

### CT2X SUBMERSIBLE SMART SENSOR

# **Conductivity/Temperature** with Pressure/Temperature Option



#### **FEATURES**

- RS485/RS232 interface
- Small diameter (0.75")
- Conductivity, temperature & time with pressure/temperature option
- 10 microSiemens/cm to 100,000 microSiemens/cm
- Linear and nLFn temperature compensation
- Also measures TDS in mg/L
- 100.000+ records / non-volatile
- 316 stainless steel, Viton® and Teflon® construction
- Polyethylene, polyurethane and FEP Teflon® cable options
- MODBUS® protocol for RTU & PLC applications
- Easy export to spreadsheets & databases

### **DESCRIPTION**

The AquiStar<sup>®</sup> CT2X is a submersible conductivity/temperature sensor with built-in datalogging. This device stores over 100,000 records of conductivity, temperature, and time data, operates with low power, and features easy to use software with powerful features. The CT2X is also available with a pressure/temperature module, giving added functionality in the same sensor housing.

The CT2X incorporates 4-pole electrode cell measurement technology. This technology reduces fringe field interference errors, lessens inaccuracy caused by polarization effects, and lowers contact resistance problems. Four-pole electrode technology also allows users to work with one electrode over a wide range of conductivity.

The conductivity probe is constructed of epoxy/graphite, making it extremely durable for use in rugged field conditions. To clean, simply scrub with a small brush.

#### **OPERATION**

The CT2X is powered internally with two AA alkaline batteries or with an external auxiliary power supply for data intensive applications. INW offers alkaline, rechargeable, and other auxiliary power systems.

The CT2X comes with powerful, easy-to-use, Windows  $^{\circledR}$ -based Aqua4Plus software, affording the user extensive control, including real time monitoring, flexible programming, easy field calibration, and both tabular and graphic data displays.

Aqua4Plus offers easy, one-point calibration. Simply put the probe in the desired standard, and then use the built-in field calibration utility to adjust to the correct conductivity output.

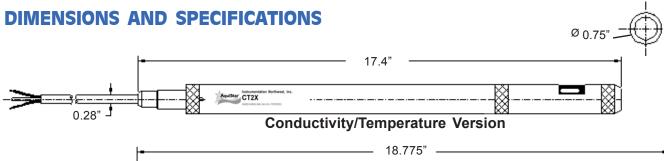
Linear and non-linear temperature compensation features add flexibility to this sensor. The user can enter specific linear temperature coefficients to match the material being sampled. Alternately, for natural waters, which do not have linear temperature coefficients, the CT2X has a non-linear natural water mode meeting DIN EN 27888 standards.





# **CT2X SUBMERSIBLE SMART SENSOR**

# **Conductivity/Temperature** with Pressure/Temperature Option



0.28" Conductivity/Temperature Version with Pressure/Temperature Option

### **Conductivity/Temperature Module**

BODY	
Body Material	316 stainless steel
Probe Material	Epoxy/Graphite
Electrode	4-pole
Wire Seal Materials	Viton® and Teflon®
<b>Terminating Connector</b>	Available
Weight	Less than 1 lb.
CABLE	
OD	0.28" maximum
Break Strength	138 lbs.
Maximum Length	2000 feet
Weight	4 lbs. per 100 feet
CONDUCTIVITY	
Static Accuracy	±0.5% of measured value
Resolution	0.1 for microSiemens
	0.001 for milliSiemens
TDS	0 - 2000 mg/L
Cell Constant	.55 (standard)
TEMPERATURE	
Accuracy	±0.2° C (at 25° C)
Resolution	0.1° C
TIME	
Operating Temp. Range	0° C to 80° C

#### **Pressure/Temperature Module (Optional)**

BODY	
<b>Body Material</b>	316 stainless steel
Wire Seal Materials	Viton® and Teflon®
Terminating Connector	Available
Weight	Less than 1 lb.
CABLE	
OD	0.28" maximum
Break Strength	138 lbs.
Maximum Length	2000 feet
Weight	4 lbs. per 100 feet
PRESSURE	
Static Accuracy (B.F.S.L. 25° C)*	±0.1% FSO (maximum) ±0.06% FSO (typical)
Temperature Error (reference 25° C)	±0.5% FSO (maximum) ±0.25% FSO (typical)
Maximum Zero Offset at 25° C	±0.25% FSO
Resolution	16 bit
Ranges	various from 5 - 300 psi -
	absolute and gauge
Over Range Protection	2x (except 300 PSIA)
TEMPERATURE	
Accuracy	±0.75° C (maximum)
Resolution	0.1° C
ТІМЕ	

### **Instrumentation Northwest, Inc.**

Information in this document is subject to change without notice.

0° C to 40° C

Operating Temp. Range



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