

Digital Transmitter with Electrochemical Formaldehyde (CH₂O) Sensor

Dimensions:	Size	5.0 x 5.0 x 3.0 in (127 x 127 x 76 mm) without optional splash guard (Option –S)
	Weight	14 oz / 400 g
Construction:		Black ABS / Polycarbonate blend, water/dust tight, corrosion resistant
Sensor:	Type	Electrochemical
	Life Span	Approximately 3 years (application dependent)
Gases Detected:		Formaldehyde (CH ₂ O)
Sensor Range:		0 – 5 ppm
System Power:		4-wire: 16-30 VDC, 3W, Class 2 4-wire: 12-27 VAC, 50-60 Hz, 3 VA, Class 2
Operating Temperature:		0°C to +40°C (32°F to 104°F), -40°C (-40°F) with low temperature Option -LT
Operating Humidity:		15 to 90% non-condensing
Indicators:		LCD digital display, 2 line x 16 character, backlit
Communication		BACnet® MS/TP (version 1 rev 14) RS-485, or Modbus® RTU (version 1.1b3) RS-485
Relay:		optional SPDT relay rated 30 volts, 2 amp max (Option –RLY)
Audible:		none
Minimum Detection:		0.01 ppm (with regular calibration maintenance of sensor)
Accuracy:		2% of signal (at conditions and date of calibration)
Repeatability:		<2% of signal
Sensitivity Drift:		<2% signal loss per month
Response Time (T₆₀):		<30 seconds
Resolution:		Display resolution 1.0 ppm Sensor resolution: <0.01 ppm
Warm Up Time:		4 minutes after power up (to full operation)
Cross Sensitivity:		CO @100 ppm = <20ppm, Ethanol @30 = 1ppm, H ₂ @100 = 5ppm, H ₂ S @20 = ~20ppm, Methanol @80 = 10ppm, Methyl Mercaptan @10 = ~6ppm, Tert-butyl Mercaptan @10 = ~6ppm
Safety:		Automatic resetting thermal overload fuse (reset capabilities to 500 times)
Wiring:		VDC or VAC (ground referenced) 4-conductor shielded, 16 AWG stranded within conduit, network wiring (daisy-chain)
Sensor Mounting:		Breathing Zone - slightly heavier than air 4 to 6 ft / 1.2 to 1.8 m from finished floor
Monitoring Area:		3,000 ft ² / 279 m ² , application dependent
Suggested Alarm Points		Low Alarm: 0.3 ppm / Mid Alarm: 0.5 ppm / High Alarm: 1.0 ppm
Certifications: (tested to)		CSA: C22.2 NO.205-12 UL: UL508 (Edition 18): 2018 CE: EMC Directive 2014/30/EU, EN50270:2015, Type 1, EN61010 Listed by BTL RoHS compliant circuit boards This device complies with part 15 of the FCC Rules
Notes:		Never install gas detectors in the direct path of moving air. Abrupt changes to RH can cause a short-term transient signal.

Rev: 2022-01