

PT2X Submersible Pressure/Temperature Smart Sensor

WITH DATA LOGGING



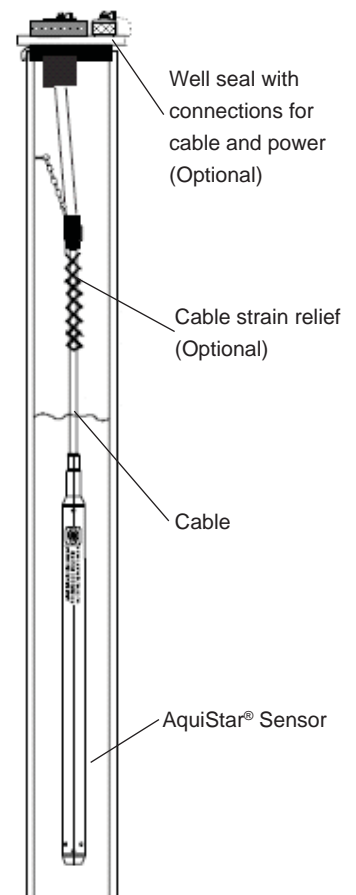
APPLICATIONS

- Pump and slug tests
- Stormwater runoff monitoring
- Well, tank, tidal levels
- River, stream, reservoir gauging
- Wetland monitoring
- Resource administration

Great almost anywhere you need to measure level and temperature – whether it be in a lake, a tank, or a well

Features

- Measures and records pressure/level, temperature, and time
- Low power — *field replaceable AA batteries*
- Modbus® RTU (RS485) and SDI-12 interface — *great flexibility*
- Thermally compensated — *great where water temperatures vary, such as in streams or in industrial tank applications*
- $\pm 0.05\%$ FSO typical accuracy
- Small diameter — 0.75" (1.9 cm)
- 520,000 record non-volatile memory — *no data loss in the event of a power failure*
- Wireless connectivity — *radios and/or cellular*
- Barometric compensation utility for use with absolute sensors
- Free, easy-to-use software



TYPICAL INSTALLATION



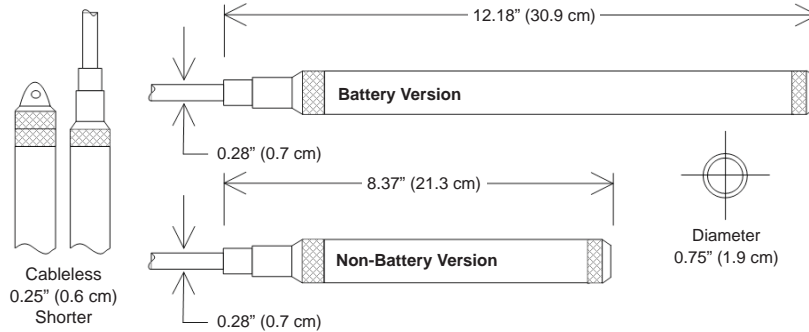
True data, measure by measure



1-800-PRO-WELL
WWW.INWUSA.COM



PT2X Submersible Pressure/ Temperature Smart Sensor with Data Logging



- ¹ Storage without batteries
- ² Lithium available upon request
- ³ Requires freeze protection kit if in water below freezing
- ⁴ Approx. 650 feet or 200 meters
- ⁵ Higher pressure ratings available upon request
- ⁶ May vary due to environmental factors
- ⁷ Depth range for absolute sensors has 14.7 PSI subtracted to give actual depth allowed.
- ⁸ ±0.25% accuracy FSO (max) at this range

GENERAL

Length w/batteries	12.18" (30.9 cm)
Length w/o batteries	8.37" (21.3 cm) Cableless 0.25" (0.6 cm) shorter
Diameter	0.75" (1.9 cm)
Weight	0.8 lb. (0.4 kg)
Body Material	Acetal & 316 stainless steel or titanium
Wire Seal Material	Fluoropolymer and PTFE
Submersible Cable	Polyurethane, polyethylene, or FEP available
Protection Rating	IP68, NEMA 6P
Desiccant	1-3 mm indicating silica gel (high or standard capacity)
Terminating Connector	Available
Communication	RS485 Modbus® RTU SDI-12 (ver.1.3)
Direct Modbus Read Output	32-bit IEEE floating point
SDI-12 Output	ASCII
Internal Math	32-bit floating point
Operating Temp. Range ³	-15° C to 55° C
Storage Temp. Range ¹	-40° C to 80° C

LOGGING

Memory	4MB - 520,000 records
Log Types	Variable, user-defined, logarithmic, profiled
Programmable Baud Rate	9600, 19200, 38400
Logging Rate	8x/sec maximum
Software	Complimentary Aqua4Plus or Aqua4Push
Networking	32 available addresses per junction w/ batching capabilities (up to 255)
File Formats	.xls / .csv / .a4d

POWER

Internal Battery	2x1.5V AA alkaline ²
Auxiliary Power	12 VDC - Nominal 6-15VDC - Range
Exp. Alkaline Battery Life	18 months at 15m polling interval ⁶

TEMPERATURE

Element Type	Digital IC on board
Accuracy	± 0.5° C
Resolution	0.1° C
Range	-40° C to 80° C
Units	Celsius, Fahrenheit, Kelvin

PRESSURE

Transducer Type	Silicon strain gauge
Transducer Material	316 stainless steel or titanium
Pressure Ranges ⁵	
Gauge	
PSI	1 ⁸ , 5, 15, 30, 50, 100, 300
FtH ₂ O	2.3 ⁸ , 12, 35, 69, 115, 231, 692
mH ₂ O	0.7 ⁸ , 3.5, 10.5, 21, 35, 70, 210
Absolute ⁷	
PSI	30, 50, 100, 300
FtH ₂ O	35, 81, 196, 658
mH ₂ O	3.5, 10, 24, 59, 200
Units	PSI, FtH ₂ O, inH ₂ O, cmH ₂ O, mmH ₂ O, mH ₂ O, inHg, cmHg, mmHg, Bars, mBars, kPa
Static Accuracy	± 0.05% FSO (typical) ± 0.1% FSO (maximum) (B.F.S.L. 20° C)
Resolution	0.0034% FS (typical)
Maximum Operating Pressure	1.1 x FS
Over Range Protection	3x FS (for >300psi, contact INW) ⁴
Burst Pressure	1000psi (approx. 2000 feet or 600 meters)
Compensated Range	0° C to 40° C

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