

# SmartReader Plus 5

## Product Specifications

**Type:** Three-Channel Temperature Thermocouple

### 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® Standard (compatible with Windows® 3.1, '95, '98, 2000, Me, NT and XP)
<b>Memory Size:</b>	32KB (capable of storing up to 21,500 readings) <i>(2 models available)</i>
<b>Sampling Rates:</b>	128KB (capable of storing up to 87,000 readings) 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>	Three (one internal thermistor for cold-junction compensation and two for thermocouple inputs)

### 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:	0.03°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)	

#### Thermocouple Wire

	Range	Resolution
J type	-50 to 600°C (-55 to 1100°F)	0.30°C (0.55°F)
K type	-100 to 1150°C (-145 to 2100°F)	0.50°C (0.90°F)
S type	0 to 1450°C (32 to 2642°F)	1.0°C (1.8°F)
T type	-200 to 400°C (-325 to 750°F)	0.40°C (0.75°F)
E type	-50 to 680°C (-58 to 1250°F)	0.24°C (0.44°F)

#### Accuracy

+/- 0.5% of range + resolution

The SmartReader Plus 5 data logger is ideal for those applications that require monitoring extremely high temperatures or monitoring temperature over a wide range. The logger has one internal channel for measuring ambient temperature and two external channels for use with ACR thermocouple wire or any J, K, S, T or E type thermocouple wire.



### WARRANTY

Internal Battery:	10 Years
Data Logger:	3 Years

### APPLICATIONS

Monitoring performance of gas-fired heating equipment, verifying concrete curing temperatures, process verification, etc.

#### Model#:

SRP-005  
SRP-005-128K

#### Cat#:

01-0012  
01-0121