

FX-SMT™ Series Intelligent Single Gas Transmitter

Single gas transmitter ideal for hydrocarbon gases, oxygen content or toxic gases.



FX-SMT
(LEL or PPM)
(combustible)



FX-SMTn



FX-SMT

Optional Accessories

- ◆ Calibration Kit
- ◆ Local Alarm Relay Module (hydrocarbon version only)

The FX-SMT Series Transmitters are loaded with industry features. These transmitters come standard with non-intrusive calibration which eliminates the need to declassify hazardous areas and a user adjustable "calibration reminder" message, smart sensor replacement assemblies available for plug-in operation.

This single gas transmitter can be configured for the detection of hydrocarbons, AsH₃, B₂H₆, Cl₂, ClO₂, CO, F₂, HCl, HCN, HF, H₂S, NH₃, NO, NO₂, O₂, O₃, PH₃, SiH₄, or SO₂.

- ◆ Non-intrusive calibration via a magnetic wand eliminates the need to declassify hazardous areas
- ◆ User adjustable "calibration reminder"
- ◆ Pre-calibrated sensors for quick and easy plug-in operation
- ◆ Connect to Thermo controllers, PLC (Programmable Logic Controllers) or DCS (Distributive Control System)
- ◆ Industrial standard, 4 to 20 mA output
- ◆ Housed in a NEMA 4X, copper-free aluminum enclosure (weather & explosion proof)
- ◆ User friendly and simple to operate
- ◆ Economical

Product Specifications

Sensors

- ◆ Combustibles: catalytic compensated
- ◆ Electrochemical: AsH₃, B₂H₆, Cl₂, ClO₂, CO, F₂, HCl, HCN, HF, H₂S, NH₃, NO, NO₂, O₂, O₃, PH₃, SiH₄, or SO₂

Analog Output

4-20 mA

Relay Outputs (hydrocarbon only)

Optional Local Alarm Relay Module contains three SPDT (Form C) relays housed in a separate explosion-proof junction box. Each relay rated at 10A/30 VDC, 10A/250 VAC

Accuracy

±10% of reading

Repeatability

±5% of reading

Operating Temperature

-4°F to 113°F (-20°C to 45°C)

Humidity

0 to 95% RH, non-condensing

Alarms

Low/High Gas and Sensor Failure Indicator with visual LED

Display

1 x 16 character LCD

Alarm Delay

User selectable

Controls

- ◆ Four push-button switches to set the parameters of range, alarm setting, alarm delay, and alarm latching
- ◆ Magnetic switch for non-intrusive calibration

Power Consumption

- ◆ 4 watts at 24 VDC (combustible only), 3 wires
- ◆ 280 mW at 24 VDC (toxic/O₂), 2 wires

Input Power

10-28 VDC, loop-powered

Dimensions

6.2 in (158 mm) L x
4.6 in (117 mm) H x
10 in (254 mm) W

Weight

5 lbs (2.3 kg)

Case Materials

Aluminum - high impact, chemical, EMI & RFI resistant

Approvals

- ◆ UL Classified for Class I, Division 1, Groups B, C, & D (combustible version)
- ◆ CSA Classified for Class I, Division 1, Groups B, C, & D (toxic/O₂)

Response Time

- ◆ 90% in less than 60 seconds (except Combustibles, HCL, and HF)
- ◆ 90% in less than 70 seconds (HCL)
- ◆ 90% in less than 90 seconds (HF)
- ◆ 90% in less than 30 seconds (Combustibles)

Warranty

One year (materials and workmanship)

| Gas | Sensor Type | Formula | Standard Range |
|-------------------|-----------------|-------------------------------|--------------------------------------|
| Ammonia | Electrochemical | NH ₃ | 0 to 100 ppm in 1 ppm increments |
| Arsine | | AsH ₃ | 0 to 1.00 ppm in 0.01 ppm increments |
| Carbon monoxide | | CO | 0 to 500 ppm in 1 ppm increments |
| Chlorine | | Cl ₂ | 0 to 10.0 ppm in 0.1 ppm increments |
| Chlorine dioxide | | ClO ₂ | 0 to 2.00 ppm in 0.01 ppm increments |
| Diborane | | B ₂ H ₆ | 0 to 1.00 ppm in 0.01 ppm increments |
| Fluorine | | F ₂ | 0 to 10.0 ppm in 0.1 ppm increments |
| Combustible | | Catalytic | |
| Hydrogen chloride | Electrochemical | HCl | 0 to 30.0 ppm in 0.1 ppm increments |
| Hydrogen cyanide | | HCN | 0 to 50.0 ppm in 0.1 ppm increments |
| Hydrogen fluoride | | HF | 0 to 10.0 ppm in 0.1 ppm increments |
| Hydrogen sulfide | | H ₂ S | 0 to 100 ppm in 1 ppm increments |
| Nitric oxide | | NO | 0 to 100 ppm in 1 ppm increments |
| Nitrogen dioxide | | NO ₂ | 0 to 20.0 ppm in 0.1 ppm increments |
| Oxygen | | O ₂ | 0 to 30.0% Vol. in 0.1% Vol. |
| Ozone | | O ₃ | 0 to 1.00 ppm in 0.01 ppm increments |
| Phosphine | | PH ₃ | 0 to 1.00 ppm in 0.01 ppm increments |
| Silane | | SiH ₄ | 0 to 20.0 ppm in 0.1 ppm increments |
| Sulfur dioxide | | SO ₂ | 0 to 20.0 ppm in 0.1 ppm increments |



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