



# PRTRANS1000

## Rugged Transient Pressure Recorder

### 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

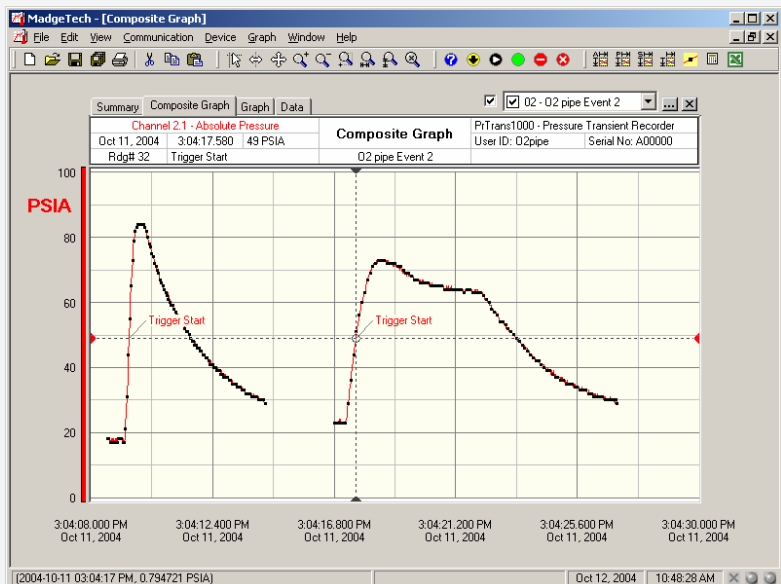
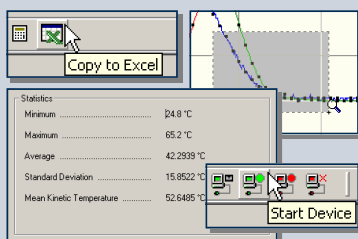
It is an all too common paradox: you need to capture transient events at a high sample rate but the events of interest are erratically spread over a long period of time. The PRTrans1000 is the pressure recorder to solve your problems. It samples up to 100Hz (10ms) but it will only trigger on pressure



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.

### SOFTWARE

PTC<sup>®</sup>'s Data Recorder Software is an easy to use Windows-based software package that allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.



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# PRTRANS1000 SPECIFICATIONS

<b>Pressure Sensor:</b> Semiconductor strain gauge	<b>Reading Interval:</b> 1 reading every 10ms to 1 every second
<b>Pressure Range:</b> 0 to 30, 100, 300, 500 PSIA/G; 1000, 5000 PSIA	<b>Calibration:</b> Digital calibration through software
<b>Pressure Resolution:</b> 0.02, 0.1, 0.2, 0.5 PSIA/G; 1.0, 5.0 PSIA	<b>Calibration Date:</b> Automatically recorded within device
<b>Calibrated Accuracy:</b> 2%FSR, 0.25% @ 25°C typical	<b>Power:</b> 3.6V lithium battery included
<b>Pressure Response Time:</b> 0.1ms (10 to 90%FSR)	<b>Battery Life:</b> 3 days continuous @ 10ms sample rate
<b>Repeatability:</b> ±0.5%FSR; ±0.2% typical	<b>Shelf Life:</b> Up to 1 year when device is not in use
<b>Adaptor:</b> 1/4" male NPT or fully submersible	<b>Data Format:</b> Date and time stamped PSIA(G), inches, feet, mmHg, bar, Torr, kPa,
<b>Trigger Modes:</b> Software programmable window size or bi-level start/stop triggers.	<b>Computer Interface:</b> PC serial or USB (interface cable required); 115,200 baud
<b>Start Time:</b> Software programmable start time and date, up to seven days in advance	<b>Software:</b> Windows 95/98/ME/NT/2000/XP based software
<b>Real Time Recording:</b> May be used with PC to monitor and record data in real time	<b>Operating Environment:</b> -40°C to +80°C, 0 to 100%RH
<b>Memory:</b> Up to 262,143 samples	<b>Dimensions:</b> 6.4" x 1.25" dia. (163mm x 32mm dia.)
<b>Number of Events:</b> Up to 255 triggered events	<b>Weight:</b> 12 oz (340 g)
<b>Pre-trigger size:</b> Up to 32 samples	<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.**

# SOFTWARE FEATURES

<b>Multiple Graphs:</b> Simultaneously analyze data from several units or deployments; easily switch to a single data series	<b>Statistics:</b> Calculate averages, min, max, and standard deviation with the touch of a button
<b>Real-Time Recording:</b> Collect and display data in real-time	<b>Export Data:</b> Export data in a variety of common formats, or switch to Excel® with a single click
<b>Graphical Cursor:</b> One click displays readings by time, value, parameter or sample number	<b>Calibration:</b> Automatically calculate and store calibration parameters
<b>Data Table:</b> Instantly access tabular view for detailed dates, times, values, and annotations	<b>Logger Configuration:</b> Easy set up and launch of data loggers with delayed start, preferred sample rate, device ID, trigger levels and trigger modes
<b>Scaling Options:</b> Autoscale function fits data to the screen, or allows user to manually enter their own values	<b>Communications:</b> Automatically sets up communications port, or lets user select configuration
<b>Formatting Options:</b> Change colors, line styles, plotting options, show or hide channels in an instant	<b>Printing:</b> Automatically print graphical or tabular data

\*Specifications are subject to change without notice. Specific warranty and remedy limitations apply.

ORDERING INFORMATION		ASK ABOUT OUR OTHER DATA RECORDERS	
Model	Description		
PRTrans1000-30	0-30 PSIA(G) Transient Pressure Recorder	Temperature	Pulse/Event
PRTrans1000-100	0-100 PSIA(G) Transient Pressure Recorder		
PRTrans1000-300	0-300 PSIA(G) Transient Pressure Recorder	Humidity	Voltage
PRTrans1000-500	0-500 PSIA(G) Transient Pressure Recorder	Pressure	Current
PRTrans1000-1000A	0-1000 PSIA Transient Pressure Recorder	Bridge/Strain	Submersible
PRTrans1000-5000A	0-5000 PSIA Transient Pressure Recorder	pH	Intrinsically Safe
SP100	Software, manual and serial interface cable	Level	RF Transmitters
IFC200	Software, manual and USB interface cable	Shock/Vibration	Multi-parameter
TEMP97	Replacement battery for PRTrans1000		

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