

FX-SMT™ Series

Intelligent single gas transmitter

The FX-SMT Series transmitters are loaded with features. These transmitters come standard with non-intrusive calibration - eliminating the need to declassify hazardous areas, a user adjustable “calibration reminder” message, and pre-calibrated sensors for quick, plug-in operation.

Single gas transmitter ideal for the detection of combustible, AsH₃, B₂H₆, Cl₂, ClO₂, CO, F₂, HCl, HCN, HF, H₂S, NH₃, NO, NO₂, O₂, O₃, PH₃, SiH₄, or SO₂

Optional Accessories

- Calibration kit
- Local alarm relay module (hydrocarbon version only)
- Splash guard
- Flow through adapter
- Air aspirated sample draw adapter

Features

- Dual ranges standard for combustible gases (LEL/ppm)
- 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’s controllers, PLC (Programmable Logic Controllers), or DCS (Distributive Control System)
- Industry standard 4 to 20 mA output

- Housed in a rugged, copper-free aluminum enclosure (weather and explosion proof)
- User friendly and simple to operate
- Economical
- Splash resistant NEMA 4X



Intelligent single gas transmitter

The FX-SMT Series gas transmitters are part of Thermo's complete gas detection family, which includes single gas portable monitors to multi-point integrated systems. You can be confident that our versatile solutions and worldwide customer support will ensure you maximum productivity.

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 for oxygen and toxic gases

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 1.0 ppm in 0.01 ppm increments
Phosphine		PH ₃	0 to 1.0 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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