

# SmartReader Plus 7

## Product Specifications

**Type:** Eight-Channel Process Signal

### 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  
**Battery Life:** 10 years with normal use (factory replaceable)  
**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  
**Software Requirements:** TrendReader® Standard 2 (compatible with Windows® 2000, and XP)

**Memory Size:** 32KB (capable of storing up to 21,500 readings)  
 128KB (capable of storing up to 87,000 readings)  
 1.5MB (capable of storing up to 1,048,000 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:** Eight (one for the internal temperature sensor and seven external channels for analog voltage and current loop signals)

### SENSOR SPECIFICATIONS

**Temperature Sensor** NTC Thermistor - 10,000 Ohm @ 25°C (77°F)  
**Range:** -40 to 70°C (-40 to 158°F)  
**Accuracy:** +/- 0.2°C (+/- 0.3°F) over the range 0 to 70°C (32 to 158°F)  
**Resolution:** 0.03°C (0.05°F) @ 25°C; better than 0.07°C (0.12°F) between -25 and 70°C (-13° and 158°F); better than 0.13°C (0.23°F) between -40 and -25°C (-40°F and -13°F)

<b>Standard Model*</b> (SRP-007)	<b>Other Models*</b>
0 to 2.5 VDC (1 channel)	All external channels: 0 to 2.5 VDC (SRP-007-0-2.5V)
0 to 5 VDC (2 channels)	All external channels: 0 to 5 VDC (SRP-007-0-5V)
0 to 10 VDC (1 channel)	All external channels: 0 to 10 VDC (SRP-007-0-10V)
0 to 200 mV DC (1 channel)	All external channels: 0 to 25 mA (SRP-007-25mA)
0 to 25 mA DC (2 channels)	

<b>Maximum Protection</b>	<b>Input Impedance</b>
Voltage channels: +/- 40V (reverse-polarity protected)	Greater than 1M Ohm (200mV channel)
Current channels: +/- 70mA (reverse-polarity protected)	Greater than 1M Ohm (0 to 2.5V channel)
	Greater than 1M Ohm (0 to 5.0V channels)
	Greater than 1M Ohm (0 to 10V channel)
	20 Ohm (0 to 25mA channels)

\*Transducer restrictions: The use of a single power supply is recommended to avoid ground loops or use loop isolators

The SmartReader Plus 7 is a versatile data logger for easy recording of common process signal variables. With seven input channels, the logger is ideal for monitoring (through commercially available transducers) a wide variety of measurement parameters.



### WARRANTY

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

### APPLICATIONS

Monitoring wind speed, flow, tank level, pressure, current, voltage, power, SCADA troubleshooting, and more.

Model#:	Cat#:
SRP-007	01-0014
SRP-007-128K	01-0123
SRP-007-1.5M	01-0152
SRP-007-0-2.5V	01-0018
SRP-007-0-2.5V-128K	01-0127
SRP-007-0-5V	01-0107
SRP-007-0-5V-128K	01-0124
SRP-007-0-5V-1.5M	01-0154
SRP-007-0-10V	01-0020
SRP-007-0-10V-128K	01-0125
SRP-007-0-10V-1.5M	01-0155
SRP-007-25mA	01-0017
SRP-007-25mA-128K	01-0126
SRP-007-25mA-1.5M	01-0156