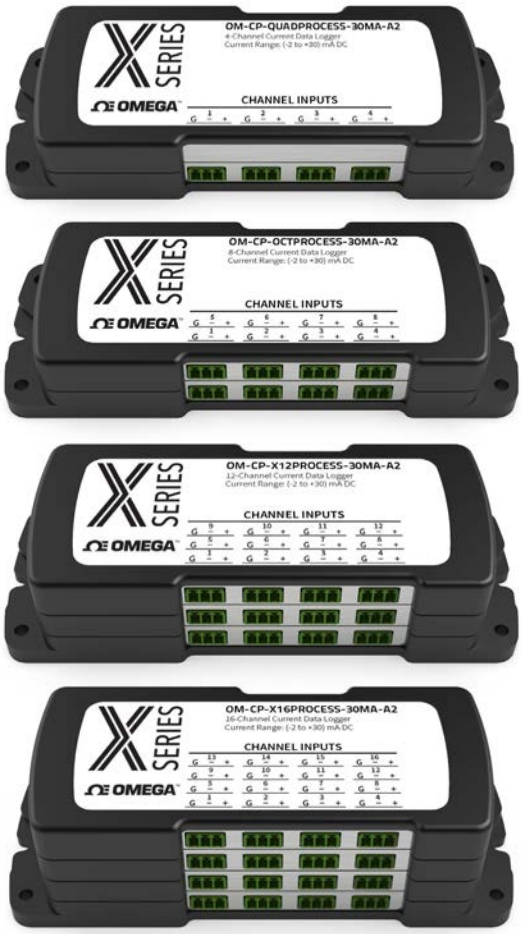
4, 8, 12 and 16-Channel Current Data Loggers

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



The new OM-CP-ProcessX Series consists of 4, 8, 12 and 16-channel, battery powered, low level DC current data loggers 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.

These easy-to-use devices feature 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-ProcessX Series data loggers is 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	3-input removable screw terminals		
Model	30 mA	160 mA	3 A
Current Range	-2 mA to +30 mA	±160 mA	±3 A
Current Resolution	0.0005 mA	0.005 mA	0.001 A
Calibrated Accuracy	±0.016 mA	±0.16 mA	±0.009 A
Input Impedance	10 Ω	1 Ω	0.1 Ω
Overload Protection (-0.3 V to +3.5 V)	±316 mA	±1000 mA	±6 A
Maximum Voltage Between Inputs to Ground	3 V (Common mode voltage must be less than 3 volts. All inputs must be within 3 volts of all other inputs.)		
Analog Conversion Time	150 ms		
Temperature Coefficient	< 50 ppm/°C typical		

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_2, flow rate and more.

GENERAL	
Memory (All channels enabled)	**4-channel:** 1,048,064 readings per channel **8-channel:** 524,032 readings per channel **12-channel:** 349,354 readings per channel **16-channel:** 262,016 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 A, mA, µA, engineering units specified through software
Time Accuracy	±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	**4-channel:** 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm) **8-channel:** 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm) **12-channel:** 2.70 in x 7.25 in x 1.68 in (65.6 mm x 184.2 mm x 42.7 mm) **16-channel:** 2.70 in x 7.25 in x 2.14 in (65.6 mm x 184.2 mm x 54.4 mm)
Weight	**4-channel:** 13 oz (368 g) **8-channel:** 13 oz (368 g) **12-channel:** 20 oz (580 g) **16-channel:** 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-QUADPROCESS-30MA-A2	4-Channel 30 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-QUADPROCESS-160MA-A2	4-Channel 160 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-QUADPROCESS-3A-A2	4-Channel 3 A Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-OCTPROCESS-30MA-A2	8-Channel 30 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-OCTPROCESS-160MA-A2	8-Channel 160 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-OCTPROCESS-3A-A2	8-Channel 3 A Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X12PROCESS-30MA-A2	12-Channel 30 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X12PROCESS-160MA-A2	12-Channel 160 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X12PROCESS-3A-A2	12-Channel 3 A Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X16PROCESS-30MA-A2	16-Channel 30 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X16PROCESS-160MA-A2	16-Channel 160 mA Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-X16PROCESS-3A-A2	16-Channel 3 A Current Data Logger, USB-A to micro USB cable, universal power adapter
OM-CP-BAT103	Replacement 9V lithium battery