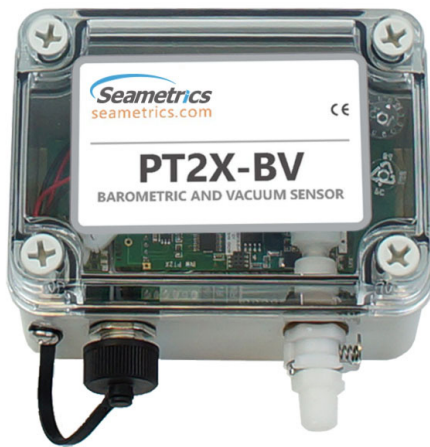


# PT2X-BV Smart Sensor

## 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
- $\pm 0.05\%$  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

**PT2X-BV Smart Sensor**  
**BAROMETRIC VACUUM SENSOR**  
**WITH DATA LOGGING**



**Specifications\***

<b>Box Enclosure</b>	<b>Body Material</b>	ABS - IP66/67	
	<b>Dimensions</b>	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)	
	<b>Wire Seal Material</b>	Fluoropolymer and Buna N	
<b>Tube &amp; Cable</b>	<b>Body Material</b>	Acetal & 316 stainless or titanium	
	<b>Dimensions</b>	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)	
	<b>Wire Seal Material</b>	Fluoropolymer and PTFE	
	<b>Weight</b>	0.8 lb. (0.4 kg)	
	<b>Cable</b>	Submersible: polyurethane, polyethylene, or ETFE (4 lb./100 ft., 1.8 kg/30 m)	
	<b>Environmental</b>	IP68, NEMA 6P	
	<b>Field Connector</b>	Standard	
<b>Temperature</b>	<b>Operating Range</b>	Recommended: -15° to 55°C (5° to 131°F)	
	<b>Storage Range</b>	Without batteries: -40° to 80°C (-40° to 176°F)	
<b>Power</b>	<b>Internal Battery</b>	Two lithium 'AA' batteries - Expected battery life: 18 months at 15 min. polling interval (may vary do to environmental factors)	
	<b>Auxiliary</b>	12 Vdc - Nominal, 6-16 Vdc - range	
<b>Communication</b>	<b>Modbus®</b>	RS485 Modbus® RTU, output=32bit IEEE floating point	
	<b>SDI-12</b>	SDI-12 (ver. 1.3) - ASCII	
<b>Logging</b>	<b>Memory</b>	4MB - 520,000 records	
	<b>Logging Types</b>	Variable, user-defined, profiled	
	<b>Logging Rates</b>	8x/sec maximum, no minimum	
	<b>Baud Rates</b>	9600, 19200, 38400	
	<b>Software</b>	Complimentary Aqua4Plus 2.0	
	<b>Networking</b>	32 available addresses per junction (Address range: 1 to 255)	
<b>Output Channels</b>	<b>Temperature</b>	<b>Temperature</b>	<b>Depth/Level<sup>1</sup></b>
	<b>Element</b>	Digital IC on board	Silicon strain gauge transducer, 316 stainless or Hastelloy
	<b>Accuracy</b>	±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)
	<b>Resolution</b>	0.1°C	0.0034% FS (typical)
	<b>Units</b>	Celsius, Fahrenheit, Kelvin	PSI, FtH <sub>2</sub> O, inH <sub>2</sub> O, mmH <sub>2</sub> O, mH <sub>2</sub> O, inH <sub>2</sub> O, cmHg, mmHg, Bars, Bars, kPa
	<b>Range</b>	-40° to 80°C (-40° to 176°F)	600 to 1100 millibars
	<b>Compensated</b>	---	0° to 40°C (32° to 104°F)
<b>Max operating pressure</b>	1.1 x full scale		
<b>Burst pressure</b>	2.0 x full scale		

\*Specifications subject to change. Please consult our 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.