Data Loggers

High Temperature Pressure Data Logger Part of the NOMAD[®] Family



- Operates up to 140°C (284°F)
- ✓ Submersible (IP68)
- User Replaceable Battery
- Rugged
- Programmable Start Time
- Software Battery Life Indicator
- Flush Mount (OM-CP-PR140) or ½ NPT Pressure Port (OM-CP-PR140-NPT)

The OM-CP-PR140 is a pressure data logger designed for use in autoclave validation and mapping. This rugged device can withstand temperatures up to 140°C (284°F) and is completely submersible (IP68).

The OM-CP-PR140 is built with a precision stainless steel pressure gauge. The device has an accuracy of ± 0.03 Bar (± 0.435 psi), which can be achieved over a wide temperature range, from 20 to 140°C (68 to 284°F).

The OM-CP-PR140 can be programmed to take readings as often as once per second (1 Hz), and has non-volatile memory that can store up to 32,700 measurements.

The OM-CP-PR140-LUERFITTING is a ¹/₈ NPT to female luer lock adaptor. It can be used with the OM-CP-PR140-NPT data logger. The OM-CP-PR140-LUERFITTING can easily be screwed into the ¹/₈ NPT female port on the data logger. This rugged adaptor is made of 316 stainless steel construction and can withstand harsh environments such as steam sterilization cycles.

The OM-CP-IFC406 multiplexer data logger interface allows for multiple devices to be connected into one interface. Each OM-CP-IFC406 allows for 6 data loggers to be connected. Up to 3 OM-CP-IFC406 units may be daisy-chained together to communicate with a total of 18 devices through 1 USB port. To connect multiple OM-CP-IFC406 interfaces together, simply join the units side by side, making sure the spring pin contacts are connected and magnetically joined.

Simply place the OM-CP-PR140 in the

OM-CP-IFC400 docking station or OM-CP-IFC406 multiplexer, connect to an available USB port on your computer, and the device can be started, stopped or downloaded using our user friendly software. Graphical, tabular and summary data is provided for analysis and can be viewed in psia, mmHg, bar, Torr and kPa. The data can also be automatically exported to Excel[®] for further calculations. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged.



OM-CP-PR140-NPT shown larger than actual size.

A OMEGA

OM-CP-IFC406 multiplexer data logger interface, shown smaller than actual size.



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M-CP-PR14

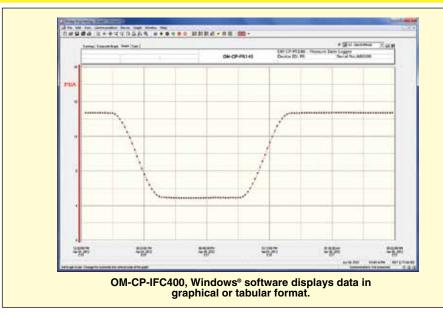
OM-CP-PR140 data logger and

OM-CP-IFC400 docking station

shown larger than actual size.

OM-CP-PR140-LUERFITTING, ½ NPT to female luer lock adaptor (optional). Shown larger than actual size.







OM-CP-PR140-NPT shown larger than actual size.

Specifications

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OM-CP-PR140 Data Logger

Pressure Sensor: Semiconductor strain gauge Pressure Range: 0 to 5 bar (0 to 72.5 psia) Pressure Resolution: 0.1 mBar (0.0015 psia) Calibrated Accuracy: ±0.03 bar (±0.435 psi) (20 to 140°C/68 to 284°F)

Pressure Response Time: 0.1 ms (10 to 90% FSR) **Repeatability:** ±0.5% FSR; ±0.2% typical

Reading Rate: 1 second to 1 every 24 hours

Memory: 32,700 readings; software configurable memory wrap

Start Modes: Software programmable immediate start or delay start up to six months

Real Time Recording: May be used with PC to monitor and record data in real time

Calibration: Digital calibration through software

Calibration Interval: Monthly calibration recommended **Data Format:** psia, bar, mbar, atm, Torr, Pa, kPa, MPa, mmHg, inHg, inH₂O, mH₂O, foot, meter

Battery Type: 3.6V lithium battery included; user replaceable Battery Life: 2 years typical **Time Accuracy:** ±1 minute/month at 20°C **Computer Interface:** USB (OM-CP-IFC400 interface cable required); 125,000 baud

Software: XP SP3/Vista/7 and 8 (32- and 64-bit) **Operating Environment:** -20 to 140°C (-4 to 284°F) 0 to 100% RH, may be used above 60°C (140°F) for up to 8 hrs per 24 hr period

Dimensions:

OM-CP-PR140: 50.8 L x 25.4 mm dia. (2.0 x 1.0") **OM-CP-PR140-NPT:** 58.2 L x 25.4 mm dia. (2.3 x 1.0")

Weight: 85 g (3 oz) Enclosure: Stainless Steel

OM-CP-IFC406 Multiplexer

Operating Environment: 10 to 35°C (50 to 95°F); 0 to 95% RH non-condensing **Baud Rate:** 125,000 baud **Connection Type:** USB (to PC)

Weight: 750 g (1.65 lb)

Material: 6061 Aluminum (PTFE impregnated hard anodize coating), ABS plastic Enclosure Dimensions: 24.13 L x 4.95 W x 4.45 cm H (9.5 x 1.95 x 1.75") Maximum Input Voltage: 6V

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| Model No. | Description |
| OM-CP-PR140 | High temperature pressure data logger, flush mount |
| OM-CP-PR140-CERT | High temperature pressure data logger, flush mount, and NIST calibration certificate |
| OM-CP-PR140-NPT | High temperature pressure data logger (1% NPT pressure port) |
| OM-CP-PR140-NPT-CERT | High temperature pressure data logger (1/8 NPT pressure port) and NIST calibration certificate |
| OM-CP-PR140-LUERFITTING | 1/8 NPT to female luer lock adaptor |
| OM-CP-IFC400 | Docking station (for single data logger) with USB cable, software and manual |
| OM-CP-IFC406 | Multiplexer data logger interface (accepts up to 6 data loggers) with USB cable, software and manual |
| 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-BAT110 | Replacement 3.6V high temperature lithium battery |

Comes complete with 3.6V lithium battery. Operator's manual and USB interface cable are included with the OM-CP-IFC400 software/cable package (required for data logger operation, sold separately).

Ordering Example: OM-CP-PR140-CERT, high temperature pressure data logger (flush mount) with NIST calibration certificate.