# **PRTRANS1000** RUGGED TRANSIENT PRESSURE DATA LOGGER



### Features

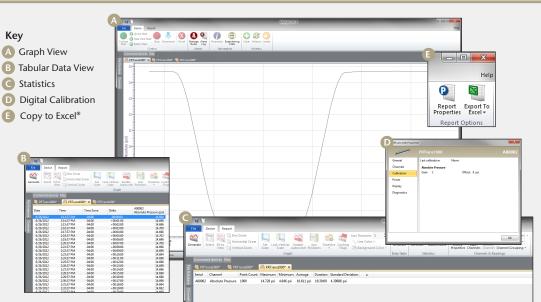
- 100 Hz operation
- Software selectable trigger modes and threshold levels
- Rugged
- Reusable
- Submersible
- Programmable start time
- 32 sample pre-trigger buffer
- 1/4 inch NPT pressure port

### Applications

- Water hammer
- Compressors
- Pumps
- Pneumatics/hydraulics
- Process control systems
- Lubrication systems
- Chemical processing
- Pressure reducing valves
- 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 PRTrans1000 is the pressure recorder to solve your problems. It samples up to 100Hz (10ms) 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 PRTrans1000 is a battery operated unit with a standard 1/4 inch NPT for easy coupling to your pressure systems. It is also completely submersible and the stainless steel sensor can measure the pressure of most common fluids and gasses. The non-volatile memory will retain your valuable data even if the user-replaceable battery becomes discharged. The PRTrans1000: 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 (FO, 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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## **PRTRANS1000 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 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 Interval:	1 reading every 10 ms up to 1 reading 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

Accuracy: 2 %FSR, 0.25 % @ 25 °C typical	Range:	R	: 0-30 PSIA/PSIG	0-100 PSIA/PSIG	0-300 PSIA/PSIG	0-500 PSIA/PSIG	0-1000 PSIA	0-5000 PSIA
	curacy:	Αϲϲι	:		2 %FSR, 0.25 %	@ 25 °C typical		
Resolution:0.02 PSIA/PSIG0.1 PSIA/PSIG0.2 PSIA/PSIG0.5 PSIA/PSIG1.0 PSIA5.0	olution:	Resolu	: 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 OR EXPLOSION RISK, DO NOT CHARGE, OPEN, HEAT OR DISPOSE OF IN FIRE.

## **ORDERING INFORMATION**

MODEL	PART NUMBER	DESCRIPTION
PRTRANS1000-30 PSIA	901249-00	0-30 PSIA Pressure Data Logger
PRTRANS1000-30 PSIG	901253-00	0-30 PSIG Pressure Data Logger
PRTRANS1000-100 PSIA	901231-00	0-100 PSIA Pressure Data Logger
PRTRANS1000-100 PSIG	901235-00	0-100 PSIG Pressure Data Logger
PRTRANS1000-300 PSIA	901241-00	0-300 PSIA Pressure Data Logger
PRTRANS1000-300 PSIG	901245-00	0-300 PSIG Pressure Data Logger
PRTRANS1000-500 PSIA	901261-00	0-500 PSIA Pressure Data Logger
PRTRANS1000-500 PSIG	901265-00	0-500 PSIG Pressure Data Logger
PRTRANS1000-1000 PSIA	901227-00	0-1000 PSIA Pressure Data Logger
PRTRANS1000-5000 PSIA	901257-00	0-5000 PSIA Pressure Data Logger
IFC200	900298-00	Software, manual and USB interface cable
TLH-5902	901747-00	Replacement battery for PRTRANS1000

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

