



RAEGuard LEL

Fixed Combustible Gas Monitor, 4-20 mA transmitter

The **RAEGuard LEL** is a permanently mounted (fixed) catalytic bead combustible gas transmitter that operates from 9 to 36 VDC power source and provides a 4-20mA analog output in the range of 0-100%LEL combustible gas. The microprocessor based circuit is housed in an explosion-proof enclosure, the **RAEGuard LEL** is equipped with a local digital display of the gas concentration and function keys for performing calibration. The **RAEGuard LEL** is operated with a standard 4-20mA controller or as a stand-alone sensor module.

Key Features

- Highly poison-resistant catalytic bead combustible gas LEL sensor
- 4-20mA analog output of 0-100%LEL combustible gas including methane, acetylene, propane or other combustible gases
- Explosion-proof enclosure for hazardous environment application
- Magnetic key interface eliminates need to open explosion-proof housing when making calibration or other minor adjustments
- Operation at 9 to 36 VDC
- Dry contact output (<30V, 2A)

Applications:

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

Hazardous Location Classification:

- UL: Class I, Division 1, Groups B, C and D
- Temperature Code T6



ATEX

Specifications

Default Sensor Settings

Gas	Range	Resolution	Response Time (T ₉₀)
Combustible Gas	0-100%LEL	1%LEL	15s

Detector Specifications

Size	12.7cmx12.7cmx11.5cm (5.0"Lx5.0"Wx4.5"H)
Weight	2.5kg (5.5 lbs)
Detector	7R-sized protected catalytic bead combustible gas sensor
Range	0-100% LEL
Resolution	1% LEL
Accuracy	+/- 2% LEL or +/-10% of reading
Hazardous Location Classifications	UL: Class I, Division 1, Group B,C,D Temperature Code T6
Power	9-36 VDC max 160mA at 24V
Signal Output	4-20mA with 12V compliance at 24V power
Sampling	Internal diffusion
Display	7-segment, 4-digit LCD with 4 color-coded fault LEDs
Response Time (t₉₀)	15 seconds to 90% of reading to 50%LEL methane
User Interface	Magnetically accessed keys for calibration
Calibration	Two point field calibration
Temperature	-20 to +55 °C (-4 to +131 °F)
Humidity	0-95% relatively humidity (non-condensing)
Pressure	700-1,300hPa
Dry Contact	Max 30V, 2A
Mounting	2 holes 133mm (5.25") from center to center
Wiring	3 or 4 wires

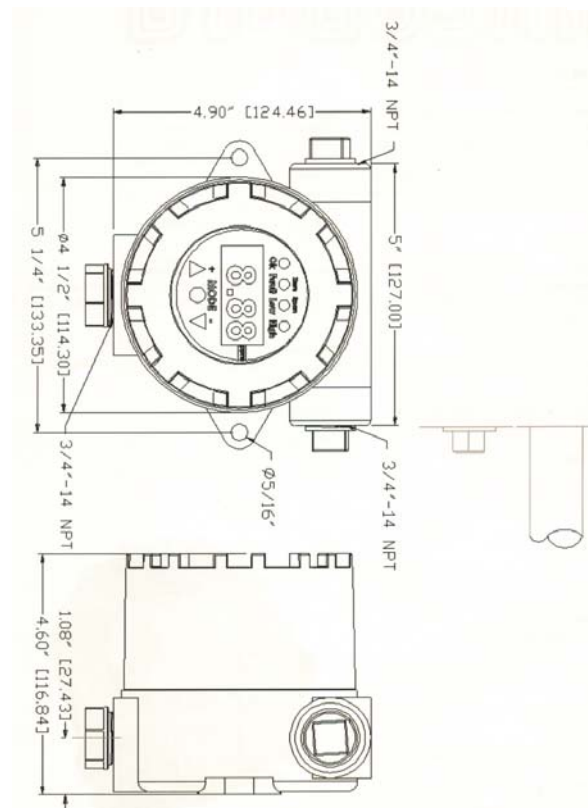
*Ongoing projects to enhance our products means that these specifications are subject to changes

RAEGuard LEL Ordering Information

RAEGuard LEL Basic Kit FGM-1100

- RAEGuard LEL detector with 7R-size LEL sensor
- Installation, operation and maintenance manual
- Magnetic key
- Calibration adapter

Installation Drawing



RAE Systems Inc.

3775 North First Street, San Jose, CA • 95134 • USA
 Tel: 408.952.8200 • Fax: 408.952.8480
 Email: raesales@raesystems.com
<http://www.raesystems.com>

RAE Systems Europe

Orestads Boulevard 69, 2300 Copenhagen S • Denmark
 Tel: +45.8652.5155

RAE Systems (Hong Kong) Ltd.

Room 8, 6/F, Hong Leong Plaza, 33 Lok Yip Road, Fanling, N.T. • Hong Kong
 Tel: 852.2669.0828

