OM-CP-PRTRANS Series Transient Pressure Data Logger

1/4" NPT and Submersible Models Part of the NOMAD® Family



\$649

Basic Unit

- ✓ 100 Hz Operation
- Software-Selectable Trigger
- Rugged
- Programmable Start Time
- ✓ 32 Sample Pre-Trigger Buffer

It is an all too common paradox: you need to capture transient events at a high sample rate, but the events of interest are erratically spread over a long period. The OM-CP-PRTRANS pressure recorder can solve your problems. It samples up to 100 Hz (10 ms) but it will only trigger on pressure limits that you set beforehand. You can start the trigger on high or low thresholds and end the trigger after either a chosen number of samples, or when the signal crosses over your stop threshold. The device can record up to 255 events and take as many as 262,143 pressure samples. It also shows up to 32 samples of "pre-trigger" data so that you can learn what caused the trigger in the first place. The OM-CP-PRTRANS is a battery operated unit with a standard ¼ NPT for easy coupling to your pressure systems. It is also completely submersible and the stainless steel sensor can measure the pressure of most common fluids and gases. The non-volatile memory will retain valuable data even if the user-replaceable battery becomes discharged.

The software converts your PC into a real time strip chart recorder. Data can be printed in graphical or tabular format and can be exported to a text or Microsoft file.

The OM-CP-PRTRANS is your solution to the transient pressure problem.





OM-CP-PRTRANS, \$649, fully submersible data logger, shown smaller than actual size

Specifications

Pressure Sensor:

Semiconductor strain gauge **Calibrated Accuracy:** 2% FSR, 0.25% @ 25°C typical

Pressure Response Time: 0.1 ms

(10 to 90% FSR)

Repeatability: ±0.5% FSR;

±0.2% typical

Adaptor: ¼ MNPT or fully submersible Trigger Modes: Sof

Trigger Modes: Software programmable window size of bi-level start/stop triggers Start Time: Programmable

start time and date, up to 7 days in advance

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

Memory: Up to 262,143 samples
Number of Events: Up to 255

triggered events

Pre-Trigger Size: Up to 32 samples Recording Interval: 1 reading every 10 ms to 1 every second Calibration: Digital calibration is available through software Calibration Date: Automatically

recorded within device **Power:** 3.6 V lithium battery

(included)

Pressure Range	Resolution
0 to 30 psia	0.02 psia
0 to 100 psia	0.1 psia
0 to 300 psia	0.2 psia
0 to 500 psia	0.5 psia
0 to 1000 psia	1.0 psia
0 to 5000 psia	5.0 psia
0 to 30 psig	0.02 psig
0 to 100 psig	0.1 psig
0 to 300 psig	0.2 psig
0 to 500 psig	0.5 psig

Battery Life: 3 days continuous @ 10 ms sample rate

Shelf Life: Up to 1 year when

not in use

Data Format: Date and time stamped, psia, psig, inches, feet,

mmHg, bar, torr, kPa

Computer Interface: PC serial or USB (interface cable required)

115,200 baud **Software:**

WIN98/NT/2000/XP/VISTA 32-bit (VISTA 32-bit version only; VISTA 64-bit is not supported)

Operating Environment: -40 to 80°C (-40 to 176°F) 0 to 100% RH non-condensing

Dimensions: 163 mm x 32 mm L (6.4 x 1.25")

Weight: 340 g (12 oz)
Material: Stainless steel



Temperature Channel				
Minimum	19.5 Deg. C 23.5 Deg. C 20.8 Deg. C 1.2 Deg. C 20.8 Deg. C			
Maximum				
Arithmetic Mean				
			Mean Kinetic Temperature	
ressure Channel				
Minimum	27.904 psia			
Maximum	28.156 psia			
Arithmetic Mean	28.006 psia			

		Pressure	Temperature	Reading
Annotation	Date and Time	psia	Deg. C	No.
	Feb 20, 2000 09:10:30 PM	27.975	22.0	1452
Pressure Drop	Feb 20, 2000 09:11:30 PM	27.975	22.0	1453
	Feb 20, 2000 09:12:30 PM	27.978	22.0	1454
	Feb 20, 2000 09:13:30 PM	27.976	22.0	1455
	Feb 20, 2000 09:14:30 PM	27.970	21.5	1456
	Feb 20, 2000 09:15:30 PM	27.967	21.0	1457
	Feb 20, 2000 09:16:30 PM	27.963	21.0	1458
	Feb 20, 2000 09:17:30 PM	27.961	20.5	1459
	Feb 20, 2000 09:18:30 PM	27.959	20.5	1460
	Feb 20, 2000 09:19:30 PM	27.957	20.0	1461
	Feb 20, 2000 09:20:30 PM	27.957	20.0	1462
	Feb 20, 2000 09:21:30 PM	27.954	20.0	1463
	Feb 20, 2000 09:22:30 PM	27.954	20.0	1464
	Feb 20, 2000 09:23:30 PM	27.952	20.0	1465

OM-CP-IFC110, \$99, Windows software displays data in graphic or tabular format

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)			
Model No.	Price	Description	
OM-CP-PRTRANS-0-30A	\$649	Transient pressure data logger, 0 to 30 psia, submersible	
OM-CP-PRTRANS-0-100A	649	Transient pressure data logger, 0 to 100 psia, submersible	
OM-CP-PRTRANS-0-30G	649	Transient pressure data logger, 0 to 30 psig, submersible	
OM-CP-PRTRANS-0-100G	649	Transient pressure data logger, 0 to 100 psig, submersible	
OM-CP-PRTRANS-1-30A	649	Transient pressure data logger, 0 to 30 psia, ¼ NPT	
OM-CP-PRTRANS-1-100A	649	Transient pressure data logger, 0 to 100 psia, ¼ NPT	
OM-CP-PRTRANS-1-300A	649	Transient pressure data logger, 0 to 300 psia, ¼ NPT	
OM-CP-PRTRANS-1-500A	649	Transient pressure data logger, 0 to 500 psia, ¼ NPT	
OM-CP-PRTRANS-1-1000A	649	Transient pressure data logger, 0 to 1000 psia, ¼ NPT	
OM-CP-PRTRANS-1-5000A	649	Transient pressure data logger, 0 to 5000 psia, ¼ NPT	
OM-CP-PRTRANS-1-30G	649	Transient pressure data logger, 0 to 30 psig, ¼ NPT	
OM-CP-PRTRANS-1-100G	649	Transient pressure data logger, 0 to 100 psig, ¼ NPT	
OM-CP-PRTRANS-1-300G	649	Transient pressure data logger, 0 to 300 psig, ¼ NPT	
OM-CP-PRTRANS-1-500G	649	Transient pressure data logger, 0 to 500 psig, ¼ NPT	
OM-CP-IFC110	99	Windows software and 1.2 m (4') RS-232 cable with DB9F termination	
OM-CP-IFC200	119	Windows software and 3.7 m (12') USB interface cable	
OM-CP-BAT102	10	Replacement 3.6 V lithium battery	

Operator's manual and RS-232 cable are included with the OM-CP-IFC110 Windows software (software sold separately). Fully submersible data loggers are only available in 0-30 psia, 0-30 psig, 0-100 psia and 0-100 psig ranges.

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

Ordering Example: OM-CP-PRTRANS-1-100A-CERT, transient pressure data logger with NIST calibration certificate, ¼ NPT fitting, 0 to 100 psia range and OM-CP-IFC110 Windows software and RS-232 cable, \$649 + 60 + 99 = \$808.

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Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters