

Rosemount 1057 Triple Channel Transmitter



Multi-parameter Transmitter for Liquid Analysis

The Rosemount 1057 Triple Channel Transmitter can display up to three independent liquid analytical measurements. The transmitter has the ability to show three additional temperature measurements, analog outputs, and diagnostic information. Start-up and installation of the 1057 is easy using the Quick Start Programming feature.

ROSEMOUNT[™]


EMERSON[™]

Overview



Independent Triple Input Measurements

- Expandable to three channels of liquid analytical measurements: pH/ORP and Contacting Conductivity.
- Modular boards with auto-recognition of sensor board.
- Large, easy to read, user customizable display of three 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.
- Display measurements, configure alarms, and conduct maintenance with a simple to use local operator interface.

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.

Contents

Overview	2	Product Certifications	6
1057 Triple Channel Transmitter	3	Dimensional Drawings	7
Specifications	5		

1057 Triple Channel Transmitter



Rosemount 1057 Triple Channel Transmitter is a line powered device that can accept inputs from pH/ORP, ISE, and contacting conductivity 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.

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 1057 Triple Channel Transmitter Ordering Information

Model	Transmitter Type
1057	Triple Channel Transmitter
Power	
02	24 Vdc with four alarm relays
03	85-265 Vac switching, 50/60 Hz with four alarm relays
Measurement 1	
20	Contacting Conductivity
22	pH/ORP/ISE
Measurement 2	
30	Contacting Conductivity
22	pH/ORP/ISE
38	None
Measurement 3	
30	Contacting Conductivity
32	pH/ORP/ISE
38	None
Approvals	
-	CSA/FM Approval
UL	UL Approval

Table 2. Rosemount 1057 Triple 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

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



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.

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

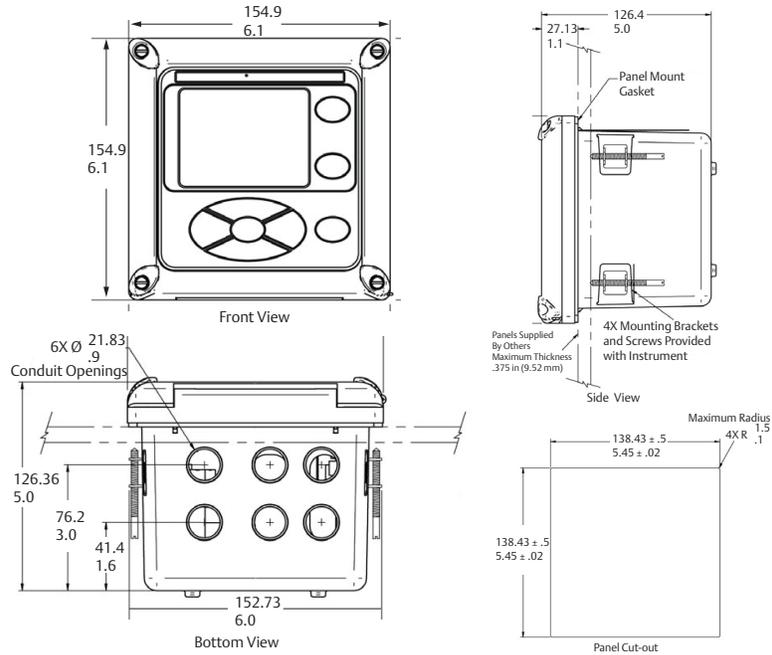


Figure 2. Wall Mount Dimensions

