

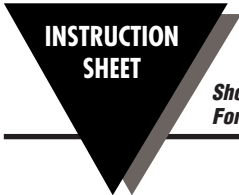


OM-CP-QUADVOLT

4-Channel Low Level DC Voltage Data Logger

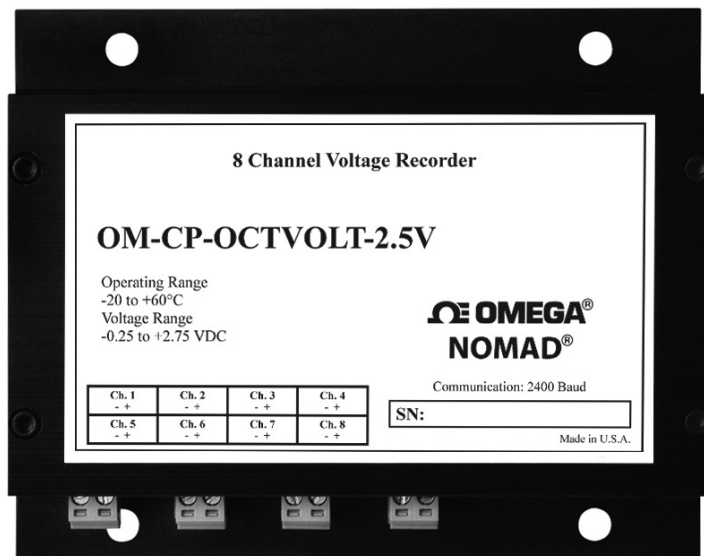
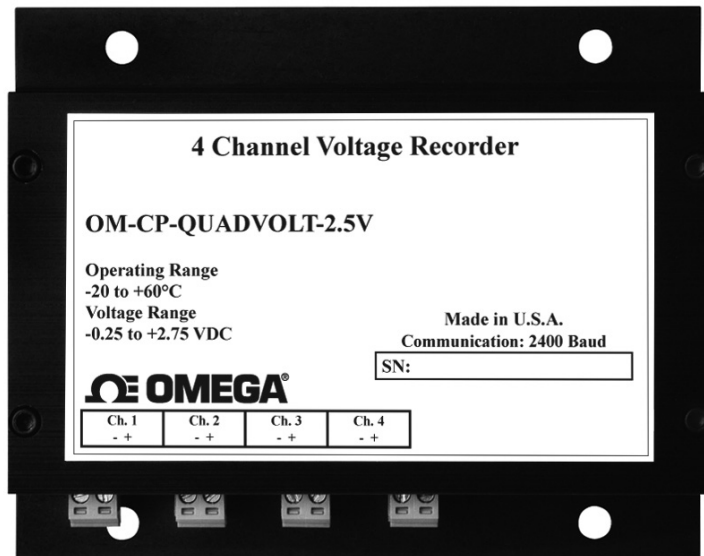
OM-CP-OCTVOLT

8-Channel Low Level DC Voltage Data Logger



MQS5086/1216

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OM-CP-QUADVOLT and OM-CP-OCTVOLT

Product Overview

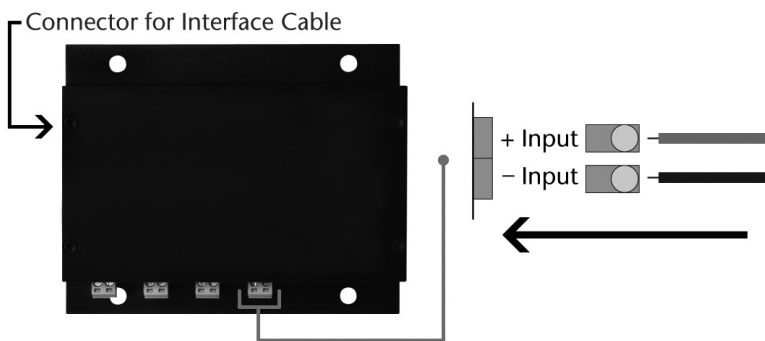
Engineering Units

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

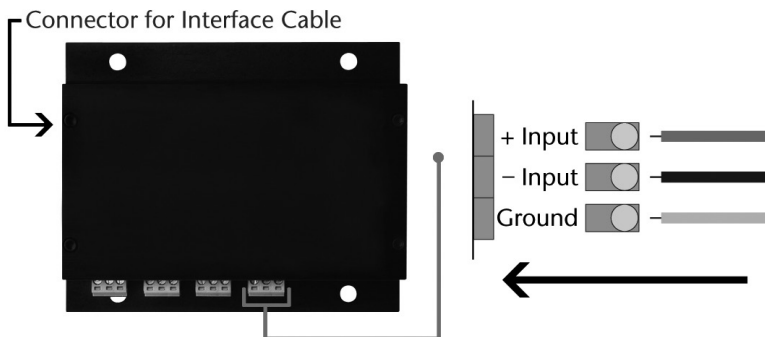
OM-CP-QUADVOLT and OM-CP-OCTVOLT Single Ended Wiring (2.5, 15 and 30V)

Two-position removable screw terminal connections; accepts 2-wire configurations.



OM-CP-QUADVOLT and OM-CP-OCTVOLT Differential Wiring (+/-100mV)

Three-position removable screw terminal connections; accepts 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.

OM-CP-QUADVOLT and OM-CP-OCTVOLT

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-QUADVOLT or OM-CP-OCTVOLT standard calibration is dependant upon the range.

Range	100mV	2.5V	15V	30V
Calibration Point	0mV and 90-100mV	0mV and 2.25-2.5V	0mV and 14.9-15.5V	0mV and 27-30V

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-QUADVOLT General Specifications

Description OM-CP-QUADVOLT	
Voltage Range	
Voltage Resolution	*See Table Below
Voltage Accuracy	
Memory	32,767/channel
Reading Rate	1 reading every second up to 1 reading every 12 hours
LED Indicator	None
Channels	4
Required Interface Package	IFC110 or IFC200
Baud Rate	2,400
Typical Battery Life	1 year
Operating Environment	-40°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-QUADVOLT Range, Resolution and Calibrated Accuracy

Nominal Range	+/-100mV	0 to 2.5V	0 to 15V	0 to 30V
Measurement Range (VDC)	+/-150mV	-0.25 to 2.75	-1 to 16	-2 to 32
Accuracy	+/-0.01%FSR	+/-0.01%FSR	+/-0.10%FSR	+/-0.10%FSR
Resolution (mV)	5µV	0.1	0.5	1.0
Common Mode Input Range	0 to 2.5V	0 to 2.5V	0 to 2.5V	0 to 2.5V

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-OCTVOLT General Specifications

Description OM-CP-OCTVOLT	
Voltage Range	
Voltage Resolution	*See Table Below
Voltage Accuracy	
Memory	16,383/channel
Reading Rate	1 reading every second up to 1 reading every 12 hours
LED Indicator	None
Channels	8
Required Interface Package	IFC110 or IFC200
Baud Rate	2,400
Typical Battery Life	1 year
Operating Environment	-40°C to +60°C, 0%RH to 95%RH (non-condensing)
Material	Anodized aluminum
Dimensions	3.5 in x 4.4 in x 1.5 in (89 mm x 112 mm x 39 mm)
Weight	17 oz (480 g)

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

Nominal Range	+/-100mV	0 to 2.5V	0 to 15V	0 to 30V
Measurement Range (VDC)	+/-150mV	-0.25 to 2.75	-1 to 16	-2 to 32
Accuracy	+/-0.01%FSR	+/-0.01%FSR	+/-0.10%FSR	+/-0.10%FSR
Resolution (mV)	5µV	0.1	0.5	1.0
Common Mode Input Range	0 to 2.5V	0 to 2.5V	0 to 2.5V	0 to 2.5V

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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omega.com info@omega.com

Servicing North America:

U.S.A. Headquarters:

Omega Engineering, Inc.
Toll-Free: 1-800-826-6342 (USA & Canada only)
Customer Service: 1-800-622-2378 (USA & Canada only)
Engineering Service: 1-800-872-9436 (USA & Canada only)
Tel: (203) 359-1660 Fax: (203) 359-7700
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Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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