


Specifications

Table 2. Rosemount RDO Optical Dissolved Oxygen Sensor Specifications

Range	0 to 20 ppm (mg/L) or 0 to 200% saturation
Wetted materials	Delrin ¹ , ABS, Viton ² , titanium, polycarbonate/poly(methyl methacrylate) blend
Accuracy	±0.1 ppm between 0 and 8 ppm; ±0.2 ppm between 8 and 20 ppm
Dimensions	Length: 8.0 in. (203 mm); Diameter: 1.9 in. (47 mm)
Rating	IP-67 with cap off; IP-68 with cap installed
Integral cable length	32 ft (10 m)
Maximum cable length (quick disconnect cable only)	4000 ft (1219 m)
Interferences	Monochloramine, dichloramine, and permanganate
Resolution	0.01 ppm (mg/L)
Temperature	0 to 50 °C (32 to 122 °F)
Pressure	Up to 314 psig (2060 kPa abs)
Digital output	Modbus/RS485
Process connections	1-1/4 in. FNPT
Response time	30 sec to 90% of final value; 37 sec to 95% of final value (at 25 °C [77 °F])
Operating life of sensing cap	2 years from first reading
Safety directive	73/23/EEC
EU directives	2004/108/EC for electromagnetic compatibility (EMC) and 72/23/EEC for safety 
Immunity	EN 61000-6-2, electromagnetic compatibility (EMC) part 6-2
Emissions	Class A requirements of CISPR 11: 2004

¹ Delrin is a registered trademark of DuPont DeNemours, LLC

² Viton is a registered trademark of DuPont Dow Elastomers, LLC.

Table 3. Rosemount RDO Optical Dissolved Oxygen Analyzer Specifications

Display	Liquid crystal; character height 0.4 in. (6 mm)
Enclosure	Polycarbonate, rated NEMA 4X, IP67
Mounting	Suitable for pipe or wall mounting
Dimensions (W x H x D)	6.3 x 6.3 x 3.6 in. (16 x 16 x 9.0 cm)
Conduit openings	Sic; PG 13.5 (1/2 in.); three gland fittings and five plugs ship with the analyzer
Power	100 to 240 Vac, approximately 0.15 A, 50-60 Hz
Analog outputs	Two fully scalable 4-20 mA outputs, each loop-powered (9-36 Vdc)
Digital output	Modbus/RS485
Relays	Two low voltage relays, < 50 Vac or Vdc, maximum current 2 A (resistive or inductive) two high voltage relays, 264 Vac max, maximum current 5 A (resistive or inductive)
Barometric pressure range	8.86 to 29.53 in Hg (300 to 1000 mbar)
Barometric pressure accuracy	±0.09 in Hg (±3 mbar)
Ambient temperature and humidity	-20 to 70 °C (-4 to 158 °F); 95% relative humidity (non-condensing)
Safety	UL 61010-1 and CAN/CSA C22.2 #61010-1
EU directives	2004/108/EC for electromagnetic compatibility (EMC)
Immunity	EN 61000-6-2, electromagnetic compatibility (EMC) part 6-2
Emissions	EN61000-6-4 electromagnetic compatibility; includes IEC/EN 61000-3-2 and IEC/EN61000-3-3 where applicable

Dimensional Drawings

Figure 1. Analyzer Dimensions with Lid Closed

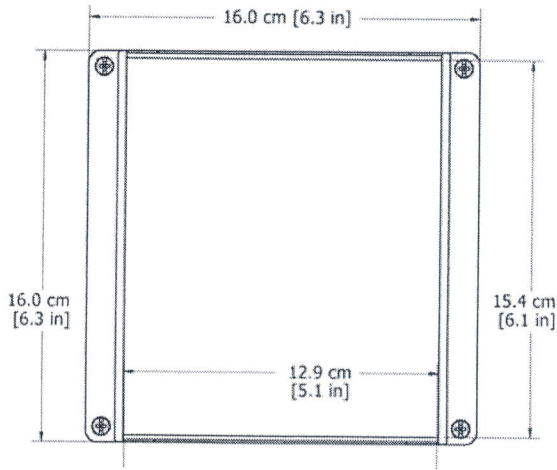


Figure 2. Analyzer Side View

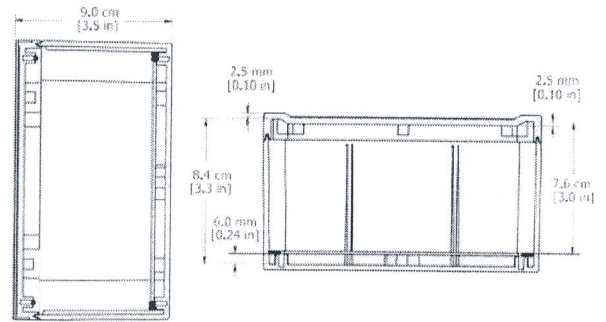


Figure 3. Sensor Side View

