

# SP1000-SERIES TECHNICAL INFORMATION

**Electrical:** - Voltage: 12 to 55 V DC

**Monitor Display:**

- 2 lines x 16 characters LCD (super twist)
- LED backlight
- Large character size (4.84 x 8.06 mm)
- Temperature range 0 °C to 50 °C

**Environmental:**

- Operating temperature
- (-10 °C to +50 °C)
  - Humidity up to 90%, no condensation

**Enclosure:**

- Water and dust resistant
- Machined aluminum
- Universal mounting bracket

**Physical:**

- Length: 242 mm
- Width: 151 mm
- Depth: 44 mm
- Weight: 1100 g

**Alphanumeric Keyboard:**

- Enlarged 16 key with tactile feedback
- Audible key signal during data entry
- Sealed keyboard, watertight
- Functions overlay

**Status Indicators:**

- System on
- Overload (Lift 3)
- Lift 2
- Lift 1
- Motion
- Transmitting

**Scrolling Features:** Allows overall status and session statistics to be displayed

**Automatic Time-Out Function:** Automatic recovery to user mode after 7 seconds if operator does not complete input instructions

**Real Time Clock:**

- Continuous operation
- Hours / Minutes
- Year / Month / Day

**EPROM:** Up to 64 K bytes for application programs

**RAM:** Up to 128 K bytes for program and data storage

**CPU:** Intel 8032

**Monitor Interface:**

- Serial interface for printer
- Serial interface for IR, RF or link to PC

**Communication**

- Automatic download of finished sessions
- Up to 9600 baud ( asynchronous )

**Monitor calibration:** External calibration via keypad with clear LCD instructions in English ( No codes )

**Calibration Security:** Only a secure ID# to initiate the calibration mode

**Standard outside thread G 1/4 male, sealed at back DIN3852/E with pressure tip orifice**

Interference Stability	Test Standard	Effects
Electrostatic discharge (ESD)	EN 61000-4-2 15 kV air discharge, 6kV contact discharge	No effect
High- frequency electromagnetic radiation (HF)	EN 61000-4-6 200mV, 80....1000Mz	No effect
Conducted HF interferences	EN 61000-4-6 30V. 0,15...80 MHz	No effect
Fast transients (burst)	EN 61000-4-4 4kV	No effect
Surge	EN-6100-4-5 Line-Line, Line-Case 500V, 12Ohm, 9µF	No failure
Magnetic fields	EN 6100-4-8 30A/m, 50 Hz	No effect
Insulation voltage	500 V DC ( optional 1000 V DC )	No effect
Interference emit	Test standard	Effects
Conducted interference Radiation from housing	EN 55022 0,15... 30Mhz30... 1000Mhz, 10 meters	No emission

**Pressure Transducer :**

Standard pressure port connection: G 1/4 , male thread standard  
Pressure transducer adapter G1/4 to 1/4"-18 NPT male included in kit  
Optional pressure port : M 12x 1,5  
Accuracy: +/- 0.3% of full scale  
Repeatability: +/- 0.05% of full scale

Hysteresis: +/- 0.1% of full scale  
Stability: +/- 0.2% full scale/yr

**Temperature Information:**

Compensation: 32° F to 175° F  
Drift: +/- 0.03% /50 ° F  
Medium: -22° F to 212° F  
Ambient: 14° F to 175° F  
Storage: -40° F to 212° F

**Materials of Construction:** Casing: Stainless steel 1.4305 (AISI 303)

**Weight:** 95 grams

**Shock Sensitivity:** <+/- 0.05% full scale @ 100g for 20 ms

**Vibration Sensitivity:** <+/- 0.05% full scale @ 35g & 5-2000Hz

**Response Time:** < 0.1 ms, 10-90% FS

**Frequency Limit:** 150 Hz

**Proof Pressure:** 2, 5 x range

**Burst Pressure:** 2, 5 x range

**Output:** 3 wires 0 - 2, 5 V DC

**Protection:** Environmental: IP67

**Fault:**

Reverse polarity  
Over voltage  
Short circuit