ppbRAE 3000

Portable Handheld VOC Monitor

The compact ppbRAE 3000 is a comprehensive VOC gas monitor and datalogger for hazardous environments.

The ppbRAE 3000 is the most advanced handheld VOC monitor available for parts-per-billion detection. This thirdgeneration patented PID device monitors VOCs using a photoionization detector with a 9.8 eV, 10.6 eV UV-discharge lamp. The built-in wireless modem allows real-time data connectivity with the ProRAE Guardian command center located up to two miles/3 km away (with optional RAELink3 portable modem) from the ppbRAE 3000 detector.

SENSOR SPECIFICATIONS

Gas Monitor	Range	Resolution	Response Time T90
VOCs	0 to 9999 ppb	1 ppb	< 3 sec
	10 to 99 ppm	0.01 ppm	< 3 sec
	100 to 999 ppm	0.1 ppm	< 3 sec
	1,000 to 9,999 ppm	1 ppm	< 3 sec

KEY FEATURES

- **Proven PID technology**
- **3-second response time**
- **Extended range to 10,000 ppm**
- **Humidity compensation**
- **Real-time wireless data transmission**
- **Built-in Bluetooth & RAElink3**
- **Integrated Correction Factors**
- **Includes flashlight**
- **Large graphic display**
- **Easy access to battery**
- **Rugged housing**
- **IP-67 waterproof design**

MONITOR ONLY INCLUDES:

ppbRAE 3000 Monitor, with RAE Systems UV lamp, as specified

Datalogging with ProRAE Studio II

Charging/download adapter

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 and tool kit

Operation CDROM

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

APPLICATIONS:

Oil & Gas

HazMat

Industrial Safety

Civil Defense

Environmental & Indoor Air Quality

ppbRAE 3000

SPECIFICATIONS Specifications subject to change without notice

Size	10" L x 3.0" W x 2.5" H (25.5 cm x 7.6 cm x 6.4 cm)	**IP Rating**	- IP67 unit off and without flexible probe - IP65 unit running
Weight	26 oz (738 g)	**Datalogging**	Standard 6 months at one-minute intervals
Sensors	Photoionization sensor with standard 10.6 eV or optional 9.8 eV or 11.7 eV lamps	**Calibration**	Two-point or three-point calibration for zero and span. Calibration memory for 8 calibration gases
Battery	- Rechargeable, external field-replaceable Lithium-Ion battery pack - Alkaline battery adapter	**Sampling Pump**	- Internal, integrated flow rate at 500 cc/mn - Sample from 100' (30m) horizontally and vertically
Operating Hours	16 hours of operation (12 hours with alkaline battery)	**Low Flow Alarm**	- Auto pump shutoff at low-flow condition
Display Graphic	4 lines, 28 x 43 mm, with LED backlight for enhanced display readability	**Communication**	- Download data and upload instrument set-up from PC through charging cradle or optional Bluetooth™ - Wireless data transmission through built-in RF modem
Keypad	1 operation and 2 programming keys, 1 flashlight on/off		
Direct Readout	Instantaneous reading - VOCs as ppm by volume - STEL, TWA and PEAK - Battery and shutdown voltage - Date, time, temperature	**Wireless Network**	ProRAE Guardian Real-Time Wireless Safety
		Wireless Emergency	ISM license-free bands
		Wireless Range (Typical):	ppbRAE 3000 to RAELink3 or RAELink3 Z1 modems ~ 33 feet (10 meters)
Alarms	95 dB (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 alarm for low battery and pump stall	**Hazard Area**	- US and Canada: UL, cUL, Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D - Europe: ATEX Ex II 2GEx ia IIC/IIB T4 - IECEx: Ex ia IIC/IIB T4
		Temperature	-4° to 113° F (-20° to 50° C)
		Humidity	0% to 95% relative humidity (non-condensing)
		Attachments	Durable black rubber boot with straps
EMI/RFI	Highly resistant to EMI/RFI Compliant with EMC Directive 89/336/EEC	**Warranty**	3 years for 10.6 eV lamp 1 year for pump, battery and instrument