SmartReader Plus 4 LPD

Product Specifications

Type: *Two-Channel Low Pressure Differential & Temperature*

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) **Not available with sample rates faster than eight seconds*
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® Standard 2 *(compatible with Windows® 2000, and XP)*
Memory Size:	32KB *(capable of storing up to 21,500 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 the internal pressure sensor)*

SENSOR SPECIFICATIONS

Temperature Sensor (internal)	NTC Thermistor - 10,000 Ohm @ 25˚C (77˚F)
Range:	-40 to 70˚C (-40 to 158˚F)
Accuracy:	+/- 0.2ºC over the range of 0 to 70ºC (+/- 0.3ºF over the range of 32 to 158ºF)
Resolution:	0.03ºC (0.05ºF) @ 25ºC; better than 0.07ºC (0.12ºF) between -25 and 70˚C (-13º and 158ºF); better than 0.13ºC (0.23˚F) between -40 and -25˚C (-40ºF and -13ºF)

Pressure Sensor

Type:	Silicon piezoresistive strain gauge	
Media:	Non-corrosive gases and dry air	
Maximum Pressure:	Four times full scale	
Range:	Accuracy:	Resolution:
+/- 0.5" WC (+/- 120 Pa)	+/- 0.05" WC (+/- 2.5 Pa)	< 0.001" WC (0.25 Pa)
+/- 1" of WC (+/- 250 Pa)	+/- 0.05" WC (+/- 2.5 Pa)	< 0.001" WC (0.25 Pa)
+/- 2" of WC (+/- 500 Pa)	+/- 0.05" WC (+/- 2.5 Pa)	< 0.001" WC (0.25 Pa)
+/- 5" of WC (+/- 1.2 kPa)	+/- 0.1" WC (+/- 12.5 Pa)	< 0.01" WC (2.5 Pa)
+/- 10" of WC (+/- 2.5 kPa)	+/- 0.1" WC (+/- 12.5 Pa)	< 0.01" WC (2.5 Pa)

The SmartReader Plus 4 LPD (Low Pressure Differential) logger is a two channel logger with internal pressure and temperature sensors. The low pressure sensor is built into the logger and is capable of measuring low gauge and differential pressure.



WARRANTY

Internal Battery:	**10 Years**
Data Logger:	**3 Years**

APPLICATIONS

Commissioning HVAC systems, monitoring air duct velocity, testing and balancing HVAC systems, monitoring wind speed, verifying room pressure in critical care facilities, etc.

Model#:	Cat#:
SRP-004-LPD-0.5	01-0310
SRP-004-LPD-1	01-0311
SRP-004-LPD-2	01-0312
SRP-004-LPD-5	01-0313
SRP-004-LPD-10	01-0314