

PRTemp1000IS

Intrinsically Safe Pressure and Temperature Data Logger



The PRTemp1000IS is a rugged pressure data logger that accurately monitors and records pressure and temperature at user programmable reading intervals. The PRTemp1000IS has been 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 environment applications such as air conditioning systems, chilled water, hot water, air, gas, oil and steam pressure systems. The internal temperature sensor provides ambient temperature measurements without the need of a separate temperature data logger.

The PRTemp1000IS 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 1/4 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.

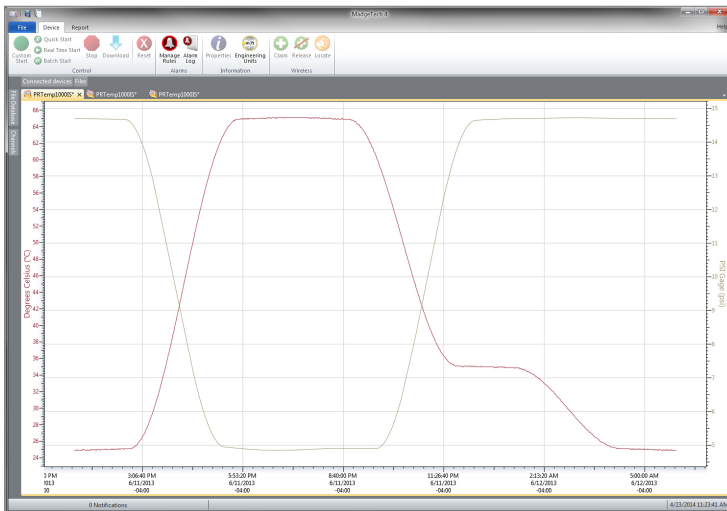
Features

- Intrinsically safe
- Rugged
- Programmable start time
- Real time operation
- User-friendly
- Low cost
- 1/4 inch NPT pressure port

Applications

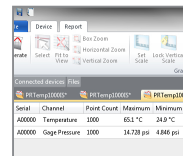
- Oil & gas industries
- Pneumatics
- Process control systems
- Gas compressors
- Natural gas production
- Lubrication systems
- Chemical processing
- Pulp and paper processing
- Medical instrumentation
- Environmental studies
- Waste water treatment
- HVAC
- Refrigeration

MadgeTech 4 Software Features

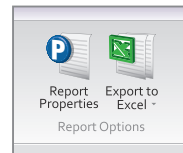


Graph View

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view



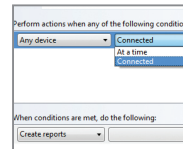
Statistics



Export to Excel

Time	Time Zone	Data
1:13:37 PM	-04:00	-00.000
1:14:37 PM	-04:00	-00.010
1:15:37 PM	-04:00	-00.020
1:16:37 PM	-04:00	-00.030
1:17:37 PM	-04:00	-00.040
1:18:37 PM	-04:00	-00.050
1:19:37 PM	-04:00	-00.060
1:20:37 PM	-04:00	-00.070
1:21:37 PM	-04:00	-00.080
1:22:37 PM	-04:00	-00.090
1:23:37 PM	-04:00	-00.100
1:24:37 PM	-04:00	-00.110
1:25:37 PM	-04:00	-00.120
1:26:37 PM	-04:00	-00.130
1:27:37 PM	-04:00	-00.140
1:28:37 PM	-04:00	-00.150

Tabular Data View



Automation

SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to madgetech.com for details.

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 (±0.9 °F)

PRESSURE	
Pressure Sensor	Semiconductor strain gauge
Pressure Range	*See table below
Pressure Resolution	
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
Start Modes	Software programmable immediate start or delay start up to six months in advance Real time and batch start available
Stop Modes	Manual or Timed (specific date and time)
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.

Memory	16,383 readings per channel; 32,766 total readings
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 (RS232 port not in use)
Computer Interface	USB (interface cable required); 2,400 baud
Operating System Compatibility	Windows XP SP3 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)
Material	303 Stainless Steel
Approvals	CE Certified Intrinsically Safe for Class I, Division 1 groups A, B, C and D to FM3600 nd FM3610 Standards

BATTERY WARNING: FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH, OR EXPOSE CONTENTS TO WATER.

*Range (PSI)	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 (PSI)	0.002 PSIA/PSIG	0.005 PSIA/PSIG	0.02 PSIA/PSIG	0.05 PSIA/PSIG	0.05 PSIA	0.2 PSIA

Ordering Information

PRTemp1000IS-1000-PSIA	PN 901170-00	0-1000 PSIA Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-100-PSIA	PN 901174-00	0-100 PSIA Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-100-PSIG	PN 901179-00	0-100 PSIG Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-300-PSIA	PN 901189-00	0-300 PSIA Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-300-PSIG	PN 901193-00	0-300 PSIG Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-30-PSIA	PN 901197-00	0-30 PSIA Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-30-PSIG	PN 901203-00	0-30 PSIG Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-5000-PSIA	PN 901209-00	0-5000 PSIA Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-500-PSIA	PN 901213-00	0-500 PSIA Intrinsically Safe Pressure and Temperature Data Logger
PRTemp1000IS-500-PSIG	PN 901217-00	0-500 PSIG Intrinsically Safe Pressure and Temperature Data Logger
IFC200	PN 900298-00	USB interface cable
TL-2150/P	PN 901744-00	Replacement battery for the PRTemp1000IS

For Quantity Discounts call (603) 456-2011 or email sales@madgetech.com