



# ToxiRAE Pro LEL

Personal Wireless Monitor  
for Combustible Gases and Vapors



The ToxiRAE Pro LEL is the world's first wireless personal combustible gas monitor<sup>1,2</sup>. 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. 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 34 correction factors, the ToxiRAE Pro LEL can be programmed to automatically read in % LEL of the specified compound.

- World's first wireless personal combustible gas monitor
- 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>

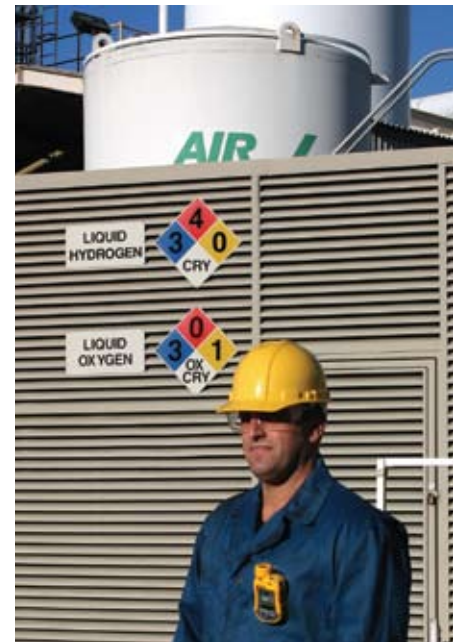
## KEY FEATURES

Wireless. Personal. Proven.

- Wireless access to real-time instrument readings and alarm status from any location
- Unmistakable five-way local and remote wireless notification of alarm conditions
- 34 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



The world's first personal wireless combustible gas monitor protects workers without getting in the way



AutoRAE 2  
Compatible



# ToxiRAE Pro LEL



Personal Wireless Monitor for Combustible Gases and Vapors

## SPECIFICATIONS<sup>3</sup>

Size	4.6" H x 2.4" W x 1.2" D (118 x 60 x 30 mm)
Weight	8.29 oz. (235 g.)
Sensor	Catalytic bead LEL sensor with 0 to 100% LEL range and 1% LEL resolution. Response time (T <sub>90</sub> ) < 15 seconds
Detectable Gases	Combustible gases and vapors from paints, coatings, fuels, degreasers, adhesives, solvents, resins, etchers, inks, pesticides, herbicides, etc. using 34 onboard correction factors
Battery	Rechargeable Lithium-ion battery - Operating time: > 12 hours (normal operation) - Recharge time: < 4 hours through charging cradle
Display	Graphical LCD display with white LED backlighting (activated when monitor is in alarm or with a button press)
Display Readout	- Real-time reading of % of lower explosive limit (LEL); battery status; data logging on/off; wireless on/off and reception quality - Peak values - Calibration and measurement gases; correction factors
Keypad	2 buttons for operation and programming
Sampling	Diffusion
Calibration	Automatic with AutoRAE 2 Test and Calibration Station <sup>2</sup> or manual
Alarm Modes	Wireless remote alarm notification <sup>1,2</sup> ; audible (95 dB @ 30 cm), vibration, visible alarm (flashing bright red LEDs), and on-screen indication of alarm conditions - Additional diagnostic alarm and display message for low battery
Datalogging	Continuous datalogging with a three-month capacity (at one-minute intervals) - User-configurable datalogging interval (from 1 to 3,600 seconds)
Communication and Data Download	- 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>1,2</sup> via built-in RF modem (optional)
Wireless Network	RAE Systems Dedicated Wireless Network
Wireless Frequency <sup>1,2</sup>	ISM license-free bands
Wireless Range <sup>1,2</sup> (Typical)	300 feet (100 meters)
Operating Temperature	-4° to 122° F (-20° to 50° C)
Humidity	0% to 95% relative humidity (non-condensing)
Dust and Water Resistance	IP-65 rating for dust and water ingress protection (validated by an independent test laboratory)
Hazardous Location Approvals	US and Canada:  Class I, Division 1, Groups A, B, C and D. T-code T4 Class I, Zone 0 A/Exia IIC T4 Europe: ATEX:  II 1G, Ex ia IIC Ga T4 IECEx: Ex ia IIC Ga T4 China: Ex ia IIC T4
CE Compliance (European Conformity)	EMC directive: 2004/108/EC. R&TTE directive: 1999/5/EC. ATEX directive: 94/9/EC
Performance Test Compliance	C22.2 No 152 ANSI/ISA-12.13.01
Warranty	- Two years on LEL sensor and non-consumable components - One year on battery and other consumable parts

<sup>1</sup> Wireless functionality is scheduled for availability in 2011 in North America and Europe. Contact RAE Systems for availability in other regions.

<sup>2</sup> Contact RAE Systems for availability.

<sup>3</sup> Specifications are subject to change.

<sup>4</sup> Wireless units have a functioning RF modem and are ready for wireless deployments; Wireless-capable units can be upgraded to wireless in the field for a fee; 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.

## 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
- Refer to the Portables Pricing Guide for other accessories, maintenance kits, gas, sensors, and replacement parts

## ORDERING INFORMATION (MODEL: PGM-1820)

- Wireless, wireless-capable, or non-wireless versions are available<sup>1,2,4</sup>
- Bulk packages of 10 units are available for select configurations
- Refer to the Portables Pricing Guide for part numbers



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