

# 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 inch 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

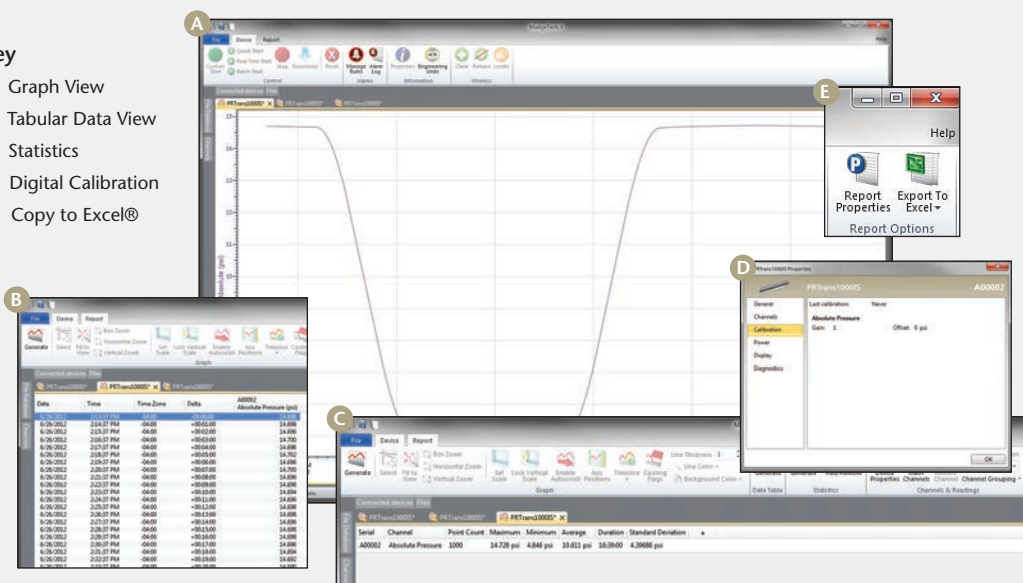


It is an all too common paradox: you need to capture transient events at a high sample rate but the events of interest are erratically spread over a long period of time. The PRTrans1000IS is the pressure recorder to solve your problems. It samples up to 100 Hz (10 ms) but it will only trigger on pressure 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

### Key

- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®



### 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\*

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS

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

<b>Reading Rate:</b>	1 reading every 10 ms to 1 every second
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	3.6V lithium battery included; <b>user replaceable</b>
<b>Battery Life:</b>	3 days continuous @ 10 ms sample rate
<b>Shelf Life:</b>	Up to 1 year when device is not in use
<b>Data Format:</b>	Date and time stamped PSIA (G), inches, feet, mmHg, bar, Torr, kPa
<b>Computer Interface:</b>	USB (interface cable required); 115,200 baud
<b>Software:</b>	XP SP3/Vista/Windows 7/Windows 8
<b>Operating Environment:</b>	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 100 %RH
<b>Dimensions:</b>	6.4 in x 1.25 in dia. (163 mm x 32 mm dia.)
<b>Weight:</b>	12 oz (340 g)
<b>Material:</b>	Stainless Steel
<b>Approvals:</b>	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
Calibration Certificate	Calibration Certificate available for data logger
TL-2150	Replacement battery for PRTrans1000IS

ASK ABOUT  
OUR OTHER  
DATA  
LOGGERS

Temperature  
Humidity  
Pressure  
pH  
Level  
Shock  
LCD Display  
Pulse/Event/State  
Current  
Voltage  
Wireless  
Intrinsically Safe  
Spectral Vibration  
Motion