

# SmartReader 2

## Product Specifications

**Type:** Four-Channel Temperature & Relative Humidity

### GENERAL SPECIFICATIONS

<b>Size:</b>	107 mm x 74 mm x 22 mm (4.2" x 2.9" x 0.9")
<b>Weight:</b>	110 grams (3.75 ounces)
<b>Case Material:</b>	Noryl® plastic
<b>Battery:</b>	3.6 volt Lithium, 1 Amp-Hour
<b>Resolution:</b>	8-bit (1 part in 256)
<b>Mounting:</b>	Magnetic backing or locking eyelet
<b>Clock Accuracy:</b>	+/- 2 seconds per day
<b>Sampling Methods:</b>	Continuous (First-in, First-out), Stop When Full (Fill-then-stop)
<b>Operating Limits:</b>	-40 to 70°C (-40 to 158°F) and 0 to 95% RH (non-condensing)
<b>PC Requirements:</b>	IBM PC or 100% compatible with at least one free serial port, 2 MB of RAM memory, and 2 MB of hard disk space
<b>Software Requirements:</b>	TrendReader® Standard (compatible with Windows® 3.1, 95, 98, Me, NT, 2000 and XP)

<b>Memory Size:</b>	32KB (capable of storing up to 32,767 readings)
<b>Sampling Rates:</b>	User selectable rates from 8 seconds to 5 days in 4-second increments
<b>Number of Channels:</b>	Four (one for the internal temperature sensor and one for the internal RH sensor and the remaining two channels are reserved for an optional remote EH-020A probe [temperature and RH probe])

### 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:	+/- 0.2°C over the range of 0 to 70°C (+/- 0.3°F over the range of 32 to 158°F)
Resolution:	0.4°C (0.7°F) @ 25°C; better than 1°C (1.8°F) between -25 and 70°C (-13° and 158°F); better than 2.0°C (3.6°F) between -40 and -25°C (-40°F and -13°F)

#### Relative Humidity Sensor (internal):

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)

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 excellent for monitoring "air quality" conditions.



### WARRANTY

<b>Internal Battery:</b>	<b>10 Years</b>
<b>Data Logger:</b>	<b>3 Years</b>

### APPLICATIONS

Monitoring the transportation or storage conditions of perishable and/or pharmaceutical goods, tracking "air quality", HVAC system testing and balancing, etc.

<b>Model#:</b>	<b>Cat#:</b>
SR-002	01-0025