SmartReader 1

Two-Channel Temperature Data Logger

The SmartReader 1 is a simple and easy-to-use data logger for monitoring and recording temperature. Quick and easy to set up, it works right out of the box, logging temperature readings from its internal, precision-calibrated temperature sensor. For added versatility, use the extra channel to record temperature (with an ACR thermistor probe), resistance or switch status.

APPLICATIONS

Food process verification, pharmaceutical storage, transportation of temperature-sensitive goods, equipment run time, HVAC system testing and balancing, etc.

GENERAL SPECIFICATIONS

Size:	107mm x 74mm x 22mm (4.2" x 2.9" x 0.9")
Weight:	110 g (3.75 oz)
Case Material:	Noryl® Plastic
Battery:	3.6 volt Lithium, 1 Amp-Hour
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°C to 70°C (-40°F to 158°F) and 0 to 95% RH (non-condensing)
PC Requirements:	Windows PC with at least one free USB or serial port (depending on interface)
Software Requirements:	TrendReader® 2 (Compatible with Windows XP, Vista, Windows 7 and Windows 8 [32 bit & 64 bit])
Memory Size:	32 KB (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:	Two (one for the internal temperature sensor and one for remote sensing of temperature resistance, or switch status)

SENSOR SPECIFICATIONS

Internal Temperature Sensor

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

ACR ET Series Thermistor Probes*	Range	Cat#
General Purpose Temperature Probe	-35°C to 95°C (-30°F to 200°F)	35-0001
Low Temperature Probe	-60°C to 55°C (-75°F to 130°F)	35-0028
Low Temperature Penetration Probe	-60°C to 55°C (-75°F to 130°F)	35-0000
High Temperature Probe	10°C to 170°C (50°F to 335°F)	35-0002
Oven Temperature Probe	70°C to 255°C (155°F to 490°F)	35-0003
Skin Surface Temperature Probe	20°C to 40°C (68°F to 104°F)	35-0020
Pipe Surface Temperature Probe	-35°C to 95°C (-30°F to 200°F)	35-0025
Waterproof Temperature Probe	-40°C to 105°C (-40°F to 221°F)	35-0035

*For remote temperature measurements (external channel)

ORDERING INFORMATION

Item	Cat#:
SR-001-32K	01-0024

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ISO 9001 Certified
ISO9000\SPECIFICATIONS\SR1.pdf

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CE

ACR 24/7/365 10yr Battery