

# 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:** +/- 0.2°C over the range of 0 to 70°C (+/- 0.3°F over the range of 32 to 158°F)  
**Resolution:** 0.03°C (0.05°F) @ 25°C; better than 0.07°C (0.12°F) between -25 and 70°C (-13° and 158°F); better than 0.13°C (0.23°F) between -40 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

<b>Range:</b>	<b>Accuracy:</b>	<b>Resolution:</b>
+/- 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