PT2X Smart Sensor
PRESSURE/TEMPERATURE
WITH DATA LOGGING

Seametrics
Precision Environmental Sensors
An ONICON Brand

APPLICATIONS

Pump and slug tests

Stormwater runoff monitoring

Well, tank, tidal levels

River, stream, reservoir gauging

Wetland monitoring

Resource administration

Features

- Measures & records pressure/level 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 Aqua4Plus 2.0 software

Contact Your Supplier

The **Seametrics PT2X** Smart Sensor is an integrated data logger and pressure/temperature sensor and is ideal for monitoring groundwater, well, tank, and tidal levels, as well as for pump and slug testing. This sensor networks with all of the Seametrics Smart Sensor family.

This industry standard digital RS485 interface device records up to 520,000 records of pressure/level, temperature, and time data, operates with low power, and features easy-to-use software with powerful features. Constructed with 316 stainless steel or titanium, PTFE, and fluoropolymer, this sensor provides high-accuracy readings in rugged and corrosive field conditions.

Two replaceable internal AA batteries power the PT2X. (Auxiliary power supplies are available for data intensive applications.) The unit is programmed using Seametrics' easy-to-use Aqua4Plus 2.0 control software. Once programmed the unit will measure and collect data on a variety of time intervals.
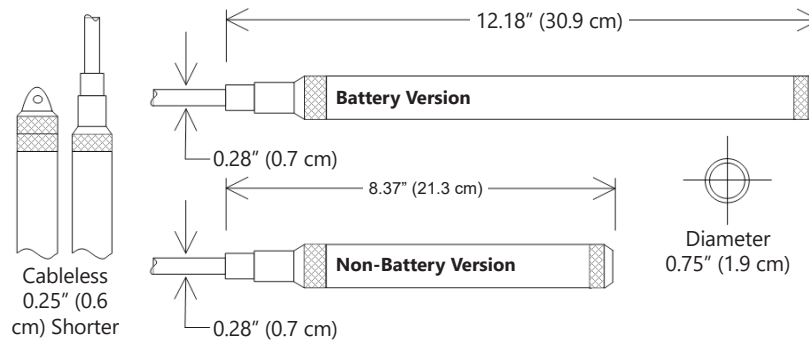
Several PT2Xs, or a combination of PT2Xs and other Seametrics Smart Sensors, can be networked together and controlled directly from a single computer.

While most will use the PT2X with our free, easy-to-use 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.

ISO 9001

PROUDLY MADE IN THE USA

Dimensions

12.18" (30.9 cm)

Battery Version

0.28" (0.7 cm)

8.37" (21.3 cm)

Non-Battery Version

0.28" (0.7 cm)

Cableless
0.25" (0.6 cm) Shorter

Diameter
0.75" (1.9 cm)

Specifications*

Housing & Cable	Weight	0.8 lb. (0.4 kg)	
	Body Material	Acetal & 316 stainless or titanium	
	Wire Seal Material	Fluoropolymer and PTFE	
	Cable	Submersible: polyurethane, polyethylene, or ETFE (4 lb./100 ft., 1.8 kg/30 m)	
	Desiccant	1-3 mm indicating silica gel	
	Field Connector	Standard	
Temperature	Operating Range	Recommended: -15˚ to 55˚C (5˚ to 131˚F) Requires freeze protection kit if using pressure option in water below freezing.	
	Storage Range	Without batteries: -40˚ to 80˚C (-40˚ to 176˚F)	
Power	Internal Battery	Two replaceable lithium 'AA' batteries - 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	-15˚ to 55˚C (5˚ to 131˚F)	Gauge / Absolute[2] Gauge: PSI: 1[1], 5, 7, 15, 30, 50, 100, 300 / FtH$_2$O: 2.3[1], 12, 35, 69, 115, 231, 692 / mH$_2$O: 0.7[1], 3.5, 5, 10.5, 21, 35, 70, 210 Absolute[2]: PSI: 30, 50, 100, 300 / FtH$_2$O: 35, 81, 196, 658 / mH$_2$O: 10, 24, 59, 200
	Compensated	---	0˚ to 40˚C (32˚ to 104˚F)
Max operating pressure	1.1 x full scale		
Over pressure protection	3x full scale up to 300psi		
Burst pressure	1000 psi (approx. 2000 ft or 600 m)		
Environmental	IP68, NEMA 6P		

*Specifications subject to change. Please consult out web site for the most current data (seametrics.com). Modbus is a registered trademark of Schneider Electric.
1 ±0.25% accuracy FSO (max) at this range
2 Depth range for absolute sensors has 14.7 PSI subtracted to give actual depth allowed.

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