

## Intrinsically Safe Transient Pressure Data Logger Part of the NOMAD® Family

### OM-CP-PRTRANSIS Series



- ✓ Intrinsically Safe
- ✓ Rugged
- ✓ 100 Hz Operation
- ✓ Software-Selectable Trigger Modes and Threshold Levels
- ✓ Programmable Start Time
- ✓ Real-Time Operation
- ✓ ¼ NPT Pressure Port

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-PRTRANSIS is the pressure recorder to 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 and/or low thresholds and end it 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. The recorder 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-PRTRANSIS has been Factory Mutual certified as intrinsically safe for Class I, Division 1, Groups A, B, C and D and non-incendive for Class I, Division 2, Groups A, B, C and D. This certification makes the device ideal for use in hostile environments.



OM-CP-PRTRANSIS-300G data logger with ¼ NPT fitting, shown smaller than actual size.

The OM-CP-PRTRANSIS is a battery-operated unit with a standard ¼ NPT for easy coupling to your pressure systems, 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 a graphic or tabular format and can be exported to a text or Microsoft file.

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

### Specifications

#### Pressure Sensor:

Semiconductor strain gauge  
**Calibrated Accuracy:** 2% FSR, 0.25% @ 25°C, (77°F) typical

**Pressure Response Time:** 0.1 ms (10 to 90% FSR)

**Repeatability:** ±0.5% FSR; ± 0.2% typical

**Adaptor:** ¼ MNPT

**Trigger Modes:** Software programmable window size or bi-level start/stop triggers

**Start Time:** Software programmable start time and date, up to seven 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  
**Reading Interval:** 1 reading every 10 ms to 1 every second

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device

#### Power:

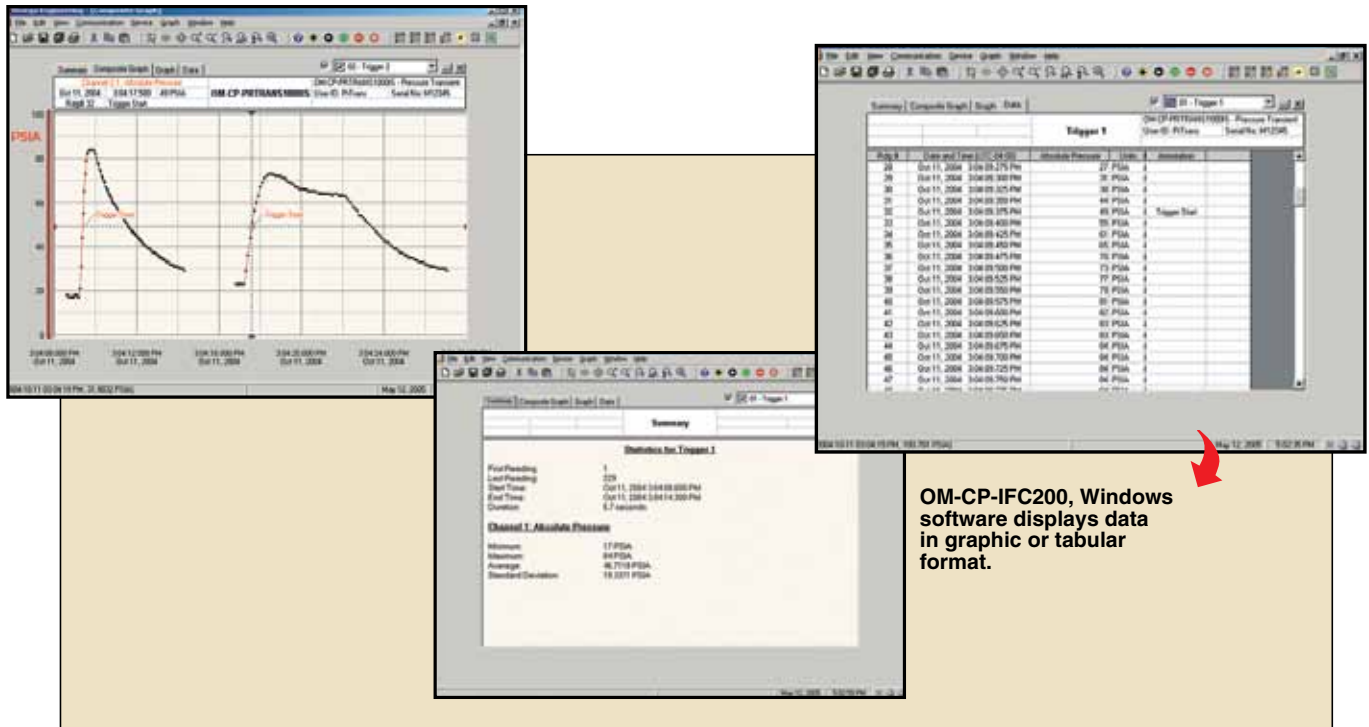
3.6 V lithium battery (included); user replaceable

**Battery Life:** 3 days

continuous @ 10 ms sample rate

**Battery Shelf Life:** Up to 1 year when not in use

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



OM-CP-IFC200, Windows software displays data in graphic or tabular format.

**Data Format:** Date and time stamped PSIA, PSIG, inches, feet, mmHg, bar, torr, kPa  
**Computer Interface:** PC serial, RS-232C COM or USB (interface cable required); 115,200 baud  
**Communications:** 115,200 baud

**Software:** XP SP3/Vista/7 and 8 (32-bit and 64-bit)  
**Operating Environment:** -40 to 80°C (-40 to 176°F), 0 to 100% RH  
**Dimensions:** 1.25 x 6.4" (32 mm x 163 mm)  
**Weight:** 340 g (12 oz)

**Material:** Stainless Steel  
**Approvals:** FM Certified Intrinsically Safe for Class I, Division 1 Groups A, B, C and D and non-incendive for Class I, Division 2, Groups A, B, C and D.

To Order	
Model No.	Description
OM-CP-PRTRANSIS-1-30A	Intrinsically safe transient pressure data logger, 0 to 30 psia, ¼ NPT
OM-CP-PRTRANSIS-1-30G	Intrinsically safe transient pressure data logger, 0 to 30 psig, ¼ NPT
OM-CP-PRTRANSIS-1-100A	Intrinsically safe transient pressure data logger, 0 to 100 psia, ¼ NPT
OM-CP-PRTRANSIS-1-100G	Intrinsically safe transient pressure data logger, 0 to 100 psig, ¼ NPT
OM-CP-PRTRANSIS-1-300A	Intrinsically safe transient pressure data logger, 0 to 300 psia, ¼ NPT
OM-CP-PRTRANSIS-1-300G	Intrinsically safe transient pressure data logger, 0 to 300 psig, ¼ NPT
OM-CP-PRTRANSIS-1-500A	Intrinsically safe transient pressure data logger, 0 to 500 psia, ¼ NPT
OM-CP-PRTRANSIS-1-500G	Intrinsically safe transient pressure data logger, 0 to 500 psig, ¼ NPT
OM-CP-PRTRANSIS-1-1000A	Intrinsically safe transient pressure data logger, 0 to 1000 psia, ¼ NPT
OM-CP-PRTRANSIS-1-5000A	Intrinsically safe transient pressure data logger, 0 to 5000 psia, ¼ NPT
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-BAT102	Replacement 3.6 V lithium battery

Comes complete with 3.6V lithium battery. Operator's manual and USB interface cable are included with the **OM-CP-IFC200** Windows software (software sold separately).

To order data logger with NIST calibration certificate, add suffix "-CERT" to model number.

**Ordering Example:** OM-CP-PRTRANSIS-1-100A-CERT intrinsically safe transient pressure data logger with NIST calibration certificate, ¼ NPT fitting, 0 to 100 psia range, OM-CP-IFC200, Windows software and USB interface cable