

SmartReader 1

Product Specifications

Type: Two-Channel Temperature Thermistor

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, 1 Amp-Hour
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 2 MB RAM, 2 MB of hard drive disk space and one free serial port
Software Requirements: TrendReader® 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: Two (one for the internal temperature sensor and one for remote sensing of temperature, resistance, or switch status)

SENSOR SPECIFICATIONS

Temperature Sensor (internal)

Type: 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)

ACR ET Series Thermistor Probes*	Range	Cat#
General Purpose Temperature Probe	-35 to 95°C (-30 to 200°F)	35-0001
Low Temperature Probe	-60 to 55°C (-75 to 130°F)	35-0028
Low Temperature Penetration Probe	-60 to 55°C (-75 to 130°F)	35-0000
High Temperature Probe	10 to 170°C (50 to 335°F)	35-0002
Oven Temperature Probe	70 to 255°C (155 to 490°F)	35-0003
Skin Surface Temperature Probe	20 to 40°C (68 to 104°F)	35-0020
Pipe Surface Temperature Probe	-35 to 95°C (-30 to 200°F)	35-0025
Waterproof Temperature Probe	-40 to 105°C (-40 to 221°F)	35-0035

*For remote temperature measurements (external channel)

The SmartReader 1 is a simple and easy-to-use data logger for monitoring and recording temperature. Quick and easy to set up, it works right out of the box, logging temperature readings from its internal, precision-calibrated temperature sensor. For added versatility, use the extra channel to record temperature (with an ACR thermistor probe), resistance or switch status.



WARRANTY

Internal Battery: 10 Years
Data Logger: 3 Years

APPLICATIONS

Food process verification, pharmaceutical storage, transportation of temperature-sensitive goods, equipment run time, HVAC system testing and balancing, etc.

Model#:	Cat#:
SR-001	01-0024