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 curent 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:	+/- 0.2ºC (+/- 0.3˚F) over the range 0 to 70ºC (32 to 158ºF)
Resolution:	0.03ºC (0.05ºF) @ 25ºC; better than 0.07ºC (0.12ºF) between -25 and 70˚C (-13º and 158ºF); better than 0.13ºC (0.23˚F) between -40 and -25˚C (-40ºF and -13ºF)

Standard Model* *(SRP-007)*

- 0 to 2.5 VDC (1 channel)
- 0 to 5 VDC (2 channels)
- 0 to 10 VDC (1 channel)
- 0 to 200 mV DC (1 channel)
- 0 to 25 mA DC (2 channels)

Other Models*

All external channels:	0 to 2.5 VDC (SRP-007-0-2.5V)
All external channels:	0 to 5 VDC (SRP-007-0-5V)
All external channels:	0 to 10 VDC (SRP-007-0-10V)
All external channels:	0 to 25 mA (SRP-007-25mA)

Maximum Protection

- Voltage channels: +/- 40V *(reverse-polarity protected)*
- Current channels: +/- 70mA *(reverse-polarity protected)*

Accuracy

- +/- 0.5% of full scale

Input Impedance

Greater than 1M Ohm	(200mV channel)
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