

SmartReader 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
Resolution:	8-bit (1 part in 256)
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)
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 32,767 readings)
Sampling Rates:	User selectable rates from 8 seconds to 5 days in 4-second increments
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 over the range of 0 to 70°C (+/- 0.3°F over the range of 32 to 158°F)
Resolution:	0.4°C (0.7°F) @ 25°C; better than 1°C (1.8°F) between -25 and 70°C (-13° and 158°F); better than 2.0°C (3.6°F) between -40 and -25°C (-40°F and -13°F)

Standard Model (SR-007)	Other Models
<i>Input Range*</i>	<i>Input Range*</i>
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)	
Maximum Protection	Input Impedance
Voltage channels: +/- 40V (reverse-polarity protected)	> 1M Ohm (200mV channel)
Current channels: +/- 70mA (reverse-polarity protected)	> 1M Ohm (0 to 2.5V channel)
	20K Ohm (0 to 5.0V channel)
	40.9K Ohm (0 to 10V channel)
	100 Ohm (0 to 25mA channel)
Accuracy	
+/- 1% of full scale	

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

The SmartReader 7 is a versatile data logger that can monitor and record a variety of different process signals including the popular 4-20mA and 0-5V. With its 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, etc.

Model#:	Cat#:
SR-007	01-0031
SR-007-0-2.5V	01-0033
SR-007-0-5V	01-0034
SR-007-0-10V	01-0041
SR-007-25mA	01-0032