

Multi-channel, Configurable, 12 Bit Data Loggers



2 Relative Humidity

3 3 Phase Current

4 Pressure

3 Channel Thermocouple

8 Channel Thermocouple

7 Process Signal

8 Channel Temperature

9 Pulse

70 RTD Temperature

Features

- Multiple channels
- Accessible remotely by modem
- Multiple loggers can be linked to form a network
- 32 K, 128 K or 1.5 MB memory
- 10-year battery life



Product Specifications

SmartReader Plus Data Loggers share many common features. For further specifications on individual models, refer to the catagorized data sheets starting on page 14.

General:

Size: 107 x 74 x 22 mm (4.2" x 2.9" x 0.9").

Weight: 110 grams (3.75 ounces).

Case Material: Noryl® Plastic.

Operating Limits: -40°C to 70°C (-40°F to 158°F) and 0

to 95% Relative Humidity (non-condensing).

Clock Accuracy: +/-2 seconds per day.

Battery: 3.6 volt Lithium, 1 Amp-Hour.

Memory Sizes: 32 K (21,500 readings).

128 K (87,000 readings).

1.5 MB (1,000,000 readings). See specific

models for availability.

Sampling Methods: 1. Continuous (First-in, First-out — not

available with sample rates faster than 8

seconds.)

2. Stop when full (Fill-then-stop).

Sampling Rates: User selectable rates from 25 per second

to one reading every 8 hours. (BP-101 battery pack or PS-201 Power Supply required for sample rates faster than 8 seconds. See

Accessories section for details).

Resolution: 12 bit (1 part in 4096).

Power Consumption: 5 to 10 microamps (continuous).

Battery Life: 10-years warrantied (under normal use).

Factory replaceable.

PC Requirements: IBM PC or 100% compatible running MS

Windows 3.1, '95, '98, or NT, with a least 2 MB RAM, 2 MB of hard drive disk space and

one free serial port.

Product Approvals: Meets Part 15 for Digital Devices of the Code of

Federal Regulations of the Federal Communications Commission (FCC). Meets Class A radiated and conducted emission requirements of Section 2 of the Radio Interference Regulations of Communications Canada. IEC801-2, 3, 4 and EN55011 covering ESD, RFI Immunity, EFT/Burst and Radiated Emissions respectively for

the Commission of the European Communities (CE).

Resistance to X-Rays: Tested for protection against a 160kV dose

@ 5mA for 30 seconds (150mA-sec) @ 38 inches F.F.D. (about 100 times that of an airport X-Ray machine). Tested for protection against Gamma Ray (equivalent to 0.137-1.38 mega volts) IR 192 - 28 curies @ 30 second exposure source to object distance 5".

Internal Temperature Sensor (common on all models, except model 9):

Type: Negative Temperature Coefficient Thermistor.

10,000 ohms @ 25°C (77°F).

Tolerance (sensor only): +/-0.2°C, over the range of 0 to 70°C

(+/-0.3°F, over the range of 32 to 158°F).

Range: -40 to 70°C (-40 to 158°F).

Resolution: $0.03^{\circ}\text{C} (0.05^{\circ}\text{F}) \text{ at } 25^{\circ}\text{C} (77^{\circ}\text{F})$. Better than

0.07°C (0.12°F) between -25°C (-13°F) and 70°C (158°F). Better than 0.13°C (0.23°F) between -40°C (-40°F) and -25°C (-13°F).