

# SmartReader Plus 10

## Product Specifications

**Type:** Four-Channel Temperature  
RTD

### GENERAL SPECIFICATIONS

<b>Size:</b>	107 mm x 74 mm x 22 mm (4.2" x 2.9" x 0.9")
<b>Weight:</b>	110 grams (3.75 ounces)
<b>Case Material:</b>	Noryl® plastic
<b>Battery:</b>	3.6 volt Lithium
<b>Resolution:</b>	12-bit (1 part in 4096)
<b>Mounting:</b>	Magnetic backing or locking eyelet
<b>Clock Accuracy:</b>	+/- 2 seconds per day
<b>Sampling Methods:</b>	Continuous (First-in, First-out)*, Stop When Full (Fill-then-stop) <i>*Not available with sample rates faster than eight seconds</i>
<b>Operating Limits:</b>	-40 to 70°C (-40 to 158°F) and 0 to 95% RH (non-condensing)
<b>PC Requirements:</b>	IBM PC or 100% compatible with at least one free serial port, 2 MB of RAM memory, and 2 MB of hard disk space
<b>Software Requirements:</b>	TrendReader® 2 (compatible with Windows® 2000, and XP)

<b>Memory Size:</b>	128KB (capable of storing up to 87,000 readings)
<b>Sampling Rates:</b>	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)
<b>Number of Channels:</b>	Four (one internal thermistor channel for ambient temperature and three external channels for use with RTD* temperature probes) <i>*Any RTD with a Temperature Coefficient of Resistance (TCR) of 0.00385 can be used</i>

### SENSOR SPECIFICATIONS

**RTD Channels** - The following specifications are for:

- 4-Wire Platinum 100 Ohm @ 0° C & TCR = 0.00385
- 4-Wire Platinum 1000 Ohm @ 0° C & TCR = 0.00385

#### Temperature

Range:	-230 to 300°C (-382 to 572°F)
Accuracy:	+/- 0.3°C (+/- 0.54°F) + resolution or +/- 0.06% full scale (of logger)
Resolution:	+/- 0.14°C (+/- 0.25°F)

#### Resistance (100 Ohm)

Range:	5 to 210 Ohm
Accuracy:	+/- 0.13 Ohm, +/- 0.06 % full scale
Resolution:	+/- 0.05 Ohm

#### Resistance (1000 Ohm)

Range:	50 to 2100 Ohm
Accuracy:	+/- 1.3 Ohm, +/- 0.06% full scale
Resolution:	+/- 0.5 Ohm

Logger is Temperature compensated by internal temperature sensor for the range of -20 to 80°C (-4 to 176°F)

The SmartReader Plus 10 is a powerful and accurate RTD temperature logger designed for easy monitoring and recording of temperature. Any RTD probe or sensor with a TCR of 0.00385 can be used with this logger.



### WARRANTY

Internal Battery:	10 Years
Data Logger:	3 Years

### APPLICATIONS

Food process verification,  
pharmaceutical storage monitoring,  
transportation of temperature-sensitive goods, etc.

<b>Model#:</b>	<b>Cat#:</b>
SRP-010-128K	01-0132