

Temperature and Relative Humidity

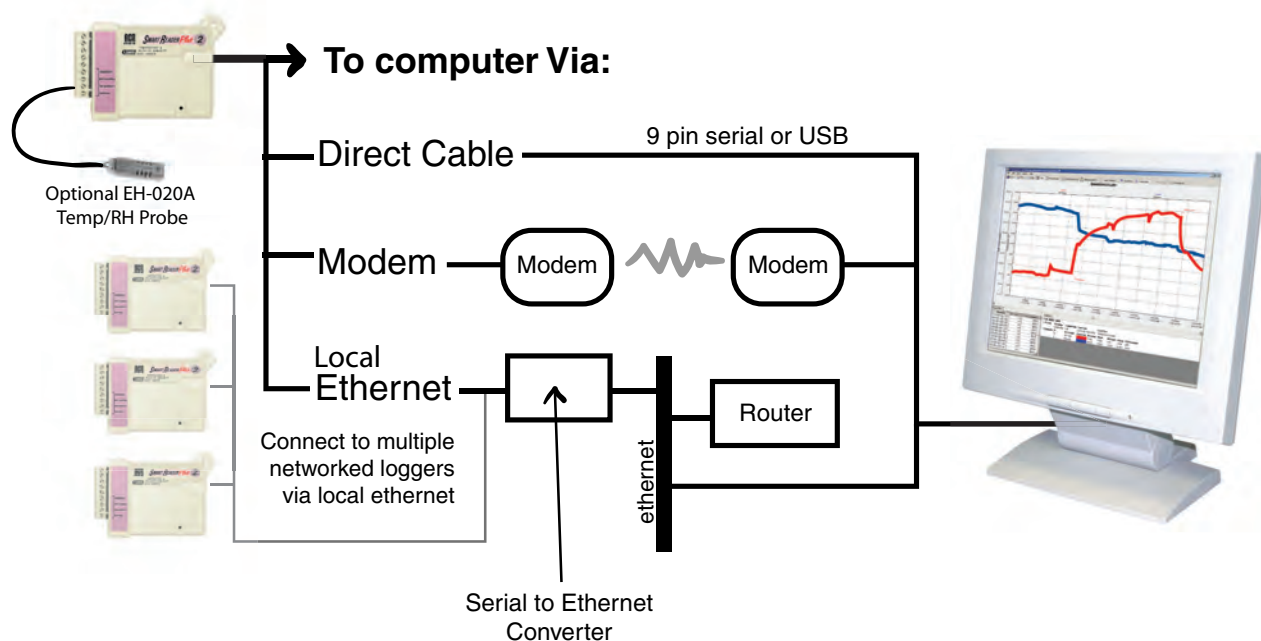
Monitoring heating and cooling in different locations



The ACR SmartReader Plus 2 Data Logger collects valuable information on heating, cooling and relative humidity. Unbalanced temperatures and humidity can put stress on air conditioning systems causing them to malfunction and use more energy than required. The SmartReader Plus2 Data Logger is an easy to use 24/7 device that monitors HVAC systems performance to keep energy consumption and costs under control. Collected information can be easily uploaded to a PC and analyzed using the ACR TrendReader 2 software.

Features:

- 10 year battery life
- Accessible remotely via modem or intranet connectivity
- N.I.S.T. traceable measurements
- Calibration certificate available
- Optional remote temperature and humidity sensor EH-020A



SmartReader Plus 2

Product Specifications

Type: Four-Channel Temperature and Relative Humidity

GENERAL SPECIFICATIONS

Size:	107 mm x 74 mm x 22 mm (4.2" x 2.9" x 0.9")
Weight:	110 grams (3.75 ounces)
Case Material:	Noryl® plastic
Battery:	3.6 volt Lithium
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) <i>*Not available with sample rates faster than eight seconds</i>
Operating Limits:	-40 to 70°C (-40 to 158°F) and 0 to 95% RH (non-condensing)
PC Requirements:	IBM PC or 100% compatible with at least one free serial port, 2 MB of RAM memory, and 2 MB of hard disk space
Software Requirements:	TrendReader® 2 (compatible with Windows® 2000 and XP)

Memory Size:	128KB (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 probe])

SENSOR SPECIFICATIONS

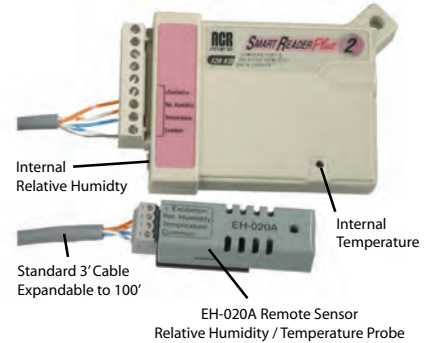
Temperature Sensor (internal)

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.



WARRANTY

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.

Model#:	Cat#:
SRP-002-128K	01-0113