

# 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" NPT pressure port

### Applications

- Water hammer
- Compressors
- Pumps
- Pneumatics/hydraulics
- Process control systems
- Lubrication systems
- Chemical processing
- Pressure reducing valves
- Waste water treatment
- HVAC

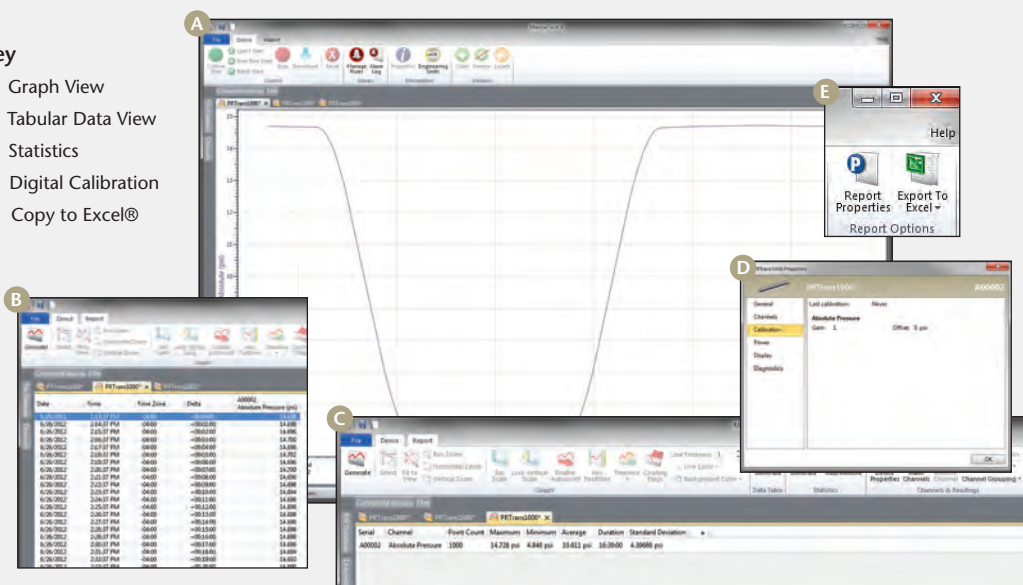


It is an all too common paradox: you need to capture transient events at a high sample rate but the events of interest are erratically spread over a long period of time. The PRTrans1000 is the pressure recorder to solve your problems. It samples up to 100Hz (10ms) but it will only trigger on pressure 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" 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

### Key

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



# PRTRANS1000 SPECIFICATIONS\*

<b>Pressure Sensor:</b>	Semiconductor strain gauge
<b>Pressure Range:</b>	0 to 30, 100, 300, 500 PSIA/G; 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, 0.25 % @ 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 or fully submersible
<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 Interval:</b>	1 reading every 10 ms up to 1 reading 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" x 1.25" dia. (163 mm x 32 mm dia.)
<b>Weight:</b>	12 oz (340 g)
<b>Material:</b>	Stainless Steel
<b>Approvals:</b>	CE

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

## ORDERING INFORMATION

MODEL	DESCRIPTION
PRTRANS1000-30	0-30PSIA(G) Pressure Recorder
PRTRANS1000-100	0-100PSIA(G) Pressure Recorder
PRTRANS1000-300	0-300PSIA(G) Pressure Recorder
PRTRANS1000-500	0-500PSIA(G) Pressure Recorder
PRTRANS1000-1000	0-1000PSIA Pressure Recorder
PRTRANS1000-5000	0-5000PSIA Pressure Recorder
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
TLH-5902	Replacement battery for PRTrans1000

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