

# X SERIES

## 4, 8, 12 and 16-Channel Voltage Data Loggers



- Real-time Operation
- Programmable Engineering Units
- 24-bit Readings Provide High Resolution
- Up to 4 Hz Reading Rate
- Compact Size
- External Power or User Replaceable Battery
- Pushbutton or Programmable Start Time
- Configurable Channel Names
- NIST Traceable Calibration Certificate Included

The new OM-CP-VoltX Series consists of 4, 8, 12 and 16-channel, battery powered, DC voltage data logger with a reading rate of up to 4 Hz. X-Series devices ship with a standard USB-A to Micro USB cable for use with free OM-CP PC based software. The X-series has a high memory capacity and increased download speed compared to previous generations of product.

This easy-to-use device features an 18 month typical battery life, user replaceable battery and programmable engineering units. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. To maximize memory capacity, users can enable or disable channels. For easy identification, each channel can be named with up to a ten digit title.

Using the OM-CP Data Logger Software, starting, stopping and downloading from the OM-CP-VoltX Series data loggers are simple and easy. Graphical, tabular and statistical data is provided for analysis and data can be viewed in multiple units, using the Engineering Units function. The data can also be automatically exported to Excel® for further calculations.



### Specifications

MEASUREMENT			
Input Connection	Removable screw terminals		
Model	160 mV	3.2 V	32 V
Voltage Range	±160 mV	±3.2 V	-8 V to +32 V
Voltage Resolution	0.02 mV	0.0004 mV	0.004 mV
Calibrated Accuracy	±0.032 mV	±0.0032 V	±0.02 V
Input Impedance	1 MΩ	125 kΩ	125 kΩ
Maximum Voltage Between Inputs to Ground	+3 V	+50 V	+50 V
Analog Conversion Time	150 ms		
Frequency Rejection	60+50 Hz		
Temperature Coefficient	25 ppm/°C		
Specified Accuracy Range	Nominal range @ 25 °C		

## Specifications

Engineering Units	Native Measurement units can be scaled to display measurement units of another type. This is useful when monitoring current outputs from different types of sensors such as temperature, CO <sub>2</sub> , flow rate and more.
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GENERAL	
Memory (All channels enabled)	<b>4-channel:</b> 698,709 readings per channel <b>8-channel:</b> 349,354 readings per channel <b>12-channel:</b> 232,903 readings per channel <b>16-channel:</b> 174,677 readings per channel
Start Modes	Software programmable immediate start or delay start, up to 6 months in advance
Real Time Recording	May be used with PC to monitor and record data in real time
LEDs	1 per channel and 2 status LEDs
Reading Rate	4 Hz up to 1 reading every 24 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	9 V lithium included, user replaceable
Battery Life	18 months typical
Data Format	Date and time stamped V, mV, $\mu$ V, engineering units specified through software
Time Accuracy	$\pm$ 1 minute/month

Computer Interface	USB-A to micro USB cable (included); 460,800 baud
Operating System Compatibility	Windows XP SP3/7/8/10
Software Compatibility	Standard Software version 4.2.19.0 or later Secure Software version 4.2.18.0 or later
Operating Environment	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
Dimensions	<b>4-channel:</b> 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm) <b>8-channel:</b> 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm) <b>12-channel:</b> 2.70 in x 7.25 in x 1.68 in (65.6 mm x 184.2 mm x 42.7 mm) <b>16-channel:</b> 2.70 in x 7.25 in x 2.14 in (65.6 mm x 184.2 mm x 54.4 mm)
Weight	<b>4-channel:</b> 13 oz (368 g) <b>8-channel:</b> 13 oz (368 g) <b>12-channel:</b> 20 oz (580 g) <b>16-channel:</b> 28 oz (800 g)
Enclosure	Black anodized aluminum
Approvals	CE, ROHS

**BATTERY WARNING:** BATTERY MAY LEAK, FLAME OR EXPLODE IF DISASSEMBLED, SHORTED, CHARGED, CONNECTED TOGETHER, MIXED WITH USED OR OTHER BATTERIES, EXPOSED TO FIRE OR HIGH TEMPERATURE. DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN.

To Order	
P/N	Description
OM-CP-QUADVOLT-160MV-A2	4-Channel $\pm$ 160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-QUADVOLT-3.2V-A2	4-Channel $\pm$ 3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-QUADVOLT-32V-A2	4-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-OCTVOLT-160MV-A2	8-Channel $\pm$ 160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-OCTVOLT-3.2V-A2	8-Channel $\pm$ 3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-OCTVOLT-32V-A2	8-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X12VOLT-160MV-A2	12-Channel $\pm$ 160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X12VOLT-3.2V-A2	12-Channel $\pm$ 3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X12VOLT-32V-A2	12-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X16VOLT-160MV-A2	16-Channel $\pm$ 160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X16VOLT-3.2V-A2	16-Channel $\pm$ 3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X16VOLT-32V-A2	16-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-BAT103	Replacement 9V lithium battery