ACR SYSTEMS INC.

Product Specifications

PROVEN DATA LOGGING SOLUTIONS

SmartReader Plus 1
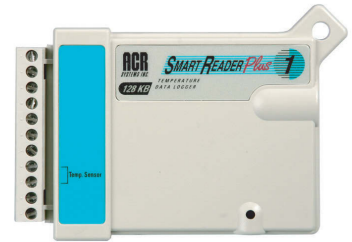
Two-Channel Temperature Data Logger

The SmartReader Plus 1 is a powerful and accurate data logger designed for easy monitoring and recording of temperature. With one internal ambient temperature channel and an input for an optional remote temperature or contact closure sensor, the SmartReader Plus 1 is ideal for quick and accurate temperature recordings in a variety of applications.

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:	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)
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, Vista, Windows 7 and Windows 8 [32 bit & 64 bit])
Memory Size:	32 KB (capable of storing up to 21,500 readings)
(3 models available)	128 KB (capable of storing up to 87,000 readings)
	1.5 MB (capable of storing up to 1,048,000 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:	Two (One for the internal temperature sensor and one for remote sensing of temperature, resistance, or switch status.)

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^{o}C over the range of 0°C to 70°C (± 0.3^{o}F over the range of 32°F to 158°F)
Resolution:	0.03^{o}C (0.05^{o}F) @ 25°C; better than 0.07^{o}C (0.12^{o}F) between -25°C and 70°C (-13°F and 158°F); better than 0.13^{o}C (0.23^{o}F) between -40°C and -25°C (-40°F and -13°F)

ACR ET Series Thermistor Probes*	Range	Cat#
General Purpose Temperature Probe	-35°C to 95°C (-30°F to 200°F)	35-0001
Low Temperature Probe	-60°C to 55°C (-75°F to 130°F)	35-0028
Low Temperature Penetration Probe	-60°C to 55°C (-75°F to 130°F)	35-0000
High Temperature Probe	10°C to 170°C (50°F to 335°F)	35-0002
Oven Temperature Probe	70°C to 255°C (155°F to 490°F)	35-0003
Skin Surface Temperature Probe	20°C to 40°C (68°F to 104°F)	35-0020
Pipe Surface Temperature Probe	-35°C to 95°C (-30°F to 200°F)	35-0025
Waterproof Temperature Probe	-40°C to 105°C (-40°F to 221°F)	35-0035

ORDERING INFORMATION

Item	Cat#:	Item	Cat#:
SRP-001-32 KB	01-0008	SRP-001-1.5 MB	01-0141
SRP-001-128 KB	01-0112		

ACR 24/7/365 **10yr** Battery

CE