

# Multi-Parameter Smart Sensor

WITH DATA LOGGING

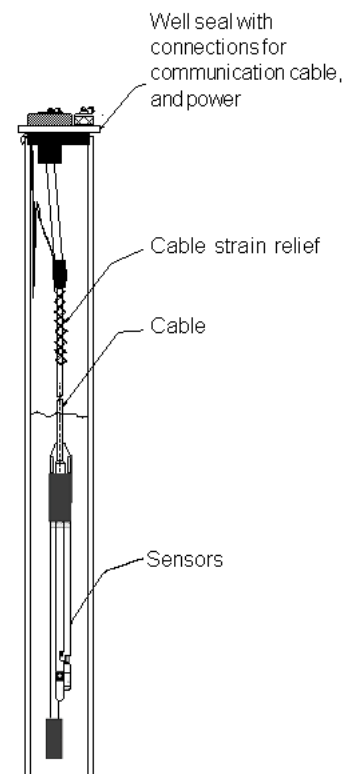


## APPLICATIONS

- Surface water monitoring
- Groundwater monitoring
- Agricultural runoff studies
- Discharge monitoring
- Aquaculture
- Leachate monitoring
- Remediation performance monitoring
- Waste water treatment discharge

## Features

- Measures pH, ORP, temperature, conductivity, salinity, TDS, pressure level, and dissolved oxygen or turbidity (depending on configuration)
- Modbus<sup>®</sup> and SDI-12 interface for greater flexibility
- Non-volatile memory
- RS485 network — *connect with other AquiStar<sup>®</sup> Smart Sensors*
- Wireless connectivity — *radios and/or cellular*
- Modular design — *accommodate changes to parameter and data needs*
- Flexible, Windows<sup>®</sup>-based programming
- Real time viewing
- Easy export to spreadsheets and databases
- Direct read option — *use with panel meters or RTU/PLC applications*
- Polyethylene, polyurethane, and FEP Teflon<sup>®</sup> cable options
- Fits in 2" (5.1 cm) well



**TYPICAL INSTALLATION**



True data, measure by measure

1-800-PRO-WELL  
[WWW.INWUSA.COM](http://WWW.INWUSA.COM)

## Multi-Parameter Smart Sensor with Data Logging



### MECHANICAL

#### ADAPTER

<b>Material</b>	Delrin®
<b>Strain relief</b>	Included

#### SENSOR TUBES

<b>Tube Material</b>	316 stainless steel or titanium
<b>Wire Seal Materials</b>	Viton® and Teflon®

#### CABLE

<b>OD</b>	0.28" (0.7 cm) maximum
<b>Break Strength</b>	138 lbs. (62.7 kg)
<b>Maximum Length</b>	2000 feet (610 meters)
<b>Weight</b>	4 lbs. per 100 feet (1.8 kg / 30 m)

### GENERAL

#### COMMUNICATION

<b>Communication</b>	RS485 Modbus RTU SDI-12 (ver.1.3)
<b>Direct Modbus Read Output</b>	32-bit IEEE floating point
<b>SDI-12 Output</b>	ASCII
<b>Internal Math</b>	32-bit floating point

#### POWER

<b>External</b>	12 VDC
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### RANGE, RESOLUTION, ACCURACY

	RANGE	RESOLUTION	ACCURACY
<b>Level/Pressure</b>		16 bit	± 0.06 FSO typical ± 0.1 FSO maximum (B.F.S.L. 25° C)
Gauge PSIG	1-300 PSI		
Gauge mH <sub>2</sub> O	0.7-210 mH <sub>2</sub> O		
Gauge FtH <sub>2</sub> O	2.3-689 FtH <sub>2</sub> O		
Absolute PSIA	20-300 PSI		
Absolute mH <sub>2</sub> O	14-210 mH <sub>2</sub> O		
Absolute FtH <sub>2</sub> O	46-689 FtH <sub>2</sub> O		
<b>Conductivity</b>	0-100 mS/cm	0.001 mS/cm	± 0.5% of measured value
<b>Salinity</b>	0-70 PSU	0.01 PSU	± 1% of reading or 0.1 PSU whichever is greater
<b>TDS</b>	4.9 - 49,000 mg/L	0.1 mg/L	± 0.5% of measured value
<b>pH</b>	1-14 pH units	0.01 pH units	± 0.2 pH units
<b>ORP</b>	± 1200 mV	0.01 mVH	0.1 mVH
<b>Dissolved Oxygen</b>	0-25 ppm	0.01 ppm when <4.00 ppm 0.1 ppm when >4.00 ppm	1% of reading or 0.02 ppm whichever is greater
<b>Turbidity</b>	0-1000 NTU	± 3 NTU	2% @ 25° C
<b>Temperature</b>	-5° C to 60° C	0.1° C	± 0.5° C

### CONFIGURATIONS - Available in five standard options. (For additional configurations, contact your INW sales representative.)

	OPTION ONE	OPTION TWO	OPTION THREE	OPTION FOUR	OPTION FIVE
<b>Level/Pressure</b>	✓	✓	✓	✓	✓
<b>Conductivity/Salinity/TDS</b>	✓	✓	✓	✓	✓
<b>pH/ORP</b>			✓	✓	✓
<b>Dissolved Oxygen</b>	✓			✓	
<b>Turbidity</b>		✓	✓		
<b>Temperature</b>	✓	✓	✓	✓	✓

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