

Rosemount™ 1056 Portable Conductivity Validation Instrument

- Loop-calibrated to N.I.S.T. traceable standards with a certificate of calibration
- Certificate of loop calibration
- Exceeds USP¹ accuracy requirements
- Conductivity or resistivity measurement
- Selection of raw or temperature compensation
- Ultrapure water temperature compensation
- Cation temperature compensation
- Two isolated outputs configurable to process conductivity or temperature
- Portable protective case with lock



Features and Applications

The Rosemount Portable Conductivity Validation Instrument is the ideal tool for documenting high purity water quality. This unit can be used as a standard to meet validation requirements by organizations such as the FDA² and USP for pharmaceutical and biotechnology applications. This instrument comes loop-calibrated to NIST traceable standards, which makes it suitable for pharmaceutical, semiconductor, and utility industries.

The portable conductivity validation instrument consists of a Rosemount Model 1056 Analyzer and a Model 404-11-17 stainless steel flow-through cell with a 0.01/cm cell constant. It includes all the cabling and tubing necessary for easy connection to your water system. Available ranges for ultrapure water include 0-50 $\mu\text{S}/\text{cm}$ for conductivity and 0-18.2 $\text{M}\Omega$ for resistivity.

Main Display

The main display of the Model 1056 can be configured to continuously read in $\mu\text{S}/\text{cm}$ or $\text{M}\Omega/\text{cm}$ and the temperature in $^{\circ}\text{C}$ or $^{\circ}\text{F}$. Standard, High purity, Cation, or Raw temperature compensation are standard features and menu selectable on the Model 1056 Analyzer.

1 United States Pharmacopeial Convention, Inc.
2 United States Food and Drug Administration

Specifications

Carrying Case

Rotationally molded black polyethylene with uniform sides and walls and raised reinforced ribs. Heavy-duty tongue and groove valance, full with piano hinge, lid document pouch, spring-loaded padded steel handle, positive closing 1/4-turn drawbolt style latches, and combination lock.

Dimensions: case outer dimensions

Width: 19 in. (48.3 cm)

Depth: 16 in. (40.6 cm)

Height: 12 in. (30.5 cm)

Weight: case weight

Single sensor: 21 lb (9.5 kg)

Dual sensor: 25 lb (11.3 kg)

Power cord:

Length: 25 ft (7.62 m)

Plug: USA standard three-prong plug

Wires: 3 @ 16 AWG

Tubing: Tygon/FEP Teflon lined SE-200 tubing I.D. 3/8 in. (.95 cm) O.D. 9/16 in. (11.43 cm) 45 psi (3.1 bar) @ 70 °F (21 °C)

- Tygon® SE-200 combines the optimal chemical resistance of FEP fluoropolymer and the clarity of Tygon tubing.
- Meets both food and medical use criteria.
- Greater purity than PVC, Polyethylene, or Polypropylene
- Zero extractables

1 Tygon is a registered trademark of Saint-Gobain Performance Plastics Corporation.



Standard Model 404-11-17 shown

1056 Analyzer

Enclosure: Polycarbonate. NEMA 4X/CSA 4 (IP65).

Conduit openings: Accepts 1/2 in. or PG 13.5 conduit fittings.

Display: Monochromatic graphic liquid crystal display. 128 x 96 pixel display resolution. Backlit. Active display area: 2.3 x 3.0 in. (58 x 78 mm).

Ambient temperature and humidity: 32 to 131 °F (0 to 55 °C), relative humidity: 5 to 95% (non-condensing).

Storage temperature effect: -4 to 140 °F (-20 to 60 °C).

Power: Ordering code -01: 115/230 Vac ± 15%, 50/60 Hz. 10 W min. power input.

RFI/EMI: EN-61326

LVD: EN-61010-1



Input: One or two isolated sensor inputs.

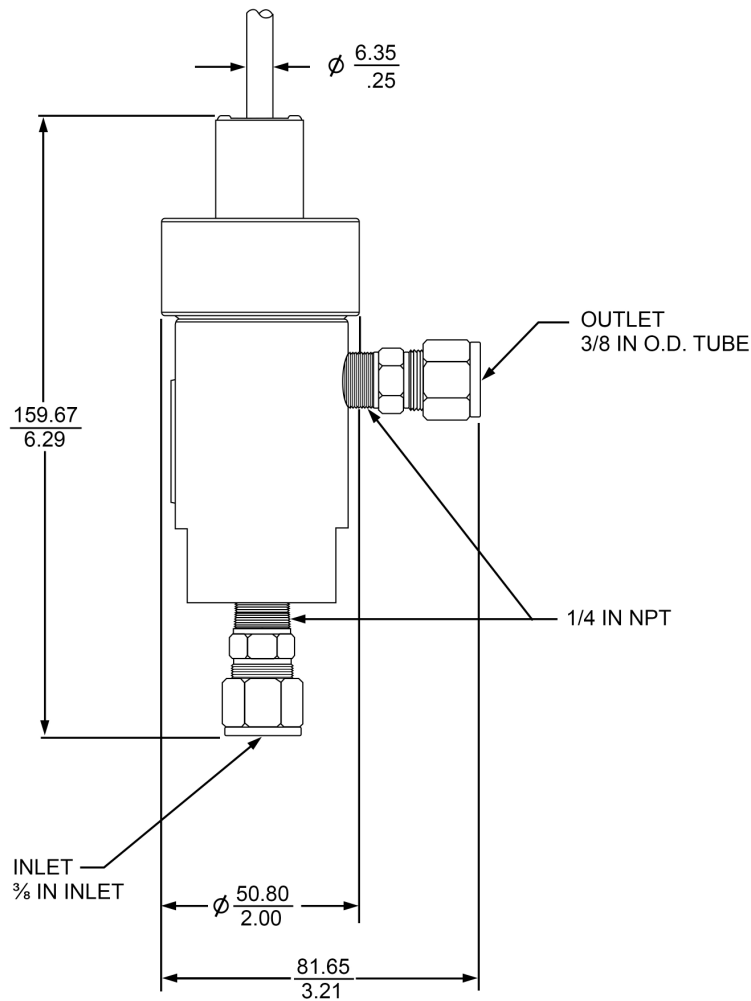
Outputs: Two 4-20 mA or 0-20 mA isolated current outputs. Fully scalable. Max load: 550 Ohm.

Terminal connections rating: Power connector (3 leads): 24-12 AWG wire size. Signal board terminal blocks: 26-16 AWG wire size. Current output connectors (2 leads): 24-16 AWG wire size.



Model 1056

Cell Constant	0.01 μS/cm	0.1 μS/cm	1.0 μS/cm	10 μS/cm	100 μS/cm	1000 μS/cm	10mS/cm	100mS/cm	1000mS/cm
0.01	0.01 μS/cm to 200 μS/cm					200 μS/cm to 6000 μS/cm			
0.1	0.1 μS/cm to 2000 μS/cm					2000 μS/cm to 60mS/cm			
1.0	1.0 μS/cm to 20mS/cm					20mS/cm to 600mS/cm			



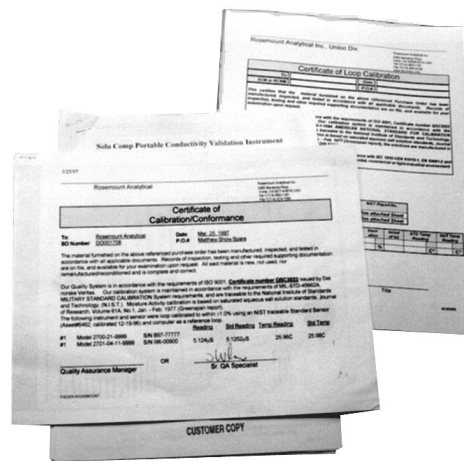
Model 404-11-17

The Conductivity Validation Unit uses a standard 404-11-17 flow cell, removes the standard fittings, and replaces them with a 1/4 in. NPT 3/8 in. barb fitting P/N 9510078.

Ordering Information

The Portable Conductivity Validation Instrument includes a Model 1056 Dual Intelligent Analyzer and a Model 404-11-17 Flow Cell. These units are housed in a portable, protective case. All necessary cabling and tubing is provided.

Model	Description
CVU-01	Portable Conductivity Validation Unit
404-11-17	0.01/cm stainless steel sensor used in CVU-01 and CVU-02
404-12-17	0.1/cm stainless steel sensor used in CVU-02 only
1056-01-20-38-AN	CVU-01
1056-01-20-30-AN	CVU-02
9200306	Teflon lined Tygon tubing 3/8 in. I.D.



Certificate of Calibration

EmersonProcess.com/LiquidAnalysis



YouTube.com/user/RosemountMeasurement



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Emerson
Rosemount
8200 Market Blvd
Chanhassen, MN 55317
USA
T +1 800 999 9307 or +1 952 906 8888
F +1 952 949 7001
Liquid.CSC@Emerson.com