

# B-GUARD MILLENIUM LEL

Infrared Hydrocarbon Gas Detector



GTA Millennium Series hydrocarbon detector is a single source dual wavelength instrument. The sensing and reference elements are self-compensating for optical integrity and other signal inhibitors. The industry standard 4 -20 mA analog output provides remote alarm, fault and calibration signals.

## APPLICATIONS

- The GTA Millennium Series hydrocarbon detectors are designed to be used in the same applications where catalytic bead sensors have been applied.
- Refineries
- Gas turbines
- Drilling and production platforms
- Chemical plants
- Fuel loading facilities
- Compressor stations
- Oil well logging
- Wastewater treatment facilities
- LNG/LPG processing and storage facilities
- Transportation facilities

## KEY FEATURES

- CSA & FM Performance Approved
- Infrared sensing technology
- Virtually maintenance free
- Low cost of ownership, over five years operating life
- Immune to poisoning and etching
- Designed for harsh environments
- Explosion proof
- Compact & lightweight
- Fast response time
- Smart calibration
- Self-compensating optical bench
- No moving parts
- Heated optical chamber
- Low power consumption
- Operates in constant hydrocarbon background
- Operates in anaerobic atmospheres
- Fault indications for all failure states
- Routine calibrations are not required
- 4 to 20 mA output
- 0 to 100% LFL detection range
- Can be coupled with SEC 2000 transmitter for network applications.
- RS-485 communication link available
- Digital Display option available

## B-GUARD MILLENIUM LEL

## SPECIFICATIONS

Specifications subject to change without notice

<b>Operating Voltage</b>	24VDC (18 – 32VDC)
<b>Current Draw</b>	210mA avg, 400mA peak
<b>Power Consumption</b>	5 W Max.
<b>Analog Output</b>	4 – 20 mA (sourced)
<b>Range</b>	0 – 100% LEL
<b>Gases</b>	Methane, Propane, and Butane. Other hydrocarbon gases are available
<b>Accuracy</b>	± 3% 0 to 50% LFL ± 5% 51 to 100% LFL
<b>Response Time</b>	T50 < 5 seconds T90 < 10 seconds
<b>Temperature Rating</b>	- 40°C to + 70°C - 40°F to + 158°F
<b>Humidity</b>	0-99% (non-condensing)
<b>Housing Construction</b>	Nickel-plated aluminum and stainless steel. Optional stainless steel model.
<b>Approvals</b>	CSA, FM Performance Approved
<b>Classification</b>	Class 1, Div. 1, Groups B, C & D
<b>Mounting</b>	¾" NPT
<b>Weight</b>	2 lbs. (0.9 kg.)

## UNIT STATUS CHART

Current Output	Status
4-20 mA	Normal measuring
0.0 mA	Unit Fault
0.2 mA	Reference channel fault
0.4 mA	Analytical channel fault
0.8 mA	Unit Warm up
1.0 mA	Optics fault
1.2 mA	Zero drift fault
1.6 mA	Calibration fault
2.0 mA	Unit Spanning
2.2 mA	Unit Zeroing
4.0 mA	Zero gas level
5.6 mA	10% LEL
8.0 mA	25% LEL
12 mA	50% LEL
16 mA	75% LEL
20 mA	100% LEL
20.1-23 mA	Over range (> 100 %)



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