# 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

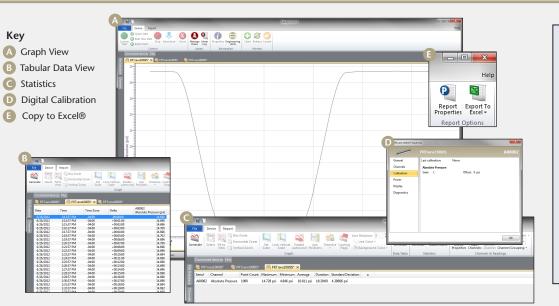
### Applications

- 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



## 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

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# **PRTRANS1000IS SPECIFICATIONS\***

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

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	PRICE (U.S.)	Temperature Humidity
PRTRANS1000IS-30	0-30PSIA(G) Intrinsically Safe Pressure Recorder	\$649.00	ASK ABOUT OUR OTHER DATA Level
PRTRANS1000IS-100	0-100PSIA(G) Intrinsically Safe Pressure Recorder	\$649.00	LOGGERS Shock LCD Display
PRTRANS1000IS-300	0-300PSIA(G) Intrinsically Safe Pressure Recorder	\$649.00	Pulse/Event/State Current Voltage
PRTRANS1000IS-500	0-500PSIA(G) Intrinsically Safe Pressure Recorder	\$649.00	Wireless Intrinsically Saf Spectral Vibratic
PRTRANS1000IS-1000	0-1000PSIA Intrinsically Safe Pressure Recorder	\$649.00	Motion
PRTRANS1000IS-5000	0-5000PSIA Intrinsically Safe Pressure Recorder	\$649.00	_
IFC200	Software, manual and USB interface cable	\$119.00	
NIST	NIST Calibration Certificate	\$60.00	
TL-2150	Replacement battery for PRTrans1000IS	\$ 15.00	

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

\*To order the product with the NIST certificate add -CERT to the end of the part number and add \$90.00 to the price.

