

PRTemp1000D

Differential Pressure and Temperature Data Logger



The PRTemp1000D is a rugged pressure recorder to accurately monitor and record pressure and temperature at user programmable reading intervals. The rugged stainless steel design allows for the device to be placed in harsh environments, which makes it well suited for use with 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 for a separate temperature recorder. The logger 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.

The PRTemp1000D uses a rugged stainless steel pressure strain gauge to accurately measure the pressure. The device comes standard with a 1/4 in NPT differential fitting.

There are many different pressure ranges available to fit most any application.

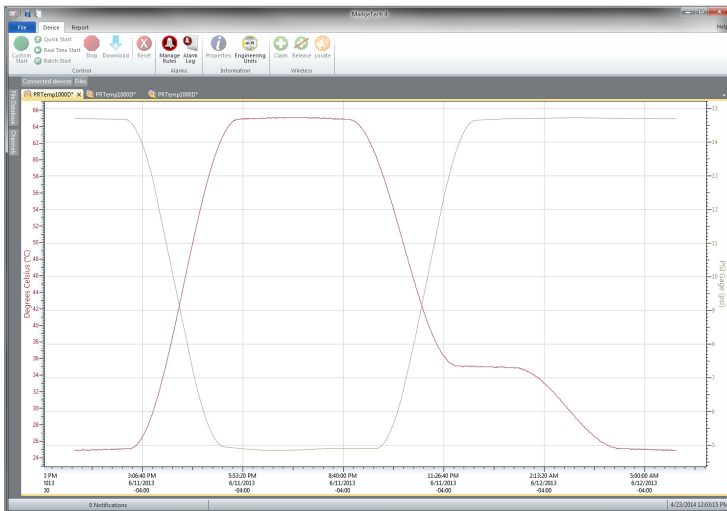
Features

- Rugged
- Reusable
- Submersible
- Programmable start time
- Real time operation
- User-friendly
- Low cost

Applications

- 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
- Oil & gas industries

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

Serial	Channel	Point Count	Maximum	Minimum
A0000	Temperature	1000	65.1 °C	24.0 °C
A0000	Gauge Pressure	1000	14.738 psi	4.846 psi

Statistics

Report Options

Report Properties Export to Excel

Export to Excel

Time	Time Zone	Data
1:33:37 PM	-04:00	-05:00:00
1:34:37 PM	-04:00	-05:00:00
1:35:37 PM	-04:00	-05:00:00
1:36:37 PM	-04:00	-05:00:00
1:37:37 PM	-04:00	-05:00:00
1:38:37 PM	-04:00	-05:00:00
1:39:37 PM	-04:00	-05:00:00
1:40:37 PM	-04:00	-05:00:00
1:41:37 PM	-04:00	-05:00:00
1:42:37 PM	-04:00	-05:00:00
1:43:37 PM	-04:00	-05:00:00
1:44:37 PM	-04:00	-05:00:00
1:45:37 PM	-04:00	-05:00:00
1:46:37 PM	-04:00	-05:00:00
1:47:37 PM	-04:00	-05:00:00
1:48:37 PM	-04:00	-05:00:00

Tabular Data View

Perform actions when any of the following conditions:

Any device Connected

At a time

Connected

When conditions are met, do the following:

Create reports

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	-20 °C to +80 °C (-4 °F to +176 °F)
Temperature Resolution	0.1 °C (0.18 °F)
Calibrated Accuracy	±0.5 °C over 0 °C to +50 °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)
Maximum Line Pressure	1000 PSI

*Range	0-30 PSID	0-100 PSID	0-300 PSID	0-500 PSID
Accuracy	2 %FSR, 0.25 % @ 25 °C typical			
Resolution	0.002 PSID	0.005 PSID	0.02 PSID	0.05 PSID

GENERAL	
Adapter	¼ inch male NPT
Start Modes	Software programmable immediate start or delay start up to six months in advance
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
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
Data Format	Date and time stamped °C, °F, K, °R; PSID, inches, feet, mmHg, bar, Torr, kPa
Time Accuracy	±1 minute/month at 20 °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	-20 °C to +80 °C (-4 °F to +176 °F), 0 %RH to 100 %RH
IP Rating	IP63
Dimensions	0.99 in x 21.87 in x 3.35 (25 mm x 533 mm x 85 mm)
Weight	15.5 oz (440 g)
Material	Stainless Steel

BATTERY WARNING: RISK OF FIRE OR EXPLOSION. DO NOT RECHARGE, FORCE OPEN, HEAT OR DISPOSE OF IN FIRE.

Ordering Information

PRTemp1000D-100	PN 901166-00	0-100 PSID Differential Pressure and Temperature Data Logger
PRTemp1000D-30	PN 901167-00	0-30 PSID Differential Pressure and Temperature Data Logger
PRTemp1000D-300	PN 901168-00	0-300 PSID Differential Pressure and Temperature Data Logger
PRTemp1000D-500	PN 901169-00	0-500 PSID Differential Pressure and Temperature Data Logger
IFC200	PN 900298-00	USB interface cable
TLH-5902	PN 901747-00	Replacement battery for the PRTemp1000D