

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

### OM-CP-BRIDGE120



Optional

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



OM-CP-BRIDGE120-25 high speed data logger shown larger than actual size.

The OM-CP-BRIDGE120 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.

OM-CP-BRIDGE120 Series data loggers are available in ranges from  $\pm 10$  to  $\pm 1000$  mV, and are capable of storing up to 32,767 readings, and 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 into an available USB port. The OM-CP-IFC200 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 $\Omega$ ) max 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 1 day

**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:** 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:** 25 days

**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/7 and 8 (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-BRIDGE120 Nominal Range

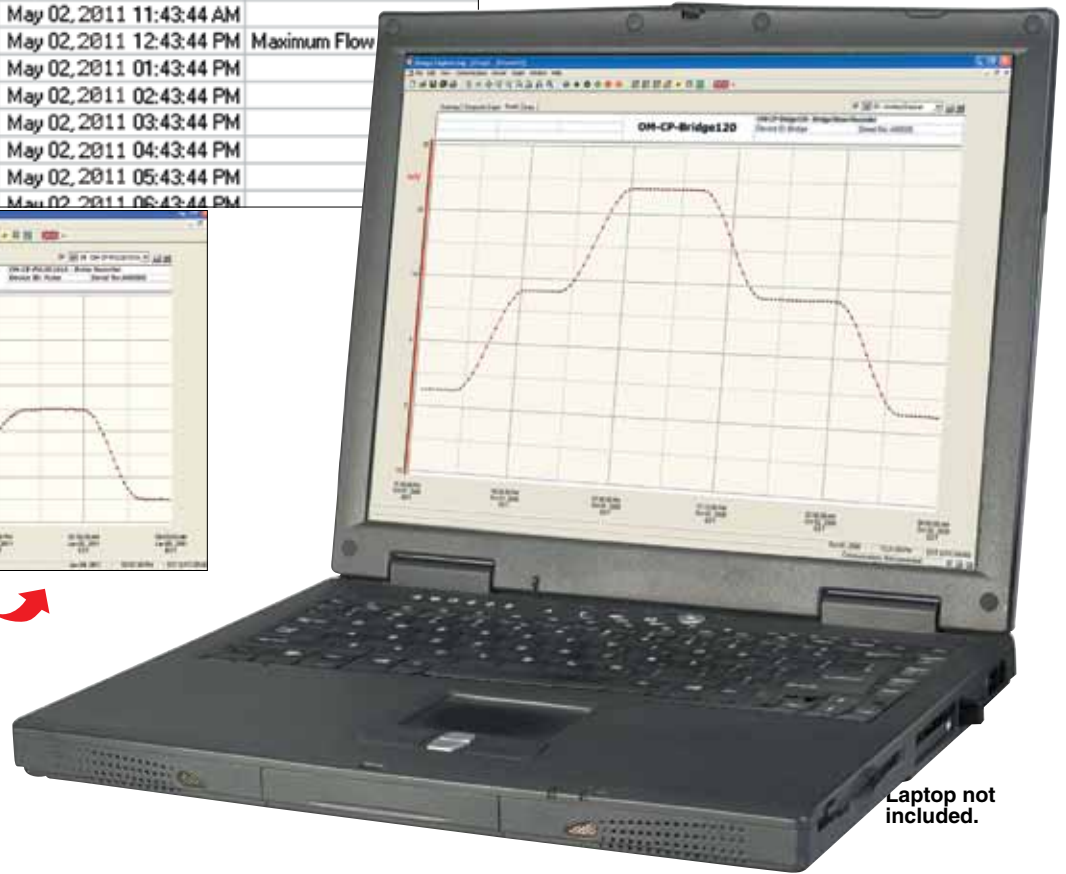
<b>Nominal Range</b>	$\pm 10$ mV	$\pm 25$ mV	$\pm 100$ mV	$\pm 1000$ mV
<b>Measurement Range</b>	$\pm 15$ mV	$\pm 37.5$ mV	$\pm 150$ mV	$\pm 1200$ mV
<b>Resolution</b>	1 $\mu$ V	2.5 $\mu$ V	5 $\mu$ V	50 $\mu$ V
<b>Calibrated Accuracy</b>	$\pm 0.25\%$ FSR	$\pm 0.10\%$ FSR	$\pm 0.05\%$ FSR	$\pm 0.01\%$ FSR

# DATA LOGGERS

Reading	Date and Time	Annotation
2.3500E+01	May 02, 2011 09:43:44 AM	
2.4000E+01	May 02, 2011 10:43:44 AM	
2.4500E+01	May 02, 2011 11:43:44 AM	
2.4500E+01	May 02, 2011 12:43:44 PM	Maximum Flow
2.4500E+01	May 02, 2011 01:43:44 PM	
2.4000E+01	May 02, 2011 02:43:44 PM	
2.4000E+01	May 02, 2011 03:43:44 PM	
2.4000E+01	May 02, 2011 04:43:44 PM	
2.4000E+01	May 02, 2011 05:43:44 PM	
2.4000E+01	May 02, 2011 06:43:44 PM	



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



Laptop not included.

## To Order

Model No.	Range Nominal	Measurement Range	Resolution	Accuracy
OM-CP-BRIDGE120-10	±10 mV	±15 mV	1 μV	±0.25% FSR
OM-CP-BRIDGE120-25	±25 mV	±37.5 mV	2.5 μV	±0.10% FSR
OM-CP-BRIDGE120-100	±100 mV	±150 mV	5 μV	±0.05% FSR
OM-CP-BRIDGE120-1000	±1000 mV	±1200 mV	50 μV	±0.01% FSR

## ACCESSORIES

Model No.	Description
OM-CP-IFC200	Windows software and 1.8 m (6') USB interface cable
OM-CP-SVP-SYSTEM	FDA 21 CFR part 11 compliant IQ/OQ/PQ secure software validation workbook and software package (unlimited users, license per computer)
OM-CP-BAT105	Replacement 3.6V lithium battery
OM-CP-CONNECTOR-6	Replacement 6 position terminal block connector

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

To order with NIST-traceable calibration certificate, add suffix "-CERT" to model number for additional cost.

Ordering Example: OM-CP-BRIDGE120-10, bridge/strain gage data logger, and OM-CP-IFC200, software with USB cable.