

# SmartReader Plus 7

## Product Specifications

**Type:** Eight-Channel Process Signal

### GENERAL SPECIFICATIONS

<b>Size:</b>	107 mm x 74 mm x 22 mm (4.2" x 2.9" x 0.9")
<b>Weight:</b>	110 grams (3.75 ounces)
<b>Case Material:</b>	Noryl® plastic
<b>Battery:</b>	3.6 volt Lithium
<b>Battery Life:</b>	10 years with normal use (factory replaceable)
<b>Resolution:</b>	12-bit (1 part in 4096)
<b>Mounting:</b>	Magnetic backing or locking eyelet
<b>Clock Accuracy:</b>	+/- 2 seconds per day
<b>Sampling Methods:</b>	Continuous (First-in, First-out)*, Stop When Full (Fill-then-stop)
<i>*Not available with sample rates faster than eight seconds</i>	
<b>Operating Limits:</b>	-40 to 70°C (-40 to 158°F) and 0 to 95% RH (non-condensing)
<b>PC Requirements:</b>	IBM PC or 100% compatible with at least one free serial port, 2 MB of RAM memory, and 2 MB of hard disk space
<b>Software Requirements:</b>	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

<b>Temperature Sensor</b>	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* (SRP-007)</b>	<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)

#### Input Impedance

**Maximum Protection**

Greater than 1M Ohm (200mV channel)

Voltage channels: +/- 40V (reverse-polarity protected)

Greater than 1M Ohm (0 to 2.5V channel)

Current channels: +/- 70mA (reverse-polarity protected)

Greater than 1M Ohm (0 to 5.0V channels)

**Accuracy**

Greater than 1M Ohm (0 to 10V channel)

+/- 0.5% of full scale

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

<b>Internal Battery:</b>	10 Years
<b>Data Logger:</b>	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