Rosemount 1066 Single Channel Transmitter

Loop Powered Transmitter for Liquid Analysis

The Rosemount 1066 Single Channel Transmitter can display a liquid analytical measurement, in addition to a temperature measurement, current output, and diagnostic information. The transmitter has quick start programming for shorter installation times and an intuitive user interface for easy operation.
Overview

Loop Powered Single Channel Transmitter

- Transmits analytical measurements: pH/ORP, Conductivity, Free Chlorine, Total Chlorine, Dissolved Oxygen, and Ozone.
- Large, easy to read, user customizable screen that displays analytical measurements, temperature, and diagnostics.

Reduced Installation and Maintenance Time

- Shorter installation times using Quick Start programming at initial install or after factory reset.
- Effortlessly connect with PLCs and DCS' by choosing the HART or Profibus DP communication options.
- Display measurements, configure alarms, and conduct maintenance with a simple to use local operator interface.
- Efficiently manage your devices using intuitive device dashboards on AMS/475 Communicators.

Accurate, Linear and Reliable Measurements of Analytical Sensors

- Faster calibration of pH sensors using auto pH Buffer solution detection.
- Linear conductivity measurements with on-board concentration curves for common acids and bases.
- Built-in features to easily display accurate amperometric measurements.

Contents

Overview ......................................................... 2  
1066 Single Channel Transmitter ....................... 3 
Specifications .............................................. 5  
Product Certifications ....................................... 6  
Dimensional Drawings ...................................... 7  

www.Emerson.com/RosemountLiquidAnalysis
1066 Single Channel Transmitter

Rosemount 1066 Single Channel Transmitter is a loop powered device that can accept input from pH/ORP, conductivity (contacting and toroidal), and amperometric (dissolved oxygen, chlorine, and ozone) sensors.

- Faster installation using Quick Start programming
- Intrinsically Safe FM, CSA, and ATEX/IECEx Hazardous Location Approvals
- Visibility of process parameters by utilizing HART or Foundation Fieldbus digital communications

### Additional Information

Specifications: see “Specifications” on page 5
Certifications: see “Product Certifications” on page 6
Dimensional drawings: see “Dimensional Drawings” on page 7

### Table 1. Rosemount 1066 Single Channel Transmitter Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Transmitter type</th>
</tr>
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<tbody>
<tr>
<td>1066</td>
<td>Single Channel Transmitter</td>
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**Measurement**

<table>
<thead>
<tr>
<th>Measurement</th>
<th></th>
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<tbody>
<tr>
<td>P</td>
<td>pH/ORP</td>
</tr>
<tr>
<td>C</td>
<td>Contacting conductivity</td>
</tr>
<tr>
<td>T</td>
<td>Toroidal conductivity</td>
</tr>
<tr>
<td>CL</td>
<td>Chlorine</td>
</tr>
<tr>
<td>DO</td>
<td>Dissolved oxygen</td>
</tr>
<tr>
<td>OZ</td>
<td>Ozone</td>
</tr>
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</table>

**Communication**

<table>
<thead>
<tr>
<th>Communication</th>
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</thead>
<tbody>
<tr>
<td>HT</td>
<td>HART® Digital Communication</td>
</tr>
<tr>
<td>FF</td>
<td>FOUNDATION™ Fieldbus Digital Communication</td>
</tr>
<tr>
<td>FI</td>
<td>FOUNDATION™ Fieldbus Digital Communication with FISCO</td>
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**Approvals**

<table>
<thead>
<tr>
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<tr>
<td>60</td>
<td>None Required (1)</td>
</tr>
<tr>
<td>67</td>
<td>FM Approved, Intrinsically Safe, and Non-Incendive</td>
</tr>
<tr>
<td>69</td>
<td>CSA/CUS Approved, Intrinsically Safe, and Non-Incendive</td>
</tr>
<tr>
<td>73</td>
<td>ATEX/IECEx Approved, Intrinsically Safe</td>
</tr>
</tbody>
</table>

1. Cannot be purchased with FI Communication option.
### Table 2. Rosemount 1066 Single Channel Transmitter Accessories List

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>23554-00</td>
<td>Cable Gland Kit (Qty 5)</td>
</tr>
<tr>
<td>23820-00</td>
<td>2 in. Pipe Mounting Kit (Includes U-bolts, mounting bracket, nuts, washers, and screws)</td>
</tr>
<tr>
<td>23820-01</td>
<td>2 in. Stainless Steel Pipe Mounting Kit (Includes U-bolts, mounting bracket, nuts, washers and screws)</td>
</tr>
<tr>
<td>9240048-00</td>
<td>Stainless Steel Tag (customer specified marking)</td>
</tr>
</tbody>
</table>
Specifications

General Analyzer

Enclosure
Material: Polycarbonate.
Rating: Type 4X and IP66.
Dimensions: 6.10 in. L x 6.10 in. W x 5.45 in. H
(155 mm x 155 mm x 131 mm)
Conduit openings: 1/2 in. or PG 13.5 conduit fittings.

Display
Features: User customizable, monochromatic graphic liquid crystal, no backlight
Display Resolution: 128 x 96 pixel display resolution
Dimensions: 3.8 in. (Diagonal)

Ambient Conditions
Temperature: -4 to 131 °F (-20 to 65 °C)
Relative Humidity: 5 to 95% (non-condensing)

Power
Minimum Voltage: 12.7 Vdc
External Load Resistor for HART: 250 Ohms

Terminal Wire Sizes
Power: 26-16 AWG
Sensor Inputs: 26-16 AWG

Weight/Shipping Weight
(rounded to nearest 1 lb. or 0.5 kg)
2 lb./ 3 lb. (1 Kg/ 1.5 kg)
Product Certifications

Hazardous Location Approvals

Intrinsic Safety (with appropriate safety barrier)

- Class I, Class II, III, Div. 1, Groups A-G
  - T4 Tamb = -20 °C to 65 °C
  - Enclosure 4X, IP66

- IECEx BAS 11.0098X
  - Ex ia IIC T4 Ga
  - T4 Tamb = -20 °C to 65 °C

ATEX

- 1180 II 1 G
  - Baseefa I1ATEX0195X
  - Ex ia IIC T4 Ga
  - T4 Tamb = -20 °C to 65 °C

Non-Incendive

- Class I, Div. 2, Groups A-D*
  - Dust Ignition Proof Class II & III, Div 1, Groups EFG
- Class II & III, Div. 1, Groups E-G
  - Type 4/4X Enclosure
  - T4 Tamb = -20 °C to 65 °C

- Class I, Division 2 Groups A-D
  - Dust Ignition proof Class II & III, Div 1, Groups EFG
  - Class II & III, Division 1, Groups E-G
  - Tamb = -20 °C to 65 °C
  - IP66 enclosure

Complies with the Following Standards

- CSA: C22.2 no 0 - 10; C22.2 no 0.4 - 04; C22.2 no. 25-M1966; C22.2 no. 94-M1991; C22.2 no.142-M1987; C22.2 no. 157- M1992; C22.2 no. 213-M1987; C22.2 no. 60529:05
- Radio Frequency Immunity/Electromagnetic Interference (RFI/EMI)
  - EN-61326

European Directive Information

A copy of the EC Declaration of Conformity can be found at the end of the Quick Start Guide and the User's Manual. The most recent revision of the EC Declaration of Conformity can be found at www.Emerson.com/RosemountLiquidAnalysis.
Dimensional Drawings

Figure 1. Panel Mount Dimensions

Figure 2. Wall Mount Dimensions