

# SmartReader 9

## Product Specifications

**Type:** Three-Channel Pulse

### 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>	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, 2000, Me, NT 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>	Three (one for internal temperature sensor and two external inputs for pulse signals or dry switch contact closures)

### SENSOR SPECIFICATIONS

#### Temperature Sensor (internal)

<b>Type:</b>	NTC Thermistor - 10,000 Ohm @ 25°C (77°F)
<b>Range:</b>	-40 to 70°C (-40 to 158°F)
<b>Accuracy:</b>	+/- 0.2°C over the range of 0 to 70°C (+/- 0.3°F over the range of 32 to 158°F)
<b>Resolution:</b>	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)

#### External Inputs

<b>Switch Contact Type:</b>	Uncommitted switch or relay contacts
<b>Logic Input Type:</b>	Active logic signals
<b>Ranges:</b>	32 pulses/second 64 pulses/second 128 pulses/second
<b>Minimum Pulse Width:</b>	4 milliseconds
<b>Input Voltage:</b>	Low = 0 to 0.5 volts DC High = 4.5 to 24 volts DC
<b>Input Impedance:</b>	750 K Ohm

The SmartReader 9 is a versatile data logger designed for counting and recording digital pulses or switch contact closures. It has two input channels, each with three selectable frequency ranges. Data can be displayed in custom engineering units using the simple equation editor of ACR's TrendReader® Standard software. It also has one internal channel for recording ambient temperature.



### WARRANTY

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

### APPLICATIONS

Food process verification, pharmaceutical storage, transportation of temperature-sensitive goods, equipment run-time, HVAC system testing and balancing, etc.

<b>Model#:</b>	<b>Cat#:</b>
SR-005	01-0028