

## OM-CP-BRIDGE Series

Bridge/Strain Gage Data Logger  
Part of the NOMAD® Family

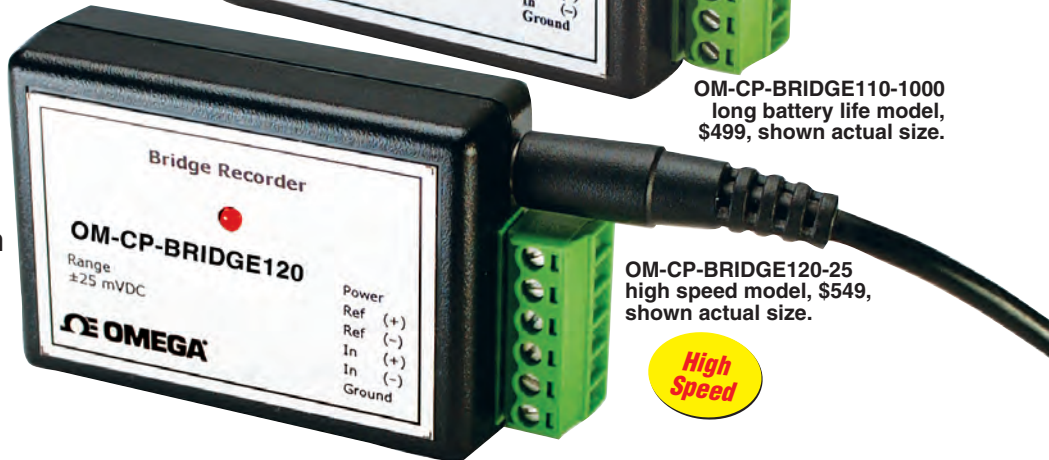
Starts at  
**\$499**



Long  
Battery  
Life



OM-CP-BRIDGE110-1000  
long battery life model,  
\$499, shown actual size.



OM-CP-BRIDGE120-25  
high speed model, \$549,  
shown actual size.

High  
Speed

- ✓ Store up to 32,767 Readings
- ✓ Models Available for High Speed or Long Battery Life Applications
- ✓ Real Time Operation
- ✓ Programmable Start Times
- ✓ Miniature, Stand-Alone Design
- ✓ Reusable, Battery Powered

The OM-CP-BRIDGE Series are battery-powered, stand-alone data loggers that measure and record voltage signals from strain gages, load cells and other low level dc sources. These compact, units are perfect for monitoring stress, torque, strain, pressure and data from many other sensors/transducers. Both the OM-CP-BRIDGE110 and OM-CP-BRIDGE120 are available in ranges from  $\pm 10$  to  $\pm 1000$  mV, and are capable of storing up to 32,767 readings.

The OM-CP-BRIDGE110 is designed for long battery life, up to 10 years (at 15 min reading rate), with a user-selectable reading rate from 2 sec to 12 hrs. The high speed OM-CP-BRIDGE120 models are capable of reading rates up to 20 readings/sec.

The OM-CP-BRIDGE units feature non-volatile solid-state memory, and can store readings even when the battery is discharged. Data retrieval is quick and easy – simply plug in to a COM or USB port. The OM-CP-IFC software displays your data in an easy to use graph, so you can analyze your data quickly.

A variety of powerful tools allow you to examine, export and print professional looking data with just a click of the mouse.

### SPECIFICATIONS

- Input Connection:** 6-position removable screw terminal
- Input Impedance:** 1 M $\Omega$  during acquisition, low impedance when inactive
- Reference Voltage Output:** 2.5 Vdc, 2.5 mA (1 k $\Omega$ ) maximum load
- Maximum Input Signal Impedance:** 5 k $\Omega$  (350  $\Omega$  sensors can be used with series resistors to produce >1 k $\Omega$ ; 120  $\Omega$  gages can be used in half and quarter bridge configurations)
- Specified Accuracy:** Nominal range @ 25°C
- Temperature Effect on Span and Offset:** <25  $\mu$ V over -40 to 80°C
- Engineering Units:** Stored in device; user may define any desired scale and offset from  $\pm 1.000E-31$  to  $\pm 9.999E+31$
- Start Modes:** Software programmable immediate or delay start up to six months in advance
- Real-Time Recording:** Device can be used with PC to monitor and record data in real-time
- Memory:** 32,767 readings; software configurable memory wrap

### Reading Rate:

- BRIDGE110 Models:** 2 sec to 12 hr
- BRIDGE120 Models:** 20 Hz to 12 hr

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device to alert user when calibration is required

**Power:** 3.6V lithium battery (included); user replaceable

### Battery Life:

**BRIDGE110 Models:** 10 yr (15 min reading rate @ 25°C)

**BRIDGE120 Models:** 25 days

**Power:** 3.6V lithium battery included

**Data Format:** Date and time stamped; %, ppm; e,  $\mu$ e, V, mV,  $\mu$ V engineering units specified through software

**Time Accuracy:**  $\pm 1$  min per/month (20 to 30°C)

**Computer Interface:** PC serial, RS232C COM or USB (interface cable required); 57,600 baud

**Software:** XP SP3/Vista and 7 (32 and 64-bit)

### Operating Environment:

-40 to 80°C (-40 to 176°F)

0 to 95% RH non-condensing

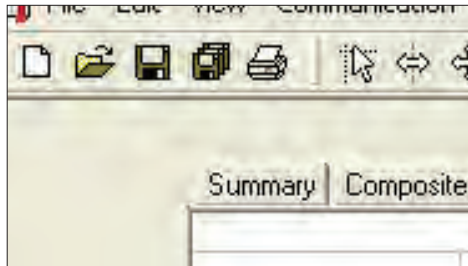
**Dimensions:** 42 H x 68 W x 20 mm D (1.7 x 2.7 x 0.8")

**Weight:** 60 g (2 oz)

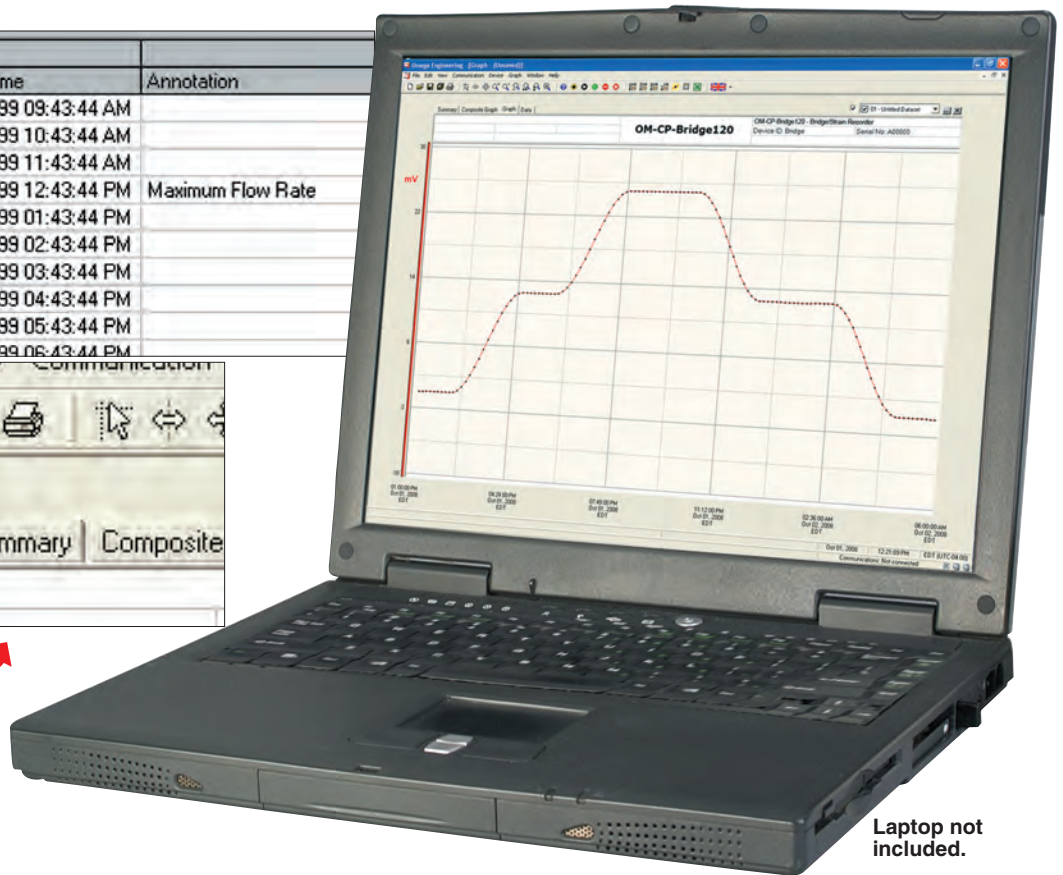
Input Ranges OM-CP-BRIDGE110 Nominal Range				
Nominal Range	$\pm 10$ mV	$\pm 25$ mV	$\pm 100$ mV	$\pm 1000$ mV
Measurement Range	$\pm 15$ mV	$\pm 37.5$ mV	$\pm 150$ mV	$\pm 1200$ mV
Resolution	1 $\mu$ V	2.5 $\mu$ V	5 $\mu$ V	50 $\mu$ V
Calibrated Accuracy	$\pm 0.25\%$ FSR	$\pm 0.10\%$ FSR	$\pm 0.05\%$ FSR	$\pm 0.01\%$ FSR

# DATA LOGGERS

Reading No.	Reading Gallons/Min	Date and Time	Annotation
10	2.3500E+01	May 02, 1999 09:43:44 AM	
11	2.4000E+01	May 02, 1999 10:43:44 AM	
12	2.4500E+01	May 02, 1999 11:43:44 AM	
13	2.4500E+01	May 02, 1999 12:43:44 PM	Maximum Flow Rate
14	2.4500E+01	May 02, 1999 01:43:44 PM	
15	2.4000E+01	May 02, 1999 02:43:44 PM	
16	2.4000E+01	May 02, 1999 03:43:44 PM	
17	2.4000E+01	May 02, 1999 04:43:44 PM	
18	2.4000E+01	May 02, 1999 05:43:44 PM	
19	2.4000E+01	May 02, 1999 06:43:44 PM	



OM-CP-IFC200 Windows software displays data in graphical or tabular format, sold separately, \$129.



Laptop not included.

**MOST POPULAR MODELS HIGHLIGHTED!**

## To Order (Specify Model Number)

MODEL NO.	PRICE	RANGE NOMINAL	MEASUREMENT RANGE	RESOLUTION	ACCURACY
<b>STANDARD BRIDGE/STRAIN GAGE DATA LOGGERS</b>					
OM-CP-BRIDGE110-10	\$499	±10 mV	±15 mV	1 µV	±0.25% FSR
OM-CP-BRIDGE110-25	499	±25 mV	±37.5 mV	2.5 µV	±0.10% FSR
OM-CP-BRIDGE110-100	499	±100 mV	±150 mV	5 µV	±0.05% FSR
OM-CP-BRIDGE110-1000	499	±1000 mV	±1200 mV	50 µV	±0.01% FSR
<b>HIGH SPEED BRIDGE/STRAIN GAGE DATA LOGGERS*</b>					
OM-CP-BRIDGE120-10	\$549	±10 mV	±15 mV	1 µV	±0.25% FSR
OM-CP-BRIDGE120-25	549	±25 mV	±37.5 mV	2.5 µV	±0.10% FSR
OM-CP-BRIDGE120-100	549	±100 mV	±150 mV	5 µV	±0.05% FSR
OM-CP-BRIDGE120-1000	549	±1000 mV	±1200 mV	50 µV	±0.01% FSR

MODEL NO.	PRICE	DESCRIPTION
OM-CP-IFC200	129	Windows software and 3.7 m (12') USB interface cable
OM-CP-BAT105	15	Replacement 3.6V lithium battery
OM-CP-CONNECTOR-6	10	Replacement 6 position terminal block connector

Comes complete with 3.6V lithium battery. Operator's manual and interface cable are included with the OM-CP-IFC200 software/cable package (required for data logger operation, sold separately).

\* To order with NIST-traceable calibration certificate, add suffix "-CERT" to model number, and \$60 to price.

Ordering Example: OM-CP-BRIDGE110-10, bridge/strain gage data logger, and OM-CP-IFC200, software with USB cable, \$499 + 129 = \$628.





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