# PRTEMP1000 RUGGED PRESSURE & TEMPERATURE DATA LOGGER



#### **Features**

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

### 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



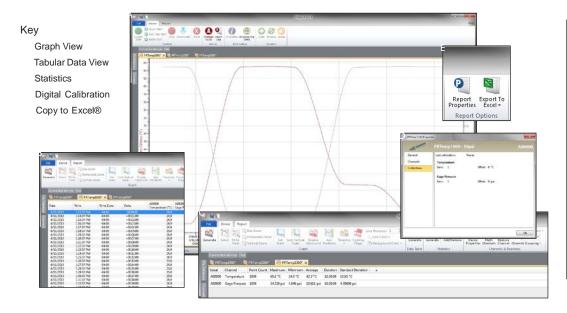
The PRTemp1000 is a rugged pressure recorder to accurately monitor and record pressure and temperature at user programmable reading intervals. The rugged stainless steel design allows for the device to be placed in harsh environments, which makes it well suited for use with air conditioning systems, 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 PRTemp1000 uses a rugged stainless steel pressure strain gauge to accurately measure the pressure. The device comes standard with a ¼" NPT fitting, which allows the logger to be connected to almost any pressure adapter. The PRTemp1000 is also fully submersible.

There are many different pressure ranges available to fit most any application. The standard pressure ranges are 30 PSIA(G), 100 PSIA(G), 300 PSIA(G), 500 PSIA(G), 1000 PSIA and 5000 PSIA. Other ranges may also be available upon request.

## MADGETECH DATA LOGGER SOFTWARE



## Software Features:

- 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
- Data table view
- Automatic report generation
- Summary view
- Multilingual

# PRTEMP1000 SPECIFICATIONS\*

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 Sensor:	Semiconductor strain gauge
Pressure Range:	0 to 30, 100, 300 and 500 PSIA/G; 0 to 1000 and 5000 PSIA
Pressure Resolution:	0.002, 0.005, 0.02, 0.05 PSIA/G; 0.05, 0.2 PSIA
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:	1/4 inch male NPT or submersible up to 60 PSI
Start Modes:	Software programmable immediate start or delay start up to six months in advance
Real Time Recording:	May be used with PC to monitor and record data in real time

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

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:	3.6V lithium battery included; user replaceable
Battery Life:	1 year typical
Data Format:	Date and time stamped °C, °F, K, °R; PSIA(g), inches, feet, mmHg, bar, Torr, kPa,
Time Accuracy:	±1 minute/month (at 20 °C, RS232 port not in use )
Computer Interface:	PC serial or USB (interface cable required); 2,400 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
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 (163 mm x 32 mm)
Weight:	12 oz (340 g)
Material:	Stainless Steel
Approvals:	CE

## ORDERING INFORMATION

MODEL	DESCRIPTION
PRTEMP1000-30	0-30PSIA(G) Pressure and Temperature Recorder
PRTEMP1000-100	0-100PSIA(G) Pressure and Temperature Recorder
PRTEMP1000-300	0-300PSIA(G) Pressure and Temperature Recorder
PRTEMP1000-500	0-500PSIA(G) Pressure and Temperature Recorder
PRTEMP1000-1000	0-1000PSIA Pressure and Temperature Recorder
PRTEMP1000-5000	0-5000PSIA Pressure and Temperature Recorder
IFC110	Software, manual and RS232 interface cable
IFC200	Software, manual and USB interface cable
NIST	NIST Calibration Certificate
TLH-5902	Replacement battery for PRTemp1000

 $^{\ast}\text{To}$  order the product with the NIST certificate add -CERT to the end of the part number.

