

SmartReader Plus 7

Product Specifications

Type: Eight-Channel Process Signal

GENERAL SPECIFICATIONS

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|-------------------------------|---|
| 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) <i>*Not available with sample rates faster than eight seconds</i> |
| 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 (compatible with Windows® 3.1, '95, '98, 2000, Me, NT 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) |



WARRANTY

| | |
|--------------------------|-----------------|
| Internal Battery: | 10 Years |
| Data Logger: | 3 Years |

APPLICATIONS

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

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) | |
| Standard Model* (SRP-007) | Other Models* | |
| 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 | +/- 0.5% of full scale | |

*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.

| 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 |