SmartReader 2

Four-Channel Temperature and Relative Humidity Data Logger

The SmartReader 2 data logger has a built-in temperature sensor, a plug-in relative humidity sensor and is equipped with two extra channels to connect either ACR's temperature/RH probe or thermistor probes. The RH plug-in sensor is field replaceable so you can always be assured of continuous recording. The SmartReader 2 is an excellent choice for monitoring air quality conditions.

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:	Four (one for the internal temperature sensor and one for the internal RH sensor; The remaining two channels are reserved for an optional remote EH-020A probe [temperature and RH probe])

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^{o}C over the range of 0°C to 70°C (± 0.3^{o}F over the range of 32°F to 158°F)
Resolution:	0.4^{o}C (0.7^{o}F) @ 25°C; better than 1°C (1.8^{o}F) between -25°C and 70°C (-13°F and 158°F); better than 2.0^{o}C (3.6^{o}F) between -40°C and -25°C (-40°F and -13°F)

Internal Relative Humidity Sensor

Type:	Capacitive thin polymer film
Range:	0 to 95% RH (non-condensing)
Accuracy:	±4% RH from 10 to 90% RH (-20 to 40°C [-4 to 104°F])
Resolution:	Better than 0.4% RH between 25 and 60% RH @ 25°C (77°F)
Chemical Tolerances:	Organic solvents typically 1,000 to 10,000 ppm
	Corrosive agents (strong acids S02, H2S04, C12, HC1, H2S etc.) typically 1 to 10 ppm
	Weak acids typically 100 to 1,000 ppm
	Bases typically 10,000 to 100,000 ppm

ORDERING INFORMATION

Item	Cat#:
SR-002-32K	01-0025

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ISO 9001 Certified
ISO9000\SPECIFICATIONS\SR2.pdf

CE

Rev:12 - 10/29/12

ACR 24/7/365 10yr Battery