



# RAEGuard IR

## Fixed Hydrocarbon Gas Monitor, 4 to 20 mA/RS-485 Transmitter, FGM-12XX

The **RAEGuard IR** is a permanently mounted (fixed) hydrocarbon gas sensor/transmitter that operates from a 9 to 36 VDC power source and provides an analog (4 to 20mA) and digital (RS-485) signal output in the range of 0 to 100% LEL hydrocarbon equivalent or 0 to 50,000ppm concentration of CO<sub>2</sub>. The **RAEGuard IR** is based on RAE Systems' patented technology of non-dispersive infrared (NDIR) for methane, hydrocarbon, or carbon dioxide measurement. Housed in an explosion-proof enclosure, the **RAEGuard IR** is equipped with a local digital display of the gas concentration and function keys for performing calibration. The **RAEGuard IR** is operated with a standard 4 to 20mA/RS-485 controller or as a stand-alone sensor module.

### Key Features

- Non-dispersive infrared technology with built-in temperature compensation
- 4 to 20mA analog and RS-485 digital signal output of 0 to 100%LEL hydrocarbons including methane, propane, or 0 to 50,000ppm of CO<sub>2</sub>
- No poisoning problem on catalytic beads
- Explosion-proof enclosure for hazardous environment application
- Local displays with adjustment keys
- Non-intrusive calibration
- Magnetic key interface eliminates need to open explosion-proof housing when making calibration or other minor adjustments
- Long life infrared source and detector
- Operation at 9 to 36 VDC
- Dry-contact output (<30V, 2A)

### Applications:

- Refineries
- Oil production
- Chemical plants
- Industrial safety
- Waste water treatment plants
- Shipyard and maritime
- Power plants
- Steel mills

### Hazardous Location Classification:

- UL: Class I, Division 1, Groups B, C and D
- Temperature Code T6
- Chinese Certificate: Ex d IICT6



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