SmartReader 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:	8-bit (1 part in 256)
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)
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 32,767 readings)*
Sampling Rates:	User selectable rates from 8 seconds to 5 days in 4-second increments
Number of Channels:	Three *(one internal thermistor for cold-junction compensation and two external channels for narrow range and wide range thermocouples)*

SENSOR SPECIFICATIONS

Temperature Sensor (internal)

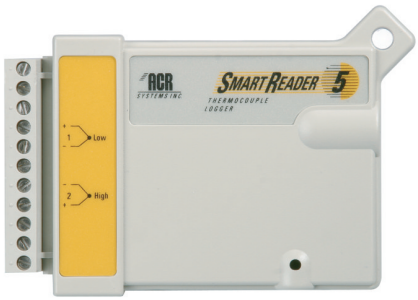
Type:	NTC Thermistor - 10,000 Ohm @ 25˚C (77˚F)
Range:	-40 to 70˚C (-40 to 158˚F)
Accuracy:	+/- 0.2ºC over the range of 0 to 70ºC (+/- 0.3ºF over the range of 32 to 158ºF)
Resolution:	0.4ºC (0.7ºF) @ 25ºC; better than 1ºC (1.8ºF) between -25 and 70˚C (-13º and 158ºF); better than 2.0ºC (3.6˚F) between -40 and -25˚C (-40ºF and -13ºF)

Thermocouple Wire		Range	Resolution
J type	Channel #2 (Wide)	-50 to 600˚C (-55 to 1100˚F)	5˚C (9˚F)
	Channel #1 (Narrow)	-20 to 190˚C (0 to 370˚F)	1.4˚C (2.5˚F)
K type	Channel #2 (Wide)	-100 to 900˚C (-145 to 1650˚F)	6.7˚C (12˚F)
	Channel #1 (Narrow)	-25 to 230˚C (-10 to 440˚F)	1.7˚C (3˚F)
S type	Channel #2 (Wide)	0 to 1760˚C (32 to 3200˚F)	23˚C (41.5˚F)
	Channel #1 (Narrow)	0 to 960˚C (32 to 1750˚F)	7˚C (12.6˚F)
T type	Channel #2 (Wide)	-200 to 400˚C (-325 to 750˚F)	6.7˚C (12˚F)
	Channel #1 (Narrow)	-35 to 200˚C (-30 to 390˚F)	1.7˚C (3˚F)

Accuracy

+/- 1% of range + resolution

The SmartReader 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 or T 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#:**
SR-005	01-0028