



ToxiRAE Pro PID

Personal Wireless Monitor
for Volatile Organic Compounds



The ToxiRAE Pro PID is the world's smallest wireless volatile organic compounds (VOC) monitor^{1,2}. The ToxiRAE Pro PID 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. Featuring RAE Systems' next-generation PID sensor, the ToxiRAE Pro PID can promptly detect and accurately monitor over 300 VOCs. With an onboard library of 190 correction factors, the ToxiRAE Pro PID can be programmed to automatically read in concentrations of the specified compound.

- World's smallest photoionization detector
- Wireless elevates worker protection to the next level
- Cutting-edge PID with 0.1 to 2,000 ppm range, 0.1 ppm resolution³ and 190 built-in correction factors
- Available in Industrial Hygiene (advanced) or Safety (basic)² configurations

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
- Reliable, rugged, and intrinsically safe
- Largest display in its class
- Continuous datalogging³
- Fully automated bump testing and calibration with AutoRAE 2²
- User-replaceable sensor, filter, fan, and Lithium-ion battery

APPLICATIONS

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



Worker exposure monitoring
with ToxiRAE Pro PID



AutoRAE 2
Compatible






ToxiRAE Pro PID



Personal Wireless Monitor for Volatile Organic Compounds

SPECIFICATIONS⁴

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 ^{2,3} (optional) lamp. Response time (T ₉₀) < 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 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 VOC concentrations in parts per million or mg/m ³ ; battery status; data logging on/off; wireless on/off and reception quality - STEL, TWA, and peak values - Calibration and measurement gases; correction factors
Keypad	2 buttons for operation and programming
Sampling	Internal fan
Calibration	Automatic with AutoRAE 2 Test and Calibration Station ² or manual
Alarm Modes	Wireless remote alarm notification ^{1,2} ; audible (95 dB @ 30 cm), vibration, visible alarm (flashing bright red LEDs), and on-screen indication of alarm conditions - High alarm: 3 beeps and flashes per second - Low alarm: 2 beeps and flashes per second - STEL and TWA: 1 beep and flash per second - Additional diagnostic alarm and display message for low battery and fan stall
Datalogging	- Continuous datalogging ³ 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 ² - Wireless data and status transmission ^{1,2} via built-in RF modem (optional)
Wireless Network	RAE Systems Dedicated Wireless Network
Wireless Frequency ^{1,2}	ISM license-free bands
Wireless Range ^{1,2} (Typical)	300 feet (100 meters)
Operating Temperature	-4° to 131°F (-20° to 55°C)
Humidity	0% to 95% relative humidity (non-condensing)
Dust and Water Resistance	IP-54 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
Warranty	- Two years on non-consumable components - One year on sensor, fan, battery, and other consumable parts

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

² Contact RAE Systems for availability.

³ Available with Industrial Hygiene configurations only.

⁴ Specifications are subject to change.

⁵ 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 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 (Industrial Hygiene versions only)
- Calibration card; quality certificate; packing list; and warranty/registration card

OPTIONAL ACCESSORIES

- AutoRAE 2 Automated Test and Calibration Station²
- Multi-unit charging station² 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-1800)

- Industrial Hygiene (advanced) and Safety (basic)² configurations are available

Industrial Hygiene configurations:

- Advanced PID sensor (10.6 eV; 0.1 to 2,000 ppm; 0.1 ppm resolution)
- Datalogging
- 9.8 eV^{2,3} or 10.6 eV lamp options

Safety configurations²:

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

- Wireless, wireless-capable, or non-wireless versions are available^{1,2,5}
- Refer to the Portables Pricing Guide for part numbers



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.