



# ToxiRAE Pro LEL

Personal Wireless Monitor  
For Combustible Gases and Vapors



The ToxiRAE Pro LEL is the world's first personal wireless combustible gas monitor. The ToxiRAE Pro LEL provides safety professionals with wireless remote access to real-time instrument readings and alarm status for better visibility and faster incident response<sup>1</sup>. The ToxiRAE Pro LEL quickly detects and accurately monitors combustibles in concentrations from 0 to 100% of the lower explosive limit (LEL). With the most extensive onboard gas library in its class, the ToxiRAE Pro LEL can be programmed to automatically read in %LEL of the specified compound.

- Wireless elevates safety to the next level
- Easy to maintain with replaceable sensor, filter, and Li-ion battery
- Fully-automatic 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
- 55 built-in LEL correction factors
- Largest display in its class
- Reliable, rugged, and intrinsically safe
- Continuous datalogging
- Easy to use

## APPLICATIONS

- Construction
- Foundries
- Oil and gas
- Pharmaceutical
- Steel mills
- 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 55 onboard correction factors
Battery	Rechargeable Li-ion battery - Operating time: > 12 hours (normal operation, non-wireless) - 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
Keypad	2 buttons for operation and programming
Sampling	Diffusion
Calibration	Automatic with AutoRAE 2 Test and Calibration System <sup>2</sup> or manual
Alarm Modes	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
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 Automatic Test and Calibration System <sup>2</sup> - Wireless data and status transmission via built-in RF modem (optional)
Wireless Network	ProRAE Guardian Real-Time Wireless Safety System or Closed-Loop Network with the EchoView Host
Wireless Frequency	ISM license-free bands
Wireless Range (Typical)	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)
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	CSA:  Class I, Division 1, Groups A, B, C and D, T-code T4 Class I, Zone 0 A/Exia IIC T4 ATEX:  II 1G, Ex ia IIC Ga T4 IECEX: Ex ia IIC Ga T4 China Ex: 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 the LEL sensor and non-consumable components - One year on battery and other consumable 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 RAE Systems for availability.

3 Specifications are subject to change.

## 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, and warranty/registration card

## OPTIONAL ACCESSORIES

- AutoRAE 2 Automatic Test and Calibration System
- Multi-unit charging station for up to five monitors

## ORDERING INFORMATION (MODEL: PGM-1820)

- Wireless or non-wireless versions are available<sup>1</sup>
- Bulk packages of 10 units are available
- Refer to the Portables Pricing Guide for part numbers for monitors, accessories, maintenance kits, gas, sensors, and replacement parts



## CORPORATE HEADQUARTERS

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