

FX-IR™ Infrared Single Gas Transmitter

Unique single gas transmitter with dual infrared technology to detect hydrocarbons

Key Features / Benefits

- ◆ Dual detector infrared technology to monitor hydrocarbon gases in virtually any environment
- ◆ Immune to catalyst poisons such as silicone & chlorinated hydrocarbons
- ◆ Can operate in oxygen deficient or inert atmospheres
- ◆ Excellent long term stability
- ◆ Non-intrusive calibration via a magnetic wand eliminates the need to declassify hazardous areas
- ◆ Housed in a rugged copper-free aluminum enclosure (weather & explosion proof)
- ◆ Housing suitable for indoor or outdoor installation in hazardous environment
- ◆ Liquid Crystal Display (LCD) with back light
- ◆ Minimum five year expected sensor life
- ◆ Connect to Thermo's controllers, PLC (Programmable Logic Controllers), or DCS (Distributive Control System)
- ◆ Industry standard 4 to 20 mA output
- ◆ User friendly - simple to operate



The FX-IR transmitter uses dual infrared technology to detect hydrocarbon gases. This unique transmitter is calibrated to either hexane, methane, or propane standards in lower explosive limits (LEL) or parts per million (ppm) ranges. This dual infrared design provides excellent long-term stability, eliminating the need for frequent calibration and providing additional sensitivity for the harshest environment.

Optional Accessories:

- ◆ Splash guard
- ◆ Calibration kit
- ◆ Local alarm relay module
- ◆ Air aspirated sample draw adapter
- ◆ Flow through adapter

Product Specifications

The FX-IR gas transmitter is 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 your maximum productivity.

Sensor

Dual detector infrared

Analog Output

4-20 mA

Relay Outputs

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

±5% of reading

Repeatability

±3% of reading

Response Time

60% of full response in 12 seconds

Warm-Up

Less than five minutes

Drift

Less than 5% of full scale/year

Operating Temperature

-22°F to 140°F (-30°C to 60°C)

Humidity

0 to 95% RH, non-condensing

Alarm

Low/High Gas & Sensor Failure Indicator with visual LED

Display

1 x 16 character LCD with backlight

Alarm Delay

User selectable

Controls

- ◆ Four push-button switches to set up various parameters (range, alarm setting, alarm delay, and alarm latching)
- ◆ Magnetic switch for non-intrusive calibration

Power Consumption

7 watts @ 24 VDC

Input Power

10-28 VDC

Dimensions

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

Weight

5 pounds (2.3 kg)

Case Materials

Aluminum - high impact, chemical, EMI & RFI resistant

Approvals

UL classified for Class I, Division 1, Groups B, C, & D

Warranty

One year (materials and workmanship)

Gas	Formula	Standard Range
Hexane	C ₆ H ₁₄	0 to 1000 ppm in 10 ppm increments
Hexane	C ₆ H ₁₄	0 to 100% LEL in 1% increments
Methane	CH ₄	0 to 5000 ppm in 50 ppm increments
Methane	CH ₄	0 to 100% LEL in 1% increments
Propane	C ₃ H ₈	0 to 2000 ppm in 20 ppm increments
Propane	C ₃ H ₈	0 to 100% LEL in 1% increments



This specification sheet is for informational purposes only and is subject to change without notice. Thermo makes no warranties, expressed or implied, in this product summary. © 2005 Thermo Electron Corporation. All rights reserved. Thermo Electron Corporation, Analyze. Detect. Measure. Control are trademarks of Thermo Electron Corporation

Lit_FXIREID_9/05

Environmental Instruments
First Responder /
Industrial Hygiene Instruments

www.thermo.com/ih

27 Forge Parkway
Franklin, MA 02038 USA

Takkebijsters 1
Breda, BL 4817
The Netherlands

+1 (866) 282-0430
+1 (508) 520-1460 fax

+33 (0) 76 5879888
+33 (0) 76 5816520 fax

Thermo
ELECTRON CORPORATION