



# ToxiRAE Pro PID

Personal Wireless Monitor  
For Volatile Organic Compounds



The ToxiRAE Pro PID is the world's smallest volatile organic compound (VOC) monitor. Featuring RAE Systems' next-generation PID sensor, the ToxiRAE Pro PID can quickly detect and accurately monitor over 300 VOCs. The ToxiRAE Pro PID provides safety professionals wireless remote access to real-time instrument readings and alarm status for better visibility and faster incident response<sup>1</sup>. With an onboard library of 190 correction factors, the ToxiRAE Pro PID can be programmed to automatically read in equivalent units of the specified compound.

- **Wireless elevates safety to the next level**
- **Available in Industrial Hygiene (advanced) or Safety (basic) configurations**
- **Man Down Alarm with real-time remote wireless notification**
- **Easy to maintain with replaceable sensor, fan, filter, and 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
- Largest display in its class
- Continuous datalogging<sup>3</sup>
- On-board correction factor library for 190 compounds
- Easy to use
- Reliable, rugged, and intrinsically safe



## APPLICATIONS

- Industrial hygiene and safety
  - Chemical plants
  - Government health, safety, security, and environmental agencies
  - Hazardous materials teams, first responders
  - Oil and gas
  - Pharmaceutical plants
- Environmental applications
  - Environmental consulting
  - Soil remediation



Worker exposure monitoring with ToxiRAE Pro PID at a PVC plant

### SPECIFICATIONS<sup>4</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	Photoionization sensor with 10.6 eV (standard) or 9.8 eV <sup>2,3</sup> (optional) lamp. Response time (T <sub>90</sub> ) < 15 sec. (Isobutene). Field-replaceable sensor. Easy access to lamp for cleaning
Detectable Gases	A wide variety of ionizable chemicals using 190 built-in and over 300 published 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 VOC concentrations in parts per million or mg/m <sup>3</sup> ; battery status; data logging on/off; wireless on/off and reception quality - STEL, TWA, and peak values
Keypad	2 buttons for operation and programming
Sampling	Internal fan
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 - Man Down Alarm with pre-alarm and real-time remote wireless notification
Datalogging	- Continuous datalogging <sup>3</sup> 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 - Wireless data and status transmission <sup>1</sup> 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 PID to Mesh Router, EchoView Host, or Mesh Reader <sup>2</sup> ~ 330 feet (100 meters) ToxiRAE Pro PID to RAELink3 Mesh or RAELink3 Z1 Mesh modems ~ 33 feet (10 meters)
Operating Temperature	-4° to 131°F (-20° to 55°C)
Humidity	0% to 95% relative humidity (non-condensing)
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
Warranty	- Two years on non-consumable components - One year on sensor, fan, 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 Available with Industrial Hygiene configurations only.

4 Specifications are subject to change.

### TOXIRAE PRO PID COMES WITH:

- ToxiRAE Pro PID monitor with sensor as specified, 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 adapter
- Combined instrument/sensor cap removal tool
- Quick Start Guide
- CD with documentation
- ProRAE Studio II software for PC-based instrument configuration and data management
- Technical Note TN-106 with ionization energies and correction factors for 300+ VOCs<sup>3</sup>
- 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-1800)

- Industrial Hygiene (advanced) and Safety (basic) configurations are available

#### Industrial Hygiene configurations:

- Advanced PID sensor (0.1 to 2,000 ppm; 0.1 ppm resolution)
- Datalogging
- 9.8 eV or 10.6 eV lamp options

#### Safety configurations:

- 10.6 eV; 1 to 1,000 ppm; 1 ppm resolution PID
- No datalogging
- 10.6 eV lamp only

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