

# SmartReader Plus 2

## Product Specifications

**Type:** Four-Channel Temperature and 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
<b>Resolution:</b>	12-bit (1 part in 4096)
<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) *Not available with sample rates faster than eight seconds
<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 2 (compatible with Windows® 2000 and XP)

<b>Memory Size:</b>	128KB (capable of storing up to 87,000 readings)
<b>Sampling Rates:</b>	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)
<b>Number of Channels:</b>	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 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:	0.03°C (0.05°F) @ 25°C; better than 0.07°C (0.12°F) between -25 and 70°C (-13° and 158°F); better than 0.13°C (0.23°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:	+/- 3% RH from 10 to 90% RH (-20 to 40°C [-4 to 104°F])
Resolution:	Better than 0.04% RH between 25 and 60% RH @ 25°C (77°F)

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.



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

**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>
SRP-002-128K	01-0113