PT2X-BV Smart Sensor

BAROMETRIC/VACUUM SENSOR WITH DATA LOGGING







APPLICATIONS

Barometrically compensate absolute sensors for level measurement

Measure vacuum pressure during vapor extraction pilot testing

Supplement aquifer test data in leaky or confined conditions

Features

- Measures & records barometric pressure/vacuum and temperature
- Low power
- Modbus® RTU (RS485) and SDI-12
- ±0.05% FSO typical accuracy
- Thermally compensated
- Small diameter 0.75" (1.9 cm)
- 520,000 records in non-volatile memory
- Barometric compensation utility for use with absolute sensors
- Free, easy-to-use, newly upgraded Aqua4Plus 2.0 software

The **Seametrics PT2X-BV** is a special version of the PT2X designed to measure barometric and vacuum pressure in reference to absolute pressure, along with temperature and time. It will measure pressure/vacuum from 600 to 1100 millibars.

Pressure measurement is accomplished utilizing an extremely rugged and stable 15 PSIA piezo-electric media-isolated pressure element combined with a 16-bit analog-to-digital converter. This provides extremely accurate and stable pressure input into the microprocessor on the circuit board that measures the pressure, stores the data in non-volatile memory, and communicates the information via a serial communication link (RS485) to the host computer.

Temperature measurement is accomplished utilizing a temperature sensor chip.

The PT2X-BV is available in two enclosures – either an ABS weather-proof box or a stainless steel tube. The tube version is available with either a solid end cone or an NPT end cone for connecting to piping.

The PT2X-BV can be networked with other Seametrics Smart Sensors and controlled directly from a single computer.

While most will use the PT2X-BV with our Aqua4Plus 2.0 software, it is by no means limited to that software. You can use your own Modbus® RTU or SDI-12 software or logging equipment to read measurements, thus tying into your existing telemetry and control systems.

Contact Your Supplier



253.872.0284 seametrics.com

PT2X-BV Smart Sensor BAROMETRIC VACUUM SENSOR WITH DATA LOGGING



Specifications*

Box Enclosure	Body Material	ABS - IP66/67		
	Dimensions	Box: 4.3" x 3.1" x 2.5" (10.9 x 7.9 x 6.4 cm) Box and connectors: 4.3" x 3.6" x 2.5" (10.9 x 9.1 x 6.4 cm)		
	Wire Seal Material	Fluoropolymer and Buna N		
Tube & Cable	Body Material	Acetal & 316 stainless or titanium		
	Dimensions	Cabled: 12.18" x 0.75" diameter (30.9 cm x 1.9 cm) Cableless: 11.93" x 0.75" diameter (30.3 cm x 1.9 cm)		
	Wire Seal Material	Fluoropolymer and PTFE		
	Weight	0.8 lb. (0.4 kg)		
	Cable	Submersible: polyurethane, polyethylene, or ETFE (4 lb./100 ft., 1.8 kg/30 m)		
	Environmental	IP68, NEMA 6P		
	Field Connector	Standard		
Temperature	Operating Range	Recommended: -15° to 55°C (5° to 131°F)		
	Storage Range	Without batteries: -40° to 80°C (-40° to 176°F)		
Power	Internal Battery	Two lithium 'AA' batteries - Expected battery life: 18 months at 15 min. polling interval (may vary do to environmental factors)		
	Auxiliary	12 Vdc - Nominal, 9-15 Vdc - range		
Communication	Modbus®	RS485 Modbus® RTU, output=32bit IEEE floating point		
	SDI-12	SDI-12 (ver. 1.3) - ASCII		
Logging	Memory	4MB - 520,000 records		
	Logging Types	Variable, user-defined, profiled		
	Logging Rates	8x/sec maximum, no minimum		
	Baud Rates	9600, 19200, 38400		
	Software	Complimentary Aqua4Plus 2.0		
	Networking	32 available addresses per junction (Address range: 1 to 255)		
	File Formats	.a4d and .csv		
Output Channels		Temperature	Depth/Level	
	Element	Digital IC on board	Silicon strain gauge transducer, 316 stainless or Hastelloy	
	Accuracy	±0.5°C — 0° to 55°C (32° to 131°F) ±2.0°C — below 0°C (32°F)	±0.05% FSO (typical, static) ±0.1% FSO (maximum, static) (B.F.S.L. 20°C)	
	Resolution	0.1°C	0.0034% FS (typical)	
	Units	Celsius, Fahrenheit, Kelvin	PSI, FtH ₂ O, inH ₂ O, mmH ₂ O, mH ₂ O, inH ₂ O, cmHg, mmHg, Bars, Bars, kPa	
	Range	-40° to 80°C (-40° to 176°F)	600 to 1100 millibars	
	Compensated		0° to 40°C (32° to 104°F)	
Max operating pressure		1.1 x full scale		
Burst pressure		2.0 x full scale		
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^{*}Specifications subject to change. Please consult out web site for the most current data (seametrics.com). Modbus is a registered trademark of Schneider Electric.

Note: Intended for use in atmosphere—not to be submerged.



We represent this supplier. For more information contact Observator Instruments:

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oriented company with a worldwide distribution network and offices in Australia, Germany, the Netherlands, Singapore and the United Kingdom.