



## SmartReader Plus 4 LPD

### Two-Channel Low Pressure Differential and Temperature Data Logger

The SmartReader Plus 4 LPD (Low Pressure Differential) data 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.

#### APPLICATIONS

Commissioning HVAC systems, monitoring air duct velocity, testing and balancing HVAC systems, monitoring wind speed, verifying positive pressure in critical facilities such as medical and manufacturing, 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) <i>*Not available with sample rates faster than eight seconds</i>
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)
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

##### 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:	0.03°C (0.05°F) @ 25°C; better than 0.07°C (0.12°F) between -25°C and 70°C (-13°F and 158°F); better than 0.13°C (0.23°F) between -40°C and -25°C (-40°F and -13°F)

##### Pressure Sensor

Type:	Silicon piezoresistive strain gauge
Media:	Non-corrosive gases and dry air
Maximum Pressure:	Four times full scale
Compensated Thermal Accuracy 0°C-70°C (32°F-158°F)	±0.01 inWC (±2.5Pa)
Long Term Stability	±0.01 inWC (±2.5Pa)

##### Range:

±0.5 inWC (±120 Pa)  
±2 inWC (±500 Pa)  
±10 inWC (±2.5 kPa)

##### Accuracy:

±0.05 inWC (±12.5 Pa)\*  
±0.05 inWC (±12.5 Pa)\*  
±0.1 inWC (±25 Pa)

##### Resolution:

<0.001 inWC (0.25 Pa)  
<0.001 inWC (0.25 Pa)  
<0.01 inWC (2.5 Pa)

#### ORDERING INFORMATION

<b>Item:</b>	<b>Cat#:</b>	<b>Item:</b>	<b>Cat#:</b>
SRP-004-LPD-0.5-32K	01-0310	SRP-004-LPD-5.0-32K	01-0313
SRP-004-LPD-1.0-32K	01-0311	SRP-004-LPD-10.0-32K	01-0314
SRP-004-LPD-2.0-32K	01-0312		

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