Multi-Parameter Smart Sensor
WITH DATA LOGGING

Features
- Measures pH, ORP, temperature, conductivity, salinity, TDS, pressure level, and dissolved oxygen or turbidity (depending on configuration)
- Modbus® and SDI-12 interface for greater flexibility
- Non-volatile memory
- RS485 network — connect with other AquiStar® Smart Sensors
- Wireless connectivity — radios and/or cellular
- Modular design — accommodate changes to parameter and data needs
- Flexible, Windows®-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® cable options
- Fits in 2” (5.1 cm) well

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

TYPICAL INSTALLATION
### MECHANICAL

**ADAPTER**
- Material: Delrin®
- Strain relief: Included

**SENSOR TUBES**
- Tube Material: 316 stainless steel or titanium
- Wire Seal Materials: Viton® and Teflon®

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

### GENERAL

**COMMUNICATION**
- Communication: RS485 Modbus RTU
- SDI-12 Output: ASCII

### POWER
- External: 12 VDC

### RANGE, RESOLUTION, ACCURACY

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level/Pressure</td>
<td></td>
<td>16 bit</td>
<td>± 0.06 FSO typical</td>
</tr>
<tr>
<td>Conductivity</td>
<td>0-100 mS/cm</td>
<td>0.001 mS/cm</td>
<td>± 0.5% of measured value</td>
</tr>
<tr>
<td>Salinity</td>
<td>0-70 PSU</td>
<td>0.01 PSU</td>
<td>± 1% of reading or 0.1 PSU whichever is greater</td>
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<tr>
<td>TDS</td>
<td>4.9 - 49,000 mg/L</td>
<td>0.1 mg/L</td>
<td>± 0.5% of measured value</td>
</tr>
<tr>
<td>pH</td>
<td>1-14 pH units</td>
<td>0.01 pH units</td>
<td>± 0.2 pH units</td>
</tr>
<tr>
<td>ORP</td>
<td>± 1200 mV</td>
<td>0.01 mVH</td>
<td>1% of reading or 0.02 ppm whichever is greater</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0-25 ppm</td>
<td>0.01 ppm when &lt;4.00 ppm</td>
<td>2% @ 25° C</td>
</tr>
<tr>
<td>Turbidity</td>
<td>0-1000 NTU</td>
<td>± 3 NTU</td>
<td>2% @ 25° C</td>
</tr>
<tr>
<td>Temperature</td>
<td>-5° C to 60° C</td>
<td>0.1° C</td>
<td>± 0.5° C</td>
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</tbody>
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### CONFIGURATIONS

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Option One</th>
<th>Option Two</th>
<th>Option Three</th>
<th>Option Four</th>
<th>Option Five</th>
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