PRTRANS1000IS
INTRINSICALLY SAFE TRANSIENT PRESSURE DATA LOGGER

MADGETECH
WE BUILD DATA LOGGERS

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
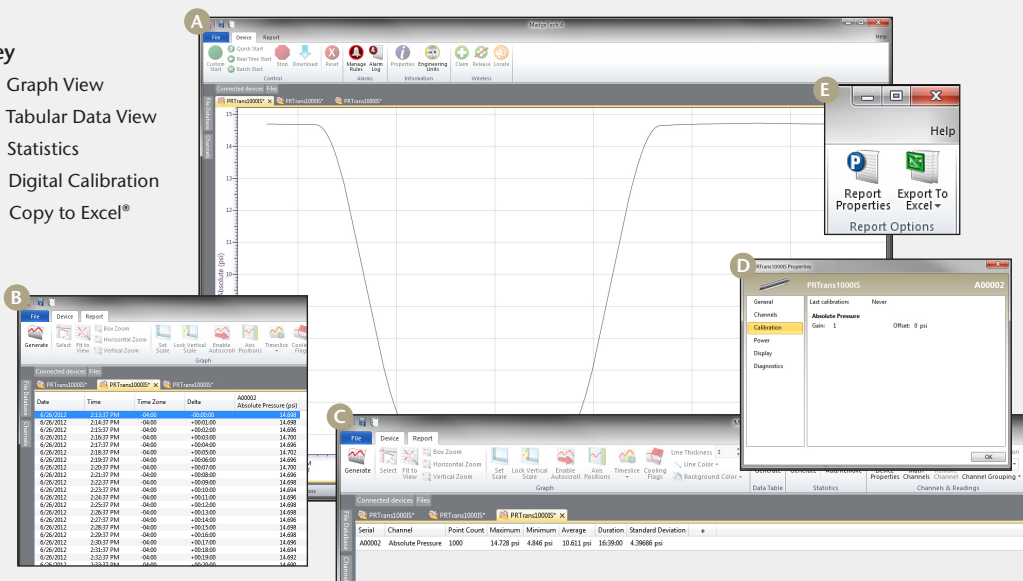- Pulp and paper processing
- Waste water treatment
- HVAC

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 inch 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 apply. Call (603) 456-2011 or go to madgetech.com for details.

Pressure Sensor:	Semiconductor strain gauge
Pressure Response Time:	0.1 ms (10 %FSR to 90 %FSR)
Repeatability:	±0.5 %FSR; ±0.2 % typical
Adaptor:	1/4 inch 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:	Windows XP SP3 or later
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:	303 Stainless Steel
Approvals:	CE, FM Certified Intrinsically Safe for Class I, Division 1 groups A, B, C and D

Range:	0-30 PSIA/PSIG	0-100 PSIA/PSIG	0-300 PSIA/PSIG	0-500 PSIA/PSIG	0-1000 PSIA	0-5000 PSIA
Accuracy:	2 %FSR, 0.25 % @ 25 °C typical					
Resolution:	0.02 PSIA/PSIG	0.1 PSIA/PSIG	0.2 PSIA/PSIG	0.5 PSIA/PSIG	1.0 PSIA	5.0 PSIA

BATTERY WARNING: WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80 °C (176 °F).

ORDERING INFORMATION

MODEL	PART NUMBER	DESCRIPTION
PRTRANS1000IS-30 PSIA	901291-00	0-30 PSIA Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-30 PSIG	901295-00	0-30 PSIG Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-100 PSIA	901275-00	0-100 PSIA Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-100 PSIG	901279-00	0-100 PSIG Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-300 PSIA	901283-00	0-300 PSIA Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-300 PSIG	901287-00	0-300 PSIG Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-500 PSIA	901303-00	0-500 PSIA Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-500 PSIG	901307-00	0-500 PSIG Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-1000 PSIA	901271-00	0-1000 PSIA Intrinsically Safe Pressure Data Logger
PRTRANS1000IS-5000 PSIA	901299-00	0-5000 PSIA Intrinsically Safe Pressure Data Logger
IFC200	900298-00	Software, manual and USB interface cable
TLH-5902	901747-00	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

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