

# Personal Wireless Gas Monitor

## **RAE Systems ToxiRAE Pro LEL**

The ToxiRAE Pro LEL is the world's first wireless personal combustible gas monitor. The ToxiRAE Pro LEL takes worker protection to the next level by providing safety professionals wireless access to real-time instrument readings and alarm status from any location for better visibility and faster response<sup>1</sup>.

The ToxiRAE Pro LEL promptly detects and accurately monitors explosives and combustibles in concentrations from 0 to 100% of the lower explosive limit (LEL). With an onboard library of 55 correction factors, the ToxiRAE Pro LEL can be programmed to automatically read in % LEL of the specified compound.

### FEATURES

- World's first wireless personal combustible gas monitor
- Wireless, wireless-capable, or non-wireless versions are available<sup>1,2,5</sup>
- Wireless elevates worker protection to the next level
- Easy to maintain with replaceable sensor, filter, and Lithium-ion battery
- Fully-automated bump testing and calibration with AutoRAE 2<sup>2</sup>
- Wireless access to real-time instrument readings and alarm status from any location
- Unmistakable five-way local and remote wireless notification of alarm conditions
- 55 built-in LEL correction factors
- Largest display in its class
- Reliable, rugged, and intrinsically safe
- Continuous datalogging
- Easy to use

### APPLICATIONS

- Construction
- Foundries
- Steel Mills
- Oil and Gas
- Pharmaceutical
- Utilities
- Water and Wastewater
- Welding/Hot Work



ToxiRAE Pro LEL  
with and without the  
protective rubber boot



**CALL GEOTECH TODAY (800) 833-7958**

**Geotech Environmental Equipment, Inc.**

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## RAE Systems ToxiRAE Pro LEL

### SPECIFICATIONS<sup>3</sup>

<b>Size</b>	4.6" H x 2.4" W x 1.2" D (118 x 60 x 30 mm)
<b>Weight</b>	8.29 oz. (235 g)
<b>Sensor</b>	Catalytic bead LEL sensor with 0 to 100% LEL range and 1% LEL resolution. Response time (T <sub>90</sub> ) < 15 seconds
<b>Detectable Gases</b>	Combustible gases and vapors from paints, coatings, fuels, degreasers, adhesives, solvents, resins, etchers, inks, pesticides, herbicides, etc. using 55 onboard correction factors
<b>Battery</b>	Rechargeable Lithium-ion battery - Operating time: > 12 hours (normal operation) - Recharge time: < 4 hours through charging cradle
<b>Display</b>	Graphical LCD display with white LED backlighting (activated when monitor is in alarm or with a button press)
<b>Display Readout</b>	- Real-time reading of % of lower explosive limit (LEL); battery status; data logging on/off; wireless on/off and reception quality - Peak values
<b>Keypad</b>	2 buttons for operation and programming
<b>Sampling</b>	Diffusion
<b>Calibration</b>	Automatic with AutoRAE 2 Test and Calibration Station <sup>2</sup> or manual
<b>Alarm Modes</b>	Wireless remote alarm notification <sup>1</sup> ; audible (95 dB @ 30 cm), vibration, visible alarm (flashing bright red LEDs), and on-screen indication of alarm conditions
<b>Datalogging</b>	Continuous datalogging with a three-month capacity (at one-minute intervals) - User-configurable datalogging interval (from 1 to 3,600 seconds)
<b>Communication and Data Download</b>	- Data download and instrument set-up on PC via charging and PC comm. cradle - Data download via AutoRAE 2 Automated Test and Calibration Station <sup>2</sup> - Wireless data and status transmission <sup>2</sup> via built-in RF modem (optional)
<b>Wireless Network</b>	ProRAE Guardian Real-Time Wireless Safety System or Closed-Loop Network with the EchoView Host
<b>Wireless Frequency</b>	ISM license-free bands
<b>Wireless Range (Typical)</b>	ToxiRAE Pro LEL to Mesh Router, EchoView Host, or Mesh Reader <sup>2</sup> ~ 330 feet (100 meters) ToxiRAE Pro LEL to RAElink3 Mesh or RAElink3 Z1 Mesh modems ~ 33 feet (10 meters)
<b>Operating Temperature</b>	-4° to 122°F (-20° to 50°C)
<b>Humidity</b>	0% to 95% relative humidity (non-condensing)
<b>Dust and Water Resistance</b>	IP65 rating for dust and water ingress protection (validated by an independent test laboratory)
<b>Hazardous Location Approvals</b>	US and Canada: CSAUS Class I, Division 1, Groups A, B, C and D. T-code T4 Class I, Zone 0 A/Exia IICT4 Europe: ATEX: CE, Ex II 1G, Ex ia IIC Ga T4 IECEX: Ex ia IIC Ga T4 China: Ex ia IICT4
<b>CE Compliance (European Conformity)</b>	EMC directive: 2004/108/EC. R&TTE directive: 1999/5/EC. ATEX directive: 94/9/EC
<b>Performance Test Compliance</b>	C22.2 No 152 ANSI/ISA-12.13.01
<b>Warranty</b>	- Two years on LEL sensor and non-consumable components - One year on battery and other consumable parts

### TOXIRAE PRO LEL SINGLE-PACK COMES WITH:

- ToxiRAE Pro LEL monitor with sensor, alligator clip, protective rubber boot, and rechargeable battery installed
- Charging and PC communication cradle
- PC communication cable
- AC adapter (100 to 240 V, 50/60 Hz AC to 12 V DC)
- Calibration adapters
- Quick Start Guide
- CD with documentation
- ProRAE Studio II software for PC-based instrument configuration and data management
- Calibration card, quality certificate, packing list, and warranty/registration card

### OPTIONAL ACCESSORIES

- AutoRAE 2 Automated Test and Calibration Station<sup>2</sup>
- Multi-unit charging station<sup>2</sup> for up to five monitors
- Contact Geotech for other accessories, maintenance kits, calibration gas, sensors, and replacement parts

1 Wireless units have a functioning RF modem and are ready for wireless deployments; Non-wireless units cannot be upgraded to wireless. Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.

2 Contact Geotech for availability.

3 Specifications are subject to change.

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