

# ToxiRAE Pro PID

## Personal Wireless Monitor for Volatile Organic Compounds

### Product description

The ToxiRAE Pro PID is the world's smallest volatile organic compound (VOC) monitor. Featuring Honeywell RAE Systems 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. 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.



### Features

- ✓ 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

### Applications

- ✓ Wireless elevates safety to the next level
- ✓ Available in Industrial Hygiene (advanced) or Safety (basic) configurations
- ✓ Hazardous materials teams, first responders
- ✓ Oil and gas
- ✓ Pharmaceutical plants
- ✓ Environmental consulting
- ✓ Soil remediation

# Technical specifications<sup>4</sup>

ToxiRAE Pro PID	
<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>Sensors</b>	Photoionization sensor with 10.6 eV (standard) or 9.8 eV <sup>2,3</sup> (optional) lamp. Response time (T90) < 15 sec. (Isobutene). Field-replaceable sensor. Easy access to lamp for cleaning
<b>Detectable gases</b>	A wide variety of ionizable chemicals using 190 built-in and over 300 published correction factors
<b>Battery</b>	Rechargeable Li-ion battery - Operating time: > 12 hours (normal operation, non-wireless) - 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 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
<b>Keypad</b>	2 buttons for operation and programming
<b>Sampling</b>	Internal fan
<b>Calibration</b>	Automatic with AutoRAE2 Test and Calibration Station <sup>2</sup> or manual
<b>Alarm modes</b>	- Wireless remote alarm notification; 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
<b>Datalogging</b>	Continuous datalogging <sup>3</sup> 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>1,2</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 PID to Mesh Router, EchoView Host, or Mesh Reader2 ~ 330 feet (100 meters) ToxiRAE Pro PID to RAELink3 Mesh or RAELink3 Z1 Mesh modems ~ 33 feet (10 meters)
<b>Operating temperature</b>	-4° to 131°F (-20° to 55°C)
<b>Humidity</b>	0% to 95% relative humidity (non-condensing)
<b>Hazardous location Approvals</b>	CSA: Class I, Division 1, Groups A, B, C and D. T-code T4 Class I, Zone 0 A/Exia IIC T4 ATEX: CE, II 1G, Ex ia IIC Ga T4 IECEX: Ex ia IIC Ga T4 China Ex: Ex ia IIC T4
<b>CE compliance (European Conformity)</b>	EMC directive: 2004/108/EC. R&TTE directive: 1999/5/EC. ATEX directive: 94/9/EC
<b>Warranty</b>	- Two years on non-consumable components - One year on all other sensors, 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

# The Bruusgaard System



TBS is a unique turnkey portable gas detection solution, giving you increased safety and substantial cost savings through standardised instruments, routines, training and procurement.

## Logistic Support

At any given time we know the status of all vessels and sites covered by The Bruusgaard System. We consolidate all shipments and make sure you have everything you need on board until next scheduled delivery. This results in fewer shipments and substantial savings!

- Year round follow up of instruments, spares and consumables
- Handling of all shipments & logistics
- Annual reports per vessel including budgeting



## Safety

QA – strict routines and logging

- Crew are able to use instruments and follow routines correctly
- Instruments are in proper working condition at all times
- Instruments are calibrated at correct intervals
- Sensors and other items are replaced at correct intervals
- Usage of instruments is logged, including abnormal observations
- Traceability – instrument history and usage
- Routines and procedures can merge into the overall QA-system

Effective and proven training is an integrated part of The Bruusgaard System.

## Instruments

All the equipment used for gas detection and calibration is placed in a custom-made wall cabinet. Including Log & Instruction Manual, which are crucial to maintaining the safety integrity.

- Standardised vessel specific gas detector solutions
- Total solutions including all equipment and routines necessary for efficient and safe use, storage and maintenance

## Cost Savings

Some of our customers have been able to go from 8 to 10 suppliers down to 1 – translating into cost savings of up to 40-50%. For one vessel, this could be thousands of dollars annually, and for a whole fleet, the cost savings can be dramatic. This is achieved through:

- One contact for worldwide supply of spares & gases
- All service and calibration can be done on site.
- Reductions of instrument types from 10-12 to 2-3

Reduced maintenance costs through:

- On board calibration
- Fewer instruments on board
- No need for spares on board
- One PO per year
- Increased safety
- Less use of administrative time