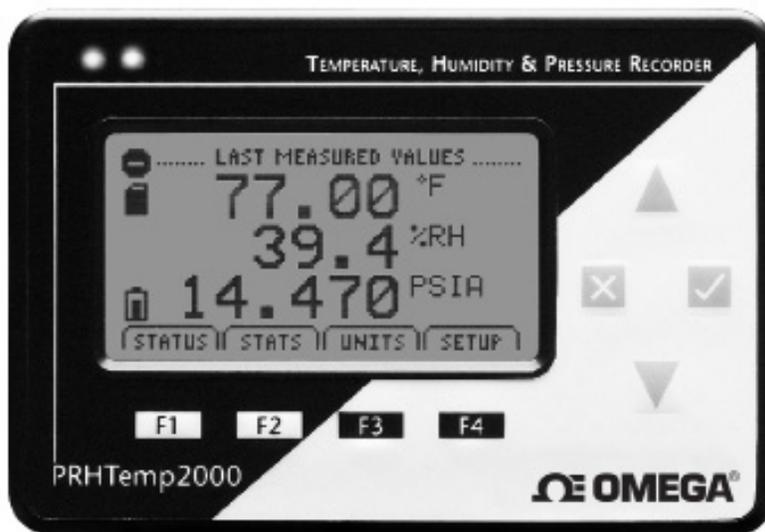


Ω OMEGA® User's Guide



OM-CP-PRHTEMP2000 **Pressure, Humidity and Temperature Data Logger with LCD**

Product Overview

The OM-CP-PRHTEMP2000 is a pressure, temperature and humidity data logger with LCD display. The convenient LCD provides access to the current pressure, temperature and humidity readings, as well as minimum, maximum and average statistics. For additional information refer to your OM-CP-PRHTEMP2000 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.

Submergibility

The OM-CP-PRHTEMP2000 is rated IP65, which means it is dust tight and can withstand water jets.

Set Password

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

- In the **Connected Devices** panel, click the device desired.
- On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
- On the **General** Tab, click **Set Password**.
- Enter and confirm the password in the box that appears, then select **OK**.

Installation Guide

Installing the Interface cable

- OM-CP-IFC200

Insert the device into a USB port. The drivers will install automatically.

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. 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: 9/64" HEX Driver (Allen Key) and a Replacement Batteries (6 AA)

1. Remove the back cover from the device by unscrewing the four screws.
2. Remove the batteries from the compartment.
3. Insert the new batteries as indicated by the diagram on the battery holder.
4. Replace the cover taking care not to pinch the wires. Screw the enclosure back together.

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

Recalibration

The OM-CP-PRHTEMP2000 standard calibration is one point at 25 °C, two points at 25 %RH and 75 %RH and two points at 14.7 PSI and 30 PSI. a reminder is automatically displayed in the software when the device is due.

OM-CP-PRHTEMP2000 General Specifications

| | |
|----------------------------|---|
| Temperature Sensor | Semiconductor (strain guage) |
| Temperature Range | -20 °C to +60 °C (-4 °F to +140 °F) |
| Pressure Resolution | 0.1°C (0.18°F) |
| Calibrated Accuracy | +0.5 °C/+0.9 °F (0 °C to 50 °C/32 °F to 122 °F) |
| Pressure Sensor | Semiconductor |
| Pressure Range | 0 to 30 PSIA |
| Pressure Resolution | 0.002PSIA |
| Calibrated Accuracy | +1.0%FSR; 0.25% at 25 °C |
| Humidity Sensor | Internal Semiconductor |
| Humidity Range | 0%RH to 95%RH |
| Humidity Resolution | 0.1%RH |
| Calibrated Accuracy | +3%RH (2%RH @ 25 °C Typical) |
| Memory | 87,381/channel |
| Reading Rate | 1 reading every 2 seconds up to 1 reading every 24 hours |
| Required Interface Package | IFC200 |
| Baud Rate | 115,200 |
| Typical Battery Life | 1 year with display off, 30 days with continuous LCD and no backlight |
| Operating Environment | -20°C to 60°C (-4°F to 140°F), 0%RH to 95%RH (non-condensing) |
| Material | Black anodized aluminum |
| Dimensions | 4.8 in x 3.3 in x 1.25 in (122 mm x 84 mm x 32 mm) |
| Weight | 16oz (440g) |
| Approvals | CE |