

Rosemount™ 1058 Dual Channel Transmitter

Multi-parameter Liquid Analysis transmitter for digital and analog sensors



Introduction

The Rosemount 1058 dual channel transmitter provides confident liquid analysis measurement in a wide range of industrial, municipal, and commercial applications.

Versatile

- Supports continuous measurement of liquid analysis from one or two sensors.
- Each sensor channel is independently configurable to support a wide selection of digital or analog liquid analysis sensors including pH, ORP, conductivity, dissolved oxygen, chlorine, turbidity, and more.
- IP66/Type 4X rated engineered polymer enclosure with universal mounting options provides confident and easy installation indoors or outdoors.

Easy to use

- Ready to connect technology allows digital sensors to be connected and configured under 10 seconds.
- Large color LCD screen with intuitive menus and alpha-numeric keypad enable easy configuration and calibration.

Smart

- Continually monitors both itself and connected sensors and provides a wide range of sensor diagnostic information as well as detailed fault and warning info.
- Predictive pH sensor health diagnostics let you know when your pH sensor is nearing the end of its life.

Contents

Introduction.....	2
Ordering information.....	3
Specifications.....	6
Dimensional drawings.....	8
Product certifications.....	12

Ordering information

Starred offerings (★) represent the most common options and should be selected for the fastest delivery times. Non-starred offerings are subject to additional delivery lead time.

Required model components

Model

Code	Description	
1058	Dual Channel Transmitter	★

Measurement 1

Code	Description	
D1	Digital – Modbus RS-485	★
P1	Analog – pH/ORP/ISE	★
C1	Analog – Contacting conductivity	★
T1	Analog – Toroidal conductivity	★
X1	Analog – Dissolved Oxygen	★
L1	Analog – Chlorine	★
Z1	Analog – Ozone	★
N1	Analog – Turbidity	★
F1	Analog – Flow/Current input	

Measurement 2

Code	Description	
E2	None	★
D2	Digital – Modbus RS-485	★
P2	Analog – pH/ORP/ISE	★
C2	Analog – Contacting conductivity	★
T2	Analog – Toroidal conductivity	★
X2	Analog – Dissolved Oxygen	★
L2	Analog – Chlorine	★
Z2	Analog – Ozone	★
N2	Analog – Turbidity	★
F2	Analog – Flow/Current input	

Communication

Code	Description	
A	4–20 mA with digital signal based on HART® Protocol	★

Power

Code	Description	
1	85-265 VAC switching, 50/60 Hz with 4 alarm relays	★
2	24 VDC with 4 alarm relays	★

Additional options

Extended product warranty

Code	Description	
WR3	3 year limited warranty	★
WR5	5 year limited warranty	★

Product certifications

Code	Description	
N5	US Division 2, Non-incendive	★
N6	Canada Division 2, Non-incendive	★

Calibration certification

Code	Description	
QE	Custom calibration certificate (transmitter outputs set to customer specified values)	★

Wire lead connection for digital sensors

Code	Description	
F0	Without factory installed M12 socket (for digital sensor connection with flying leads)	

Cable glands

Code	Description	
A1	Cable gland kit (Qty. 5)	★

Mounting kits

Code	Description	
B1	Panel mounting kit	★
B2	2-in. pipe / wall mounting kit, aluminum bracket	★

Code	Description	
B3	2-in. pipe / wall mounting kit, 316 stainless steel bracket	★

Tagging

Code	Description	
Y2	Cable wire-on stainless steel tag (customer specified marking)	

Spare parts

Mounting and installation

Part Number	Description
23554-00	Cable gland kit (Qty. 5)
24230-00	Hole plug and gland fitting
23820-00	2-in. pipe / wall mounting kit, Aluminum bracket
23820-01	2-in. pipe / wall mounting kit, 316 Stainless Steel bracket
23823-00	Panel mount kit
34059-00	Gasket for panel mounting

Signal input boards

Part number	Description
01058-8002-0001	Universal digital signal board kit, 1058
24263-00	Analog pH/ORP signal input board kit
24264-00	Analog contacting conductivity signal board kit
24265-00	Analog toroidal conductivity signal input board kit
24266-00	Analog chlorine signal input board kit
24267-00	Analog oxygen signal input board kit
24268-00	Analog ozone signal input board kit
24412-00	Kit, turbidity signal board PCBA
24413-00	Kit, flow/current input signal board PCBA

Other spare parts

Part number	Description
01058-8001-0001	Conduit entry hole plug kit (Qty. 4)
01058-8003-0001	M12 connector kit, 1058
01058-8005-0001	ASSY, front panel, 1058
01058-8006-001	Internal front panel gasket, 1058
D0000340-01	PCB, 85-265 VAC switching power supply, 56/1058 RoHS
24365-30	24 VDC power supply board for 1058

Specifications

Enclosure

Material: Heat stabilized and reinforced polybutylene terephthalate (PBT)

Ratings: Type 4X, IP66

Dimensions: 6.2 in. L x 6.3 in. W x 5.5 in. H (157 mm x 160 mm x 140 mm)

Conduit openings: Accepts six ½-in. or PG 13.5 conduit fittings.

Display

Features: User customizable, back-lit color LCD with large process variables and user-definable display of diagnostic parameters.

Resolution: 480 x 272 pixels per inch

Dimensions (Diagonal): 4.3 in. (109 mm)

Languages: English, Chinese, Spanish, Portuguese, Italian, French, German, Polish, Russian

Ambient Conditions

Temperature: 14 to 140 °F (-10 to 60 °C)

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

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

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

Note

Some degradation in display response or performance may occur below 23 °F (-5 °C) and above 131 °F (55 °C). Above 140 °F (60 °C), the following components will progressively and automatically shut down: display, USB communications port, current outputs, alarm relays, and main circuit board.

Power

Option 1: 115 Vac ±15% 60 Hz ±6%, 10W; 230 Vac ± 15% 50 Hz ±6%, 10 W

Option 2: 20 to 30 Vdc, 15 W

Current outputs

Four 4-20 mA or 0-20 mA isolated current outputs. Fully scalable. Output 1 superimposes the HART® digital signal. Outputs can be programmed for PID control. Output dampening can be enabled with time constants from 0 to 999 seconds. HART digital communications transmitted via current output 1 is standard on all units.

Max Load: 550 Ohms

Analog Output Accuracy: 0.05 mA (0.3125% of span) at 25 °C

Temperature Effect: less than 0.03 mA drift per 10 °C (+/-0.1875% of span per 10 °C)

Relay outputs

Four alarm relays for process measurement(s) or temperature. Any relay can be programmed for any measurement, timer, TPC or fault alarm operation, instead of a process alarm. When selected, a fault alarm will activate the relay when a sensor or analyzer fault occurs. Each relay can be configured independently.

Relays: Form C, SPDT, epoxy sealed

Maximum Relay Current (resistive): 5.0 A

Inductive Load: ½ HP motor (maximum) at 115/230 Vac

Terminal wire sizes

Power: 24-12 American Wire Gauge (AWG)

Signal Board: 26-16 AWG

Alarm Relays: 24-12 AWG

Current outputs: 26-16 AWG

Digital Sensor compatibility

When configured with the digital sensor signal input board, the 1058 supports select digital Modbus RTU sensors. The communication between the device and the digital sensor is RS-485 with a Baud rate of 9600 and a default address of 1.

See *digital sensor product data sheet* for digital sensor accuracy. The Rosemount 1058 does not affect digital sensor accuracy.

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

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

Dimensional drawings

Figure 1: Panel mount, front view

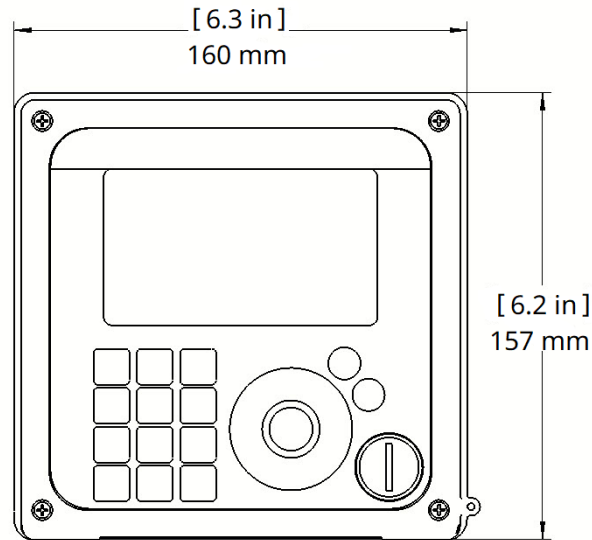
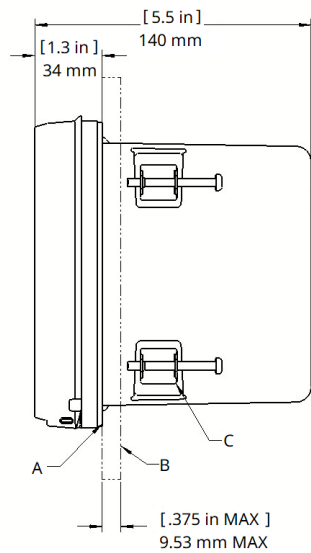
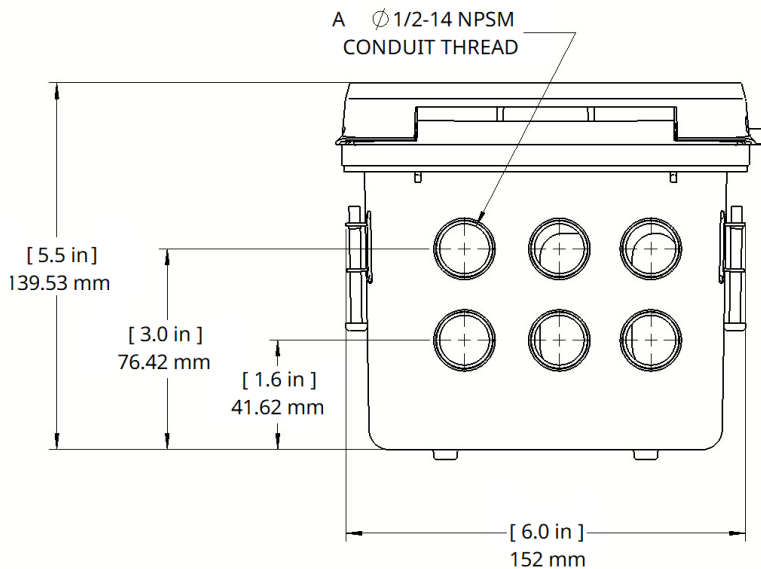


Figure 2: Panel mount, side view



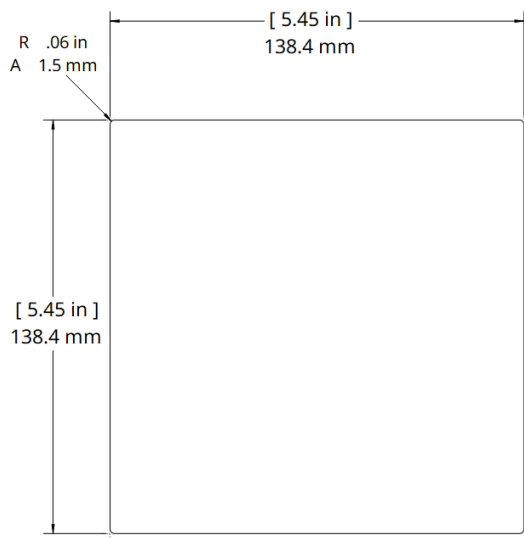
- A. Panel mount gasket
- B. Panel supplied by customer. Maximum thickness: 0.375 in (9.52 mm)
- C. Four mounting brackets and screws provided with the instrument.

Figure 3: Panel mount, bottom view



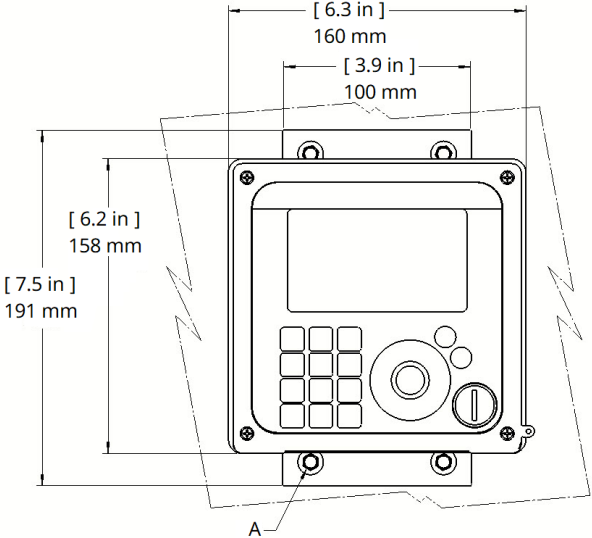
A. Conduit openings

Figure 4: Panel cut-out



A. Maximum

Figure 5: Wall mount, front view



A. QTY 4 Ø5/16 Wall Anchor Screws

Figure 6: Wall mount, side view

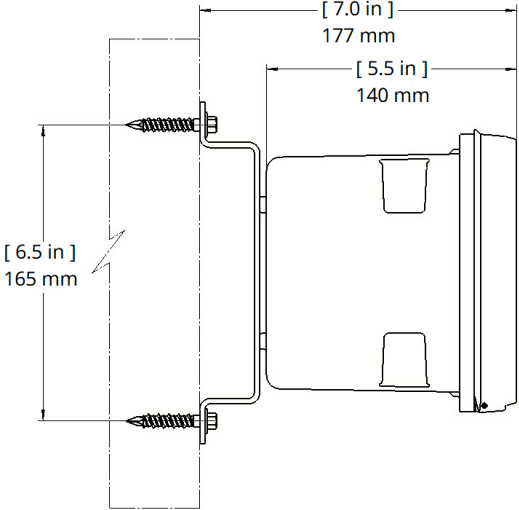
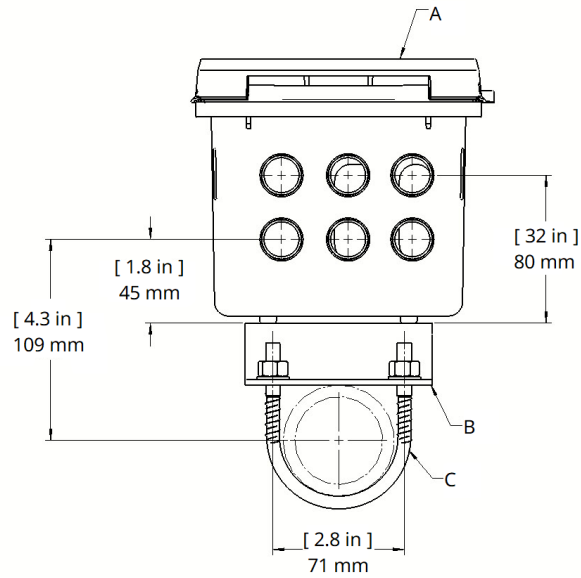
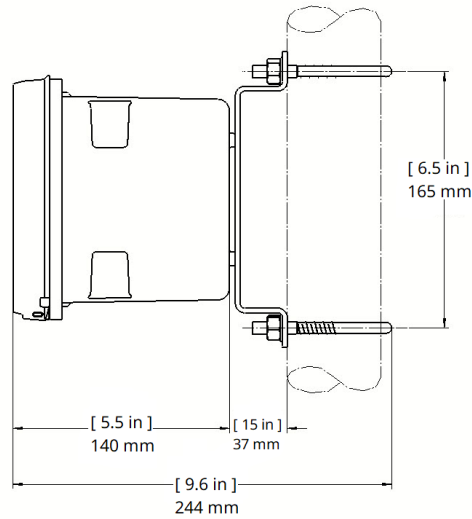


Figure 7: Wall mount, bottom view



- A. Front panel
- B. 2 in (51 mm) pipe mount bracket
- C. Two sets U-bolts for 2 in (51 mm) pipe in kit, PN 23820-00

Figure 8: Pipe mount, side view



Product certifications

European Directive Information

A copy of the EU Declaration of Conformity can be found at the end of the Quick Start Guide. The most recent revision of the EU Declaration of Conformity can be found at [Emerson.com/Rosemount](https://www.emerson.com/Rosemount).

For more information: [Emerson.com/global](https://emerson.com/global)

©2024 Emerson. All rights reserved.

Emerson Terms and Conditions of Sale are available upon request. The Emerson logo is a trademark and service mark of Emerson Electric Co. Rosemount is a mark of one of the Emerson family of companies. All other marks are the property of their respective owners.