

# SmartReader Plus 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  
**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® 2 (compatible with Windows® 2000, and XP)

**Memory Size:** 32KB (capable of storing up to 21,500 readings)  
*(3 models available)* 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:** Two (one for the internal temperature sensor and one for remote sensing of temperature, resistance, or switch status)

### SENSOR SPECIFICATIONS

**Internal 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:** 0.03°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)

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 Plus 1 is a powerful and accurate data logger designed for easy monitoring and recording of temperature. With one internal ambient temperature channel and an input for an optional remote temperature or contact closure sensing, the SmartReader Plus 1 is ideal for quick and accurate temperature recordings in a variety of applications.



### WARRANTY

**Internal Battery:** 10 Years  
**Data Logger:** 3 Years

Model#:	Cat#:
SRP-001	01-0008
SRP-001-128K	01-0112
SRP-001-1.5M	01-0141