



## SmartReader 9

### Three-Channel Pulse Data Logger

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® 2 Software. It also has one internal channel for recording ambient temperature.

#### APPLICATIONS

Food process verification, pharmaceutical and/or laboratory storage, transportation of temperature-sensitive goods, equipment run time, 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
Resolution:	8-bit (1 part in 256)
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)
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 SP3, Windows Vista SP2 & Windows 7 (32 bit & 64 bit)
Memory Size:	32 KB (capable of storing up to 32,767 readings)
Sampling Rates:	User selectable rates from 8 seconds to 5 days in 4-second increments
Number of Channels:	Three (One for internal temperature sensor and two external inputs for pulse signals or dry switch contact closures) NOTE: For "switch status" logging, see SmartReader Plus 8



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

##### External Inputs

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

#### ORDERING INFORMATION

<b>Item</b>	<b>Cat#:</b>
SR-009-32K	01-0037

ACR Systems Inc  
 Toll-Free: 1.800.663.7845  
 Tel: 1.604.591.1128  
 sales@acrsystems.com

[www.acrsystems.com](http://www.acrsystems.com)

ISO 9001 Certified

ISO9000\SPECIFICATIONS\SR9.pdf



Rev:11 - 28/04/11

