# PRTRANS1000IS INTRINSICALLY SAFE TRANSIENT PRESSURE DATA LOGGER



#### **Features**

- · Intrinsically safe
- Rugged
- 100 Hz operation
- Software selectable trigger modes and threshold levels
- · Programmable start time
- · Real Time operation
- 1/4" NPT pressure port

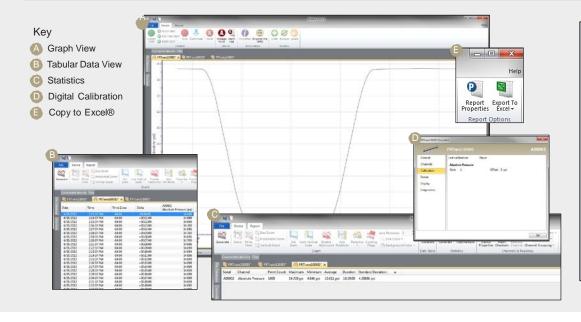
#### Applications

- · Oil and gas applications
- Water hammer
- Compressors
- Pumps
- Pneumatics
- Process control systems
- · Lubrication systems
- · Chemical processing
- · Pulp and paper processing
- Waste water treatment
- HVAC



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 of time. The PRTrans1000IS 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 the trigger 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 you might learn what caused the trigger in the first place. The PRTrans1000IS 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 uses in hostile environment applications. The PRTrans1000IS is a battery operated unit with a standard 1/4" NPT for easy coupling to your pressure systems. The non-volatile memory will retain your valuable data even if the user-replaceable battery becomes discharged. The PRTrans1000IS: your solution to the transient pressure problem.

## 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

# PRTRANS1000IS SPECIFICATIONS\*

Pressure Sensor:	Semiconductor strain gauge
Pressure Range:	0 to 30, 100, 300, 500 PSIA/G; 0 to 1000, 5000 PSIA
Pressure Resolution:	0.02, 0.1, 0.2, 0.5 PSIA/G; 1.0, 5.0 PSIA
Calibrated Accuracy:	2 %FSR, .25 % @ 25 °C typical
Pressure Response Time:	0.1 ms (10 to 90 %FSR)
Repeatability:	±0.5 %FSR; ±0.2 % typical
Adaptor:	1/4" male NPT
Trigger Modes:	Software programmable window size or bi-level start/stop triggers.
Start Modes:	Software programmable for immediate start.
Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	262,143 samples
Number of Events:	Up to 255 triggered events
Pre-trigger size:	Up to 32 samples

Reading Rate:	1 reading every 10 ms to 1 every second
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	3 days continuous @ 10 ms sample rate
Shelf Life:	Up to 1 year when device is not in use
Data Format:	Date and time stamped PSIA (G), inches, feet, mmHg, bar, Torr, kPa
Computer Interface:	USB (interface cable required); 115,200 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 dia. (163 mm x 32 mm dia.)
Weight:	12 oz (340 g)
Material:	Stainless Steel
Approvals:	CE, FM Certified Intrinsically Safe for Class I, Division 1 groups A, B, C and D

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

# ORDERING INFORMATION

MODEL	DESCRIPTION
PRTRANS1000IS-30	0-30PSIA(G) Intrinsically Safe Pressure Recorder
PRTRANS1000IS-100	0-100PSIA(G) Intrinsically Safe Pressure Recorder
PRTRANS1000IS-300	0-300PSIA(G) Intrinsically Safe Pressure Recorder
PRTRANS1000IS-500	0-500PSIA(G) Intrinsically Safe Pressure Recorder
PRTRANS1000IS-1000	0-1000PSIA Intrinsically Safe Pressure Recorder
PRTRANS1000IS-5000	0-5000PSIA Intrinsically Safe Pressure Recorder
IFC200	Software, manual and USB interface cable
NIST	NIST Calibration Certificate
TL-2150	Replacement battery for PRTrans1000IS

