

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 (compatible with Windows® 3.1, '95, '98, 2000, Me, NT 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°F 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)

Input Range*

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)

Maximum Protection

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

Accuracy

+/- 1% of full scale

Other Models

Input Range*

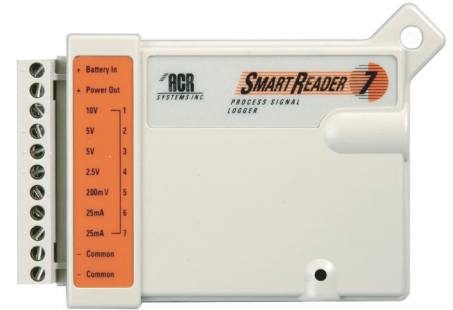
All external channels: 0 to 2.5 VDC (SRP-007-0-2.5V)
 All external channels: 0 to 5 VDC (SRP-007-0-5V)
 All external channels: 0 to 10 VDC (SRP-007-0-10V)
 All external channels: 0 to 25 mA (SRP-007-25mA)

Input Impedance

> 1M Ohm (200mV channel)
 > 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)

*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