



## 1066 (2-wire)

### Model 1066 Single Channel pH, ORP, Contacting and Toroidal Conductivity 2-Wire Transmitter & Analyzer



[pH/ORP/ISE Sensors WITHOUT preamplifier Hook-Up Schematic](#)  
[pH/ORP/ISE Sensors WITH preamplifier Hook-Up Schematic](#)  
[pH/ORP/ISE Sensors with Mini External Preamplifier Hook-Up Schematic](#)  
[Guide to quick disconnect Q7M/Q7F snap cable system for Rosemount transmitters](#)  
[Contacting Conductivity Sensor Hook-Up Schematic](#)  
[Toroidal Conductivity Sensor Hook-Up Schematic](#)

- Chemically & Mechanically Resilient Polycarbonate NEMA 4X / CSA 4 IP66 Enclosure – Standard 1/2 DIN Cutout
- 2-Wire Loop-Powered 24VDC Power Operation with scalable 4-20mA analog current loop output standard
  - Second 4-20mA loop-powered output available to send process temperature

reading in addition to measured analytical liquid parameter

- Automatic Temperature Compensation via 100 or 1000 Ohm Platinum Temperature Compensation Element (Available in Standard and ACCU-TEMP fast response configurations)
- **HART 7 is Standard** and Foundation FieldBus available as an optional digital output
- Large LCD Display with touch membrane keypad – Menu Driven Interface and Programming
- Automatic Temperature Compensation from 0 to 150 °C (32 to 302 °F) for pH/ORP and 0 to 200 °C (32 to 392 °F) for Conductivity
- Area Classifications:
  - Intrinsically Safe (with appropriate safety barrier) for:
    - CSA/UL Class I, II, III, Div. 1 Groups A-G T4 Tamb = -20°C to 65°C
    - ALTEX Baseefa04ATEX0195X EEx ia IIC T4 Tamb = -20°C to 65°C
    - IECEx BAS 11.90098X EEx ia IIC T4 Tamb = -20°C to 65°C
  - Non-Incendive:
    - CSA/UL Class I, Div. 2, Groups A-D Dust Ignition Proof Class II & III, Div. 1, Groups E-G NEMA 4X Enclosure T4 Tamb = -20°C to 65°

## 1066 Product Specifications

### 1066 Operation Manual

Measurement	Input	Measurement Range	Outputs	Calibration Points	Compatible Sensor(s)	Special Features
pH/ORP	Single or Dual Channel – pH/ORP	– 0 to 14 pH (standard) – Fully Scalable from 1 to 13 pH units	– Analog 0-20 mA or 4-20 mA output for pH/ORP/ISE or temperature for each input channel – Optional HART or ProfiBUS Digital Outputs	– 2 point auto buffer recognition for pH for slope determination – 1 point user defined pH standardize calibration to correct for offset (drift)	– Any Suitable ASTI pH/ORP Sensor with 100 or 1000 Ohm Platinum TC – Any Suitable ASTI pH/ORP Sensor with 100 or 1000 Ohm Platinum TC & 1056 compatible preamplifier	– Excellent option for severe service pH & ORP measurement in areas with flammable gas and corrosive environments.

Contacting Conductivity	Single or Dual Channel – Conductivity Cell	<ul style="list-style-type: none"> <li>– Cell from 0.01 to 10.0, user selectable</li> <li>– Ranges from 0-200 microSiemens (0.01/cm) to 0-200 milliSiemens (10.0/cm) as mates with cell</li> </ul>	<ul style="list-style-type: none"> <li>– Analog 0-20 mA or 4-20 mA output for Conductivity or temperature for each input channel</li> <li>– Optional HART or ProfiBUS Digital Outputs</li> </ul>	<ul style="list-style-type: none"> <li>– Zero Calibration (Capitance)</li> <li>– Cell Constant calibration to find exact effective (apparent) cell constant in standard solution or process media</li> </ul>	<ul style="list-style-type: none"> <li>– Any Suitable Contacting Conductivity Sensor with 1000 Ohm Platinum TC</li> </ul>	<ul style="list-style-type: none"> <li>– Support for displaying in concentration units of acids, bases and electrolytes as well as salinity</li> <li>– Special ultrapure water temperature compensation and support for display in resistivity units</li> </ul>
Toroidal Conductivity (Contactless Inductive)	Single or Dual Channel – Toroidal Conductivity Sensor	<ul style="list-style-type: none"> <li>– Range from 0.050 to 2,000 milliSiemens (2 Siemens)</li> </ul>	<ul style="list-style-type: none"> <li>– Analog 0-20 mA or 4-20 mA output for Conductivity or temperature for each input channel</li> <li>– Optional HART or ProfiBUS Digital Outputs</li> </ul>	<ul style="list-style-type: none"> <li>– Zero Calibration (Capitance)</li> <li>– Cell Constant calibration to find exact effective (apparent) cell constant in standard solution or process media</li> </ul>	<ul style="list-style-type: none"> <li>– Any Suitable Toroidal Conductivity Sensor with 20/20 Windings and 1000 Ohm Platinum TC</li> </ul>	<ul style="list-style-type: none"> <li>– Support for displaying in concentration units of acids, bases and electrolytes as well as salinity</li> <li>– Excellent choice for strong acid, strong base and strong electrolyte solutions at elevated temperatures</li> </ul>