

Datalogging Water Quality Sensor

AquiStar® PT2X Submersible Pressure/Temperature Smart Sensor with Data Logging

The PT2X is ideal for observing flow patterns, testing pumps, and monitoring groundwater, well, tank and tidal levels.

A pressure and temperature sensor with integrated datalogging, this sensor is constructed with 316 stainless steel, fluoropolymer, PTFE – providing highly accurate readings in rugged and corrosive field conditions.

FEATURES

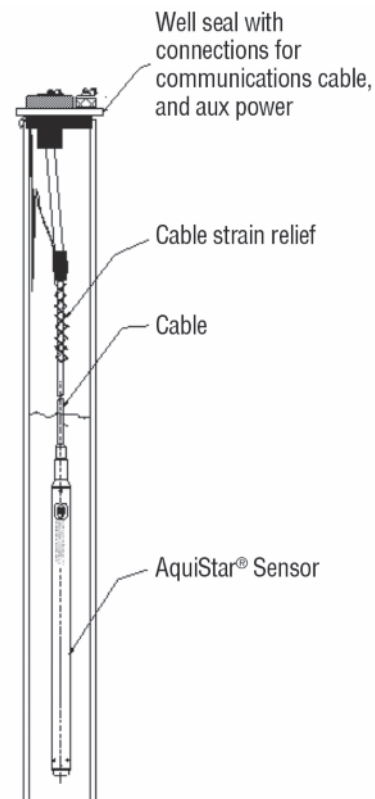
Sensor

- Measures and records pressure/level, temperature, and time
- Low power – field replaceable AA batteries
- Modbus® RTU (RS485) and SDI-12 interface – great flexibility
- Small diameter – 0.75" (1.9 cm)
- $\pm 0.05\%$ FSO typical accuracy
- 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

Datalogger

- 520,000 record
- Non-volatile memory – no data loss in the event of a power failure
- Flexible, multi-phase logging sequences – save sequences to disk to reuse in the future
- Pause logging feature – temporarily pause the logging while repositioning or transporting sensor
- Delayed start feature – state a specific future start time, making it easy to set several sensors to start at the same time

TYPICAL INSTALLATION



APPLICATIONS

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



CALL GEOTECH TODAY (800) 833-7958

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Datalogging Water Quality Sensor



AquiStar® PT2X Submersible Pressure/Temperature Smart Sensor with Data Logging

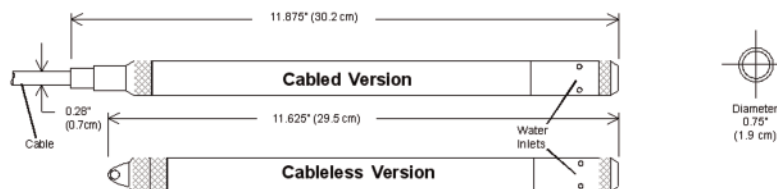
SPECIFICATIONS

General	Length	12.175" (30.881 cm) cabled 11.925" (30.281 cm) cableless
	Diameter	0.75" (1.9 cm)
	Weight	0.8 lb. (0.4 kg)
	Body Material	Acetal & 316 stainless steel or titanium
	Wire Seal Materials	Fluoropolymer and PTFE
	Submersible Cable	Polyurethane, polyethylene, or ETFE available
	Protection Rating	IP68, NEMA 6P
	Desiccant	1-3mm 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. Range³	-15°C to 55°C
Storage Temp. Range¹	-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	2 x 1.5V AA Alkaline ²
	Auxiliary Power	12 VDC – Nominal 6-15 VDC – Range
Expected 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 Ranges⁵	
	Gauge	
	FtH ₂ O	2.3, 5.8, 12, 35, 69, 115, 231, 692
	mH ₂ O	0.7, 1.75, 3.5, 10.5, 21, 35, 70, 210
	Absolute ⁷	
	FtH ₂ O	12, 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	
Max Operating Pressure	1.1 x FS	
Burst Pressure⁴	3.0 x FS	
Compensated Range	0°C to 40°C	

- 1 Storage without batteries
- 2 Lithium available upon request
- 3 Requires freeze protection kit if in water below freezing
- 4 Burst reduced at PSI>300
- 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.

Information in this document is subject to change without notice.



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