

SmartReader Plus 5

Product Specifications

Type: Three-Channel Temperature Thermocouple

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® Standard 2 (compatible with Windows® 2000, and XP)

Memory Size:	32KB (capable of storing up to 21,500 readings)
(2 models available)	128KB (capable of storing up to 87,000 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:	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#:	Cat#:
SRP-005	01-0012
SRP-005-128K	01-0121