OM-CP-QUADPROCESS
4-Channel Low Level DC Current Data Logger

OM-CP-OCTPROCESS
8-Channel Low Level DC Current Data Logger

INSTRUCTION SHEET

MQS5087/1216

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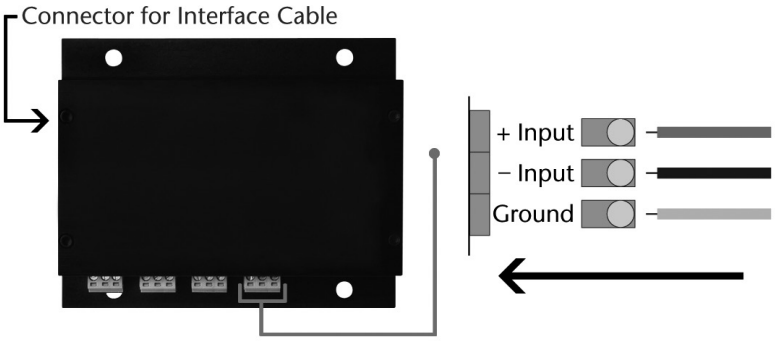
Product Overview

Engineering Units

Engineering units are used to convert one measurement reading to another. The OM-CP Data Logger software allows for software level Engineering Units (conversion applied to data after download). Certain devices have device level Engineering Units, which upon download automatically appear in the chosen unit of measure.

Wiring the Data Logger

The OM-CP-QUADPROCESS and OM-CP-OCTPROCESS both have two-position removable screw terminal connections. The OM-CP-QUADPROCESS has 4 connections, the OM-CP-OCTPROCESS has 8 connections. They accept 3-wire configurations.



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

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 Wizard.

Device Operation

Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- 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.)*
- The status of the device will change to "**Running**", "**Waiting to Start**" or "**Waiting to Manual Start**", depending upon your start method.
- 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

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

Device Maintenance

Battery Replacement
Materials: 3/32" HEX Driver (Allen Key) and Replacement Battery (OM-CP-BAT103)
- Remove the 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.

Recalibration
The OM-CP-QUADPROCESS or OM-CP-OCTPROCESS standard calibration is at two points. The points are dependent on the range of the data logger.

Range	1mA	25mA	100mA
Calibration Point	0mA and 0.9-1mA	0mA and 22.5-25mA	0mA and 90-100mA

Recalibration is recommended annually for any Omega data logger; a reminder is automatically displayed in the software when the device is due. Specifications subject to change. See Omega's terms and conditions at www.omega.com

OM-CP-QUADPROCESS General Specifications

Description	OM-CP-QUADPROCESS
Current Range	*See Table Below
Current Resolution	
Current Accuracy	
Input Impedance	
Channels	4
Memory	32,767/channel
Reading Rate	1 reading every second up to 1 reading every 12 hours
LED Indicator	None
Required Interface Package	IFC110 or IFC200
Baud Rate	2,400
Typical Battery Life	1 year
Operating Environment	-20°C to +60°C, 0%RH to 95%RH (non–condensing)
Material	Anodized aluminum
Dimensions	3.5" x 4.4" x 1.0" (89 mm x 112 mm x 26 mm)
Weight	13 oz (370 g)

*OM-CP-QUADPROCESS Range, Resolution and Calibrated Accuracy

Nominal Range	+-1mA	+-25mA	+-100mA
Measurement Range	+-1.5mA	+-30mA	+-120mA
Common Mode Input Range	0 to 2.5V	0 to 2.5V	0 to 2.5V
Resolution	0.05µA	1µA	5µA
Calibrated Accuracy @25 oC	+-0.5 %FSR	+-0.1%FSR	+-0.1 %FSR

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).

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

Still need help? For more troubleshooting tips and information, refer to the built in help section visit us online at www.omega.com or contact us for support at 1 (800) 872-9436.

OM-CP-OCTPROCESS General Specifications

Description	OM-CP-OCTPROCESS
Current Range	*See Table Below
Current Resolution	
Current Accuracy	
Input Impedance	
Channels	8
Memory	16,383/channel
Reading Rate	1 reading every second up to 1 reading every 12 hours
LED Indicator	None
Required Interface Package	IFC110 or IFC200
Baud Rate	2,400
Typical Battery Life	1 year
Operating Environment	-20°C to +60°C, 0%RH to 95%RH (non–condensing)
Material	Anodized aluminum
Dimensions	3.5” x 4.4” x 1.5” (89 mm x 112 mm x 39 mm)
Weight	17 oz (480 g)

*OM-CP-OCTPROCESS Range, Resolution and Calibrated Accuracy

Nominal Range	+-1mA	+-25mA	+-100mA
Measurement Range	+-1.5mA	+-30mA	+-120mA
Common Mode Input Range	0 to 2.5V	0 to 2.5V	0 to 2.5V
Resolution	0.05µA	1µA	5µA
Calibrated Accuracy @25 oC	+-0.5 %FSR	+-0.1 %FSR	+-0.1 %FSR

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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