



PRODUCT SPECIFICATION

LPT-M-F2 Transmitter

Digital (Modbus®) Transmitter with Electrochemical Fluorine (F₂) Sensor

Dimensions: Size	5.0" X 5.0" X 2.8" (127 mm x 127 mm x 71 mm) (dimensions without optional splash guard)
Weight	5.0" X 5.0" X 3.3" (127 mm x 127 mm x 84 mm) (dimensions with optional splash guard) 14 ounces (400 g)
Construction	ABS / Polycarbonate blend, water/dust tight, corrosion resistant (meets IP54 standard with optional splash guard installed)
Sensor: Type	Electrochemical
Life Span	Approximately 1-2 years (application dependent)
Gases Detected	Fluorine (F ₂)
Sensor Range	0 – 1.0 ppm standard
System Power	3-wire: VDC: 12-30 VDC, 3-Watts 4-wire: VAC: 12-27VAC, 3-VA
Temperature	-10°C to +40°C (14°F to 104°F), -40°C (-40°F) with LCD heater option
Humidity	15 to 90% non-condensing
Indicators	LCD digital display, back lit, 128 X 64 pixel graphic (optional heater - applications to -40C)
Signal	Modbus® RS-485 RTU
Relay	One dry contact relay rated 2-amps @ 30v S.P.D.T.
Audible	Internal audible alarm (user controlled)
Minimum Detection	0.02 ppm (with regular calibration maintenance of sensor)
Accuracy	+/- 0.2 ppm @ STP, across measurement range at time of calibration and at calibration concentration + calibration gas concentration error
Repeatability	+/- 2% (with regular calibration maintenance of sensor)
Sensitivity Drift	Zero: 0.1 ppm (on the zero reading) change/year in lab air (with regular calibration maintenance of sensor). Sensitivity: <20% of the sensitivity at 20 deg. C
Response Time	<30 seconds T ₅₀ calculated from 4-min. exposure time with 1-ppm Cl ₂ <80 seconds T ₉₀ calculated from 4-min. exposure time with 1-ppm Cl ₂
Resolution	Display resolution 0.1 ppm, sensor resolution: 0.1 ppm
Warm Up Time	5- minutes after power up (to full operation)
Cross Sensitivity	H ₂ S 1 ppm = -2, AsH ₃ 0.2 ppm = 1, Cl ₂ 10 ppm = 1-ppm = 1.4, SO ₂ 20 ppm = 0.04, CO 100 ppm = 1, H ₆ B ₂ 0.25 ppm = 0.4, HCN 1 ppm = -3, NO ₂ 10 ppm = -19, O ₃ 0.25 = 0.3,
Safety	Automatic resetting thermal overload fuse (reset capabilities to 500 times)
Wiring	4-wire VAC/VDC, 16 awg, 4-conductor shielded network wiring (daisy chain)
Sensor Mounting	Slightly lighter than air 4' to 6' from floor
Monitoring Area	3000 sq. ft.
Certifications	CSA: C22.2 NO.205-12 UL: UL508 (Edition 17): 2007 CE: EMC Directive 2004/108/EC, EN50270:2006, Type-1 & EN61010 FCC
Note	Never install gas detectors in the direct path of moving air.

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