Product Specifications

PROVEN DATA LOGGING SOLUTIONS

SmartReader Plus 9

Two-Channel Pulse Data Logger

The SmartReader Plus 9 is a versatile data logger designed for easy counting and recording of switch contact closures and voltage pulses. It has two pulse/contact channels.

APPLICATIONS

Monitoring fluid and air flow, energy use, wind speed, shaft RPM and rainfall, etc.

GENERAL SPECIFICATIONS

Size:	107mm x 74mm x 22mm (4.2" x 2.9" x 0.9")
Weight:	110 g (3.75 oz)
Case Material:	Noryl® Plastic
Battery:	3.6 volt Lithium
Resolution:	12-bit (1 part in 4096)
Mounting:	Magnetic backing or locking eyelet
Clock Accuracy:	± 2 seconds per day
Sampling Methods:	Continuous (First-in First-out), Stop When Full (Fill-then-stop) **Not available with sample rates faster than eight seconds*
Operating Limits:	-40°C to 70°C (-40°F to 158°F) and 0 to 95% RH (non-condensing)
PC Requirements:	Windows PC with at least one free USB or serial port (depending on interface)
Software Requirements:	TrendReader® 2 (Compatible with Windows 2000 SP4, XP SP1 and Vista 32 bit)
Memory Size:	32 KB (capable of storing up to 21,500 readings)
(2 models available)	128 KB (capable of storing up to 87,000 readings)
Sampling Rates:	User selectable rates from 25 per second to once every eight hours (BP-101 battery pack or PS-201 power supply required for sampling rates faster than eight seconds)
Number of Channels:	Two (two external inputs for externally-generated pulse signals and dry switch contact closures) NOTE: For "switch status" logging, see SmartReader Plus 8)

SENSOR SPECIFICATIONS

Pulse Inputs

Range:	4095 pulses/sample period
Accuracy:	±1 pulse/sample period
Absolute Max. Voltage:	+24/-22 volts DC
Input Impedance:	>1.0 M for Vin < 5V >4.0 K for Vin > 5V
Min. Pulse Width: *(50% Duty Cycle)*	Slow input: 2 milliseconds Fast input: 10 microseconds

Switch Inputs

Input Type:	Uncommitted "dry" contacts (relay or switch)
Excitation:	5 microamps contact current 3.6 volts open circuit

Voltage Input

Input Type:	Active logic signals
Input Voltage:	Low: 0 to 0.5 volts DC High: 4.5 to 24 volts DC
Maximum Frequency	100 KHz