SmartReader Plus 2

Four-Channel Temperature and Relative Humidity Data Logger

The SmartReader Plus 2 is a self-contained data logger that can monitor and record temperature and relative humidity right out of the box. The on-board RH sensor is temperature compensated, permitting reliable, worry free RH readings. For remote sensing of temperature and RH, simply attach ACR's temperature/RH probe, or for remote temperature sensing, attach up to two thermistor probes.

APPLICATIONS

Monitoring the transportation or storage conditions of perishable and/or pharmaceutical goods, tracking "air quality", 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:	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°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:	128 KB (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:	Four (one for the internal temperature sensor, one for the internal RH sensor and two for remote measurements of temperature and RH [with ACR's EH-020A

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 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°C and 70°C (-13°F and 158°F); better than 0.13°C (0.23°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:	±3% RH from 10 to 90% RH (-20°C to 40°C [-4°F to 104°F])
Resolution:	Better than 0.04% 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#:
SRP-002-128K (SmartReader Plus 2)	01-0113