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:	+/- 0.2ºC over the range of 0 to 70ºC (+/- 0.3ºF over the range of 32 to 158ºF)
Resolution:	0.03ºC (0.05ºF) @ 25ºC; better than 0.07ºC (0.12ºF) between -25 and 70˚C (-13º and 158ºF); better than 0.13ºC (0.23˚F) between -40 and -25˚C (-40ºF and -13ºF)

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