

# SmartReader Plus 9

## Product Specifications

Type: Two-Channel Pulse

### GENERAL SPECIFICATIONS

**Size:** 107 mm x 74 mm x 22 mm (4.2" x 2.9" x 0.9")  
**Weight:** 110 grams (3.75 ounces)  
**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 to 70°C (-40 to 158°F) and 0 to 95% RH (non-condensing)  
**PC Requirements:** IBM PC or 100% compatible with at least one free serial port, 2 MB of RAM memory, and 2 MB of hard disk space  
 TrendReader® Standard 2 (compatible with Windows® 2000, and XP)

**Memory Size:** 32KB (capable of storing up to 21,500 readings)  
 (2 models available) 128KB (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)

### 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

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.



### WARRANTY

**Internal Battery:** 10 Years  
**Data Logger:** 3 Years

### APPLICATIONS

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

**Model#:**

**Cat#:**

SRP-009

01-0016

SRP-009-128K

01-0130