OM-CP-PRTEMP1000IS-A2 Intrinsically Safe Pressure and Temperature Data Logger





- Intrinsically Safe (IS) certification in accordance with the latest issue of FM3600 and FM3610.
- Certified Intrinsically Safe for: Class 1 Division 1 Group ABCD,
 Class 1 Division 2 Group ABCD, Temperature Class: T4A
- Programmable Start Time
- Real Time Operation
- 303 Stainless Steel Enclosure
- User-friendly
- 1/4 inch NPT pressure port



The OM-CP-PRTEMP1000IS-A2 is a rugged pressure data logger that accurately monitors and records pressure and temperature at user programmable reading intervals. The OM-CP-PRTEMP1000IS-A2 has been certified as Intrinsically Safe (IS) certification in accordance with the latest issue of FM3600 and FM3610.

Certified Intrinsically Safe for:

- Class 1 Division 1 Group ABCD
- Class 1 Division 2 Group ABCD
- Temperature Class: T4A

This certification makes the device ideal for uses in hostile environment applications such as air conditioning systems, chilled water, hot water, air, gas, oil and steam pressure systems. The internal temperature sensor provides accurate temperature measurements without the need of a separate temperature data logger.

The OM-CP-PRTEMP1000IS-A2 can be started to take measurements as often as every two seconds, up to one reading every twelve hours. It will store up to 16,383 readings in its non-volatile memory. It uses a rugged stainless steel pressure strain gauge to accurately measure the pressure.

The device comes standard with a common ¼ inch NPT fitting, which allows the logger to be adapted to almost any pressure fitting. There are many different pressure ranges available to suit most any application.

Specifications

TEMPERATURE	
Temperature Sensor	Semiconductor
Temperature Range	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution	0.1 °C (0.18 °F)
Calibrated Accuracy	±0.5 °C (0 °C to +50 °C) ±0.9 °F (+32 °F to +122 °F)

PRESSURE		
Pressure Sensor	Semiconductor strain gauge	
Pressure Range		
Pressure Resolution	*See table below	
Calibrated Accuracy		
Pressure Response Time	0.1 ms (10 to 90 %FSR)	
Repeatability	±0.5 %FSR; ±0.2 % typical	

GENERAL	
Adapter	¼ inch male NPT
Memory	16,383 readings per channel; 32,766 total readings
Start Modes	Software programmable immediate start or delay start up to six months in advance
Stop Modes	Manual or Timed (specific date and time)



Specifications

Real Time Recording	May be used with PC to monitor and record data in real time
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6 V lithium battery included, user replaceable
Battery Life	1 year typical (1 minute reading rate @ 25 °C)
Data Format	Date and time stamped °C, °F, K, °R; PSIA(g), inches, feet, mmHg, bar, Torr, kPa
Time Accuracy	±1 minute/month at 25 °C
Computer Interface	OM-CP-IFC200 (interface cable required); 2,400 baud
Operating System Compatibility	Windows XP SP3/7/8/10

Software Compatibility	Standard Software version 4.2.5.1 or later Secure Software version 4.1.7.2 or later
Operating Environment	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 100 %RH
Dimensions	6.4 in x 1.25 in dia. (163 mm x 32 mm dia.)
Weight	12 oz (340 g)
Enclosure	303 Stainless Steel
Approvals	CE Certified Intrinsically Safe in accordance with the latest issue of FM3600 and FM3610 • Class 1, Division 1 Group ABCD • Class 1, Division 2, Group ABCD • Temperature Class: T4A

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80 °C (176 °F).

*Range	0-30 PSIA/PSIG	0-100 PSIA/PSIG	0-300 PSIA/PSIG	0-500 PSIA/PSIG	0-1000 PSIA	0-5000 PSIA
Accuracy	2 %FSR, 0.25 % @ 25 °C typical					
Resolution	0.002 PSIA/PSIG	0.005 PSIA/PSIG	0.02 PSIA/PSIG	0.05 PSIA/PSIG	0.05 PSIA	0.2 PSIA

To Order		
P/N	Description	
OM-CP-PRTEMP1000IS-A2-1-1000-A	0-1000 PSIA Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-100-A	0-100 PSIA Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-100-G	0-100 PSIG Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-300-A	0-300 PSIA Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-300-G	0-300 PSIG Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-30-A	0-30 PSIA Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-30-G	0-30 PSIG Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-5000-A	0-5000 PSIA Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-500-A	0-500 PSIA Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-PRTEMP1000IS-A2-1-500-G	0-500 PSIG Intrinsically Safe Pressure and Temperature Data Logger	
OM-CP-IFC200	Required USB Interface Cable (sold separately)	
OM-CP-BAT102	Replacement 3.6 V lithium battery	