ppbRAE 3000

Portable Handheld VOC Monitor

The ppbRAE 3000 is the most advanced handheld volatile organic compound (VOC) monitor on the market. Its photoionization detector's (PID) extended range of 1 ppb to 10,000 ppm makes it an ideal instrument for applications from HazMat/Homeland Security and industrial hygiene to Indoor Air Quality and military applications.

The **RF modem allows real-time data communication** with a base controller located up to 500 feet away from the ppbRAE 3000 detector (or two miles with optional RAELink3 portable modem). A personal computer can be used as the base station for a ppbRAE 3000 system. The standard ProRAE Remote software is capable of monitoring the input of up to 64 remotely located monitors, including ppbRAE 3000, AreaRAE, etc.

Key Features

- **Proven PID technology.** The patented sensor provides the following unique features:
  - 3-second response time
  - Extended range from 1 ppb to 10,000 ppm with improved linearity
  - Humidity compensation with integral humidity and temperature sensors

- **Real-time wireless** data transmission with built-in RF modem or Bluetooth

- **Designed for simple service** Easy access to lamp and sensor in seconds without tools

- **Big graphic display** for easy overview of gas type, Correction Factor and concentration

- **Field-interchangeable battery pack** replaced in seconds without tools

- **Integrated flashlight** for better view in dark conditions

- **User-friendly screens including dataplot chart view**

- **Integrated RAE Systems Correction Factors list for more than 200 compounds** to measure more chemicals than any other PID

- **Multi-language support** with 12 languages encoded

- **Rugged housing** withstands use in harsh environments
  - IP67 waterproof design for easy cleaning and decontamination in water
  - Strong, protective removable rubber boot

Additional Advantages

- View real-time sensor data and alarm status at headquarters or command center
- Automatic lamp type recognition
- Duty-cycling™ lamp and sensor auto-cleaning technology
- Tough, flexible inlet Flexi-Probe™
- 3 Large keys operable with 3 layers of gloves
- Strong, built-in sample pump draws up to 100 feet (30m) horizontally or vertically
- Loud 95 dB audible alarm
- Bright red flashing visual alarm
- Interchangeable drop-in Lithium-Ion and alkaline battery packs
- Charging cradle doubles as an external battery charger
- Compatible with AutoRAE™ calibration station
- ProRAE Remote software simultaneously controls and displays readings for up to 64 remote detectors
- License free, ISM band RF transmission with communication range up to 500 feet (2 miles with optional RAELink3 modem)
- Optional RAELink3 modem provides GPS capability to track and display readings from remote detectors and provides up to 2 miles long distance transmission
- Data logging with up to 6 months of data at one-minute intervals
- 3-year 10.6 eV lamp Warranty

Wireless

AutoRAE Compatible

ISO 9001 CERT FIED

ATEX

CSA us

RAE SYSTEMS

Specifications*

Detector Specifications

Size	10" L x 3.0" W x 2.5" H (25.5 cm x 7.6 cm x 6.4 cm)
Weight	26 oz (738 g)
Sensors	Photoionization sensor with standard 10.6 eV or optional 9.8 eV or 11.7 eV lamps
Battery	• Rechargeable, external field-replaceable Lithium-Ion battery pack • Alkaline battery adapter
Operating Hours	16 hours of operation (12 hours with alkaline battery)
Display Graphic	4 lines, 28 x 43 mm, with LED backlight for enhanced display readability
Keypad	1 operation and 2 programming keys, 1 flashlight on/off
Direct Readout	Instantaneous reading • VOCs as ppm by volume • High values • STEL and TWA • Battery and shutdown voltage • Date, time, temperature
Alarms	95dB at 12" (30 cm) buzzer and flashing red LED to indicate exceeded preset limits • High: 3 beeps and flashes per second • Low: 2 beeps and flashes per second • STEL and TWA: 1 beep and flash per second • Alarms latching with manual override or automatic reset • Additional diagnostic alarm and display message for low battery and pump stall
EMI/RFI	Highly resistant to EMI/RFI. Compliant with EMC directive (2004/108/EC); R & TTE directive (1999/5/EC)
IP Rating	• IP67 unit off and without flexible probe • IP65 unit running
Datalogging	Standard 6 months at one-minute intervals
Calibration	Two-point or three-point calibration for zero and span. Calibration memory for 8 calibration gases, alarm limits, span values and calibration dates
Sampling Pump	• Internal, integrated flow rate at 500 cc/mn • Sample from 100' (30m) horizontally and vertically
Low Flow Alarm	• Auto pump shutoff at low-flow condition
Communication	• Download data and upload instrument set-up from PC through charging cradle or optional Bluetooth™ • Wireless data transmission through built-in RF modem
Frequency	902 to 928 MHz (license-free), 2.400 to 2.4835 GHz (license-free), 433 MHz, 869 MHz
RF Range	Up to 500' (152m; 900 MHz, 433 Mhz, 869 Mhz), extendable with RAELink3 Repeater to 2 miles (3.2km)
Hazard Area Approval	• **US and Canada:** c(SP)us, Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D • **Europe:** ATEX II 2G EEx ia IIC T4
Temperature	-4° to 122° F (-20° to 50° C)
Humidity	0% to 95% relative humidity (non-condensing)
Attachments	Durable black rubber boot
Warranty	3 years for 10.6 eV lamp, 1 year for pump, battery, sensor and instrument

*Specifications are subject to change

Sensor Specifications

Gas Monitor	Range	Resolution	Response Time T90
VOCs	0 to 9999 ppb 10 to 99 ppm 100 to 999.9 ppm 1000 to 9999 ppm	1 ppb 0.01 ppm 0.1 ppm 1 ppm	< 3 s < 3 s < 3 s < 3 s

Monitor only includes:

• ppbRAE 3000 Monitor, Model PGM-7340
• Wireless communication module built in, as specified
• Datalogging with ProRAE Studio Package for Windows™ 98, 2000, NT, ME & XP
• Charging/download adapter
• RAE UV lamp, as specified
• VOC Zeroing Tubes (1 box)
• Tube adapter
• Tedlar® bag for calibration
• Flex-I-Probe™
• External filter
• Rubber boot with straps
• Alkaline battery adapter
• Lamp-cleaning kit
• Tool Kit
• Operation CD-ROM
• Operation & Maintenance manual
• Soft leather case

Monitor with accessories kit adds:

• Hard transport case with pre-cut foam padding
• Charging/download cradle
• 5 Porous metal filters and O-rings
• Organic vapor zeroing kit
• Gas outlet port adapter and tubing

Optional calibration kit adds:

• 10 ppm isobutylene calibration gas, 34L
• Calibration regulator and flow controller

Optional Guaranteed Cost of Ownership Program:

• 4-year repair and replacement guarantee
• Annual maintenance service

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