

Rosemount 1056 Dual Channel Transmitter



Multi-parameter Transmitter for Liquid Analysis

The Rosemount 1056 Dual Channel Transmitter displays up to two independent liquid analytical measurements. HART and Profibus DP digital communication options allow for connection to HART hosts and Profibus networks. Start-up and installation of the 1056 is easy by using Quick Start Programming.



ROSEMOUNT™

Overview



Independent Dual Input Measurements

- Expandable to two channels of liquid analytical measurements: pH/ORP, Conductivity, Free Chlorine, Total Chlorine, Dissolved Oxygen, Ozone, and Turbidity.
- Modular boards with auto-recognition of sensor board.
- Large, easy to read, user customizable display of dual measurements in addition to diagnostic and temperature readings.

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 and turbidity measurements.

Contents

Overview	2	Product Certifications	6
1056 Dual Channel Transmitter	3	Dimensional Drawings	7
Specifications	5		

1056 Dual Channel Transmitter



Rosemount 1056 Dual Channel Transmitter is a line powered device that can accept inputs from pH/ORP, ISE, flow, conductivity (contacting and toroidal), turbidity, and amperometric (dissolved oxygen, chlorine, and ozone) sensors.

- Faster installation using Quick Start programming, auto-recognition of sensor boards and modular design.
- At a glance view of pertinent information provided by the large customizable display.
- Visibility of process parameters by utilizing HART or Profibus DP 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 1056 Dual Channel Transmitter Ordering Information

Model	Transmitter type
1056	Dual channel transmitter
Power	
01	115/230 Vac, 50/60 Hz no relays ⁽¹⁾
02	24 Vdc with four alarm relays
03	85-265 Vac switching, 50/60 Hz with four alarm relays
Measurement 1	
20	Contacting conductivity
21	Toroidal conductivity
22	pH/ORP/ISE
23	Flow/current input
24	Chlorine
25	Dissolved oxygen
26	Ozone
27	Turbidity
Measurement 2	
30	Contacting conductivity
31	Toroidal conductivity
32	pH/ORP/ISE
33	Flow/current input
34	Chlorine
35	Dissolved oxygen

Table 1. Rosemount 1056 Dual Channel Transmitter Ordering Information(continued)

36	Ozone
37	Turbidity
38	None
Communication	
AN	4-20 mA analog
DP	Profibus DP digital communication
HT	HART® digital communication
UL Approval	
-	CSA/FM approval
UL	UL approval

1. Not compatible with Turbidity Measurements.

Table 2. Rosemount 1056 Dual Channel Transmitter Accessories List

Part Number	Description
23554-00	Cable gland kit (Qty 5)
23820-00	2 in. pipe mounting kit (Includes U-bolts, mounting bracket, nuts, washers, and screws)
23820-01	2 in. stainless steel pipe mounting kit (Includes U-bolts, mounting bracket, nuts, washers and screws)
9240048-00	Stainless steel tag (customer specified marking)

Specifications

General Analyzer

Enclosure

Material: Polycarbonate.

Rating: Type 4X and IP65.

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, back lit display.

Display Resolution: 128 x 96 pixel display resolution.

Dimensions: 3.8 in. (Diagonal)

Ambient Conditions

Temperature: 32 to 131 °F (0 to 55 °C)

Temperature for Turbidity: 32 to 122 °F (0 to 50 °C)

Relative Humidity: 5 to 95% (non-condensing)

Storage Temperature: -4 to 140 °F (-20 to 60 °C)

Power

01: 115 Vac ±15% 60 Hz ±6%, 10 W;
230 Vac ±15% 50 Hz ±6%, 10 W.

02: 20 to 30 Vdc. 15 W.

03: 84 to 265 Vac, 47 to 63.0 Hz. 15 W.

Power option codes 02 and 03 include four programmable relays.

Equipment protected by double insulation.

Relays

Form C, SPDT, epoxy sealed



Maximum Relay Current	
	Resistive
28 Vdc	5.0 A
115 Vac	5.0 A
230 Vac	5.0 A

Inductive Load: 1/8 HP motor (maximum) at 115/230 Vac

*Relays only available with option 02 power supply (20 - 30 Vdc) or 03 switching power supply (84 - 265 Vac)

Alarm Relays

Four configurable alarm relays for process measurement as alarms or faults with interval timer settings.

Terminal Wire Sizes

Power: 24-12 AWG

Analog outputs: 26-16 AWG

Relays: 24-12 AWG

Weight/Shipping Weight (rounded to nearest 1 lb. or 0.5 kg)

3 lb./4 lb. (1.5 kg/2.0 kg)

Product Certifications

Hazardous Location Approvals (Not available for DP)



Class I, Division 2, Group A, B, C, and D

Class II, Division 2, Groups E, F, and G

Class III T4A Tamb = 50 °C

Evaluated to the ANSI/UL Standards. The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S. respectively.



Class I, Division 2, Group A, B, C, and D

Class II and III, Division 2, Groups E, F, and G

T4A Tamb = 50 °C, Enclosure Type 4X

Ordinary Locations: (only with UL ordering option)



Pollution Degree 2

Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation possible.

Altitude: 6562 ft. (2000 meter) maximum

Radio Frequency Immunity/Electromagnetic Interference (RFI/EMI)

EN-61326

Low Voltage Directive (LVD)

EN-61010-1



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

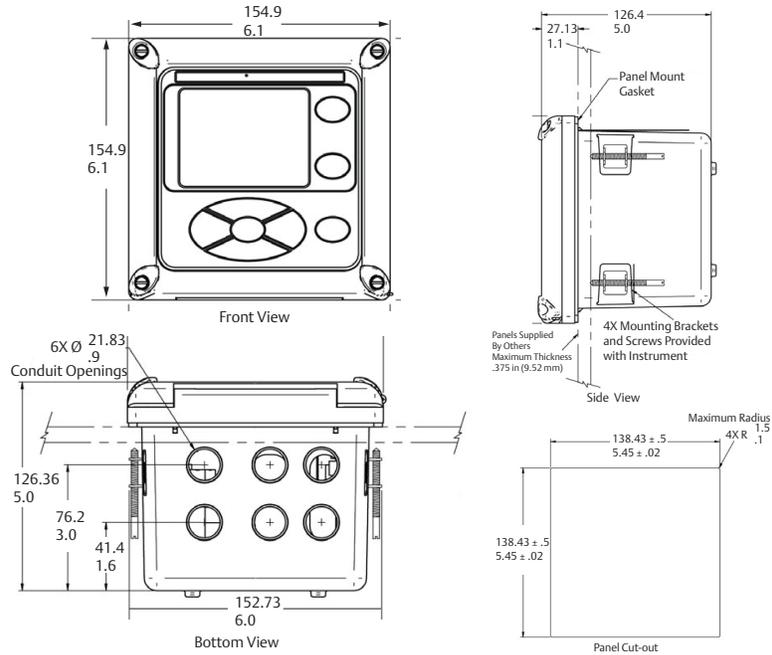


Figure 2. Wall Mount Dimensions

