The MiniRAE 3000+ and ppbRAE 3000+ are the most advanced handheld volatile organic compound (VOC) monitors on the market. Their photoionization detector's (PID) extended range of 0 to 15,000 ppm (1 ppb to 10,000 ppm – ppbRAE 3000+) make them ideal instruments for industrial hygiene, leak detection and HazMat.

FEATURES

- Third-generation patented PID technology
- Reflex PID Technology™
- VOC detection range from 0 to 15,000 ppm
- 3-second response time
- Humidity compensation with built-in humidity and temperature sensors
- Six-month datalogging
- Highly connectivity capability through multiple wireless module options
- Large graphic display with integrated flashlight
- Multi-language support with 10 languages encoded
- IP-67 waterproof design
- Highly accurate VOC measurements
- Low maintenance — easy access to lamp and sensor
- Low cost of ownership
- 3-year 10.6eV lamp warranty
- BLE module & dedicated APP for Enhanced Datalogging capability

APPLICATIONS

- Oil & Gas
- HazMat
- Industrial Safety
- Civil Defense
- Environmental & Indoor Air Quality

MiniRAE 3000+

ppbRAE 3000+

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Technical 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 or mg/m3 • High values • STEL and TWA • Battery and shutdown voltage • Date, time, temperature
Alarms	95 dB at12" (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
EMC/RFI	Compliant with EMC directive (2004/108/EC) EMI and ESD test: 100MHz to 1GHz 30V/m, no alarm Contact: ±4kV Air: ±8kV, no alarm
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. Reflex PID Technology™ Calibration memory for 8 calibration gases, alarm limits, span values and calibration dates
Accuracy	0 to 2000 ppm: ±5% at calibration point
Sampling Pump	Internal, integrated flow rate at 500 cc/mn Sample from 100′ (30 m) horizontally and vertically
Low Flow Alarm	Auto pump shutoff at low flow condition
Communication & Data Download	Download data and upload instrument set-up from PC through charging cradle or using BLE module and dedicated APP Wireless data transmission through built-in RF modem
Wireless Network	Mesh RAE Systems Dedicated Wireless Network
Wireless Range (Typical)	Up to 15 ft. (5 m) for BLE EchoView Host: LOS > 660 ft. (200 m) Safety Suite Premium & RAEMesh Reader: LOS > 660 ft. (200 m) Safety Suite Premium & RAELink3 Mesh: LOS > 330 ft. (100 m)
Safety Certifications	**US and Canada:** CSA, 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 113°F (-20° to 50°C)
Humidity	0% to 95% relative humidity (non-condensing)
Attachments	MiniRAE 3000+ – Durable bright yellow rubber boot with belt clip ppbRAE 3000+ – Durable black rubber boot with straps
Warranty	3-year for 10.6 eV lamp, 1 year for pump, battery, sensor, and instrument
Wireless Approvals	FCC Part 15, CE R&TTE, Others[1]
Radio Module	Supports BLE or Bluetooth or RM900

1 Contact Geotech for country-specific wireless approvals and certificates.

Sensor Specifications for VOCs*

Gas Monitor	Range	Resolution	Response Time T90
MiniRAE 3000+	0 to 999.9 ppm	0.1 ppm	< 3 s
	1000 to 15,000 ppm	1 ppm	< 3 s
ppbRAE 3000+	0 to 9999 ppb	1 ppb	< 3 s
	10 to 99 ppm	0.01 ppm	< 3 s
	100 to 999 ppm	0.1 ppm	< 3 s
	1000 to 9999 ppm	1 ppm	< 3 s

MiniRAE 3000+ Monitor only includes:

- Model PGM-7320 MiniRAE 3000+ Monitor
- Wireless communication module built-in, as specified
- Datalogging with Safety Suite Premium package
- Charging/download adapter
- RAE UV lamp, as specified
- Flex-I-Probe™
- External filter
- Soft leather case
- Rubber boot with belt clip and straps
- Alkaline battery adapter
- Lamp-cleaning kit
- Tool kit
- Lithium-ion (li-Ion) battery with universal AC/DC charger and international plug kit
- Operation CD-ROM
- Operation & Maintenance Manual

ppbRAE 3000+ Monitor only includes:

- ppbRAE 3000+ Monitor, with RAE Systems UV lamp, as specified
- Datalogging with Safety Suite Premium package
- Charging/download adapter
- VOC Zeroing Tubes (1 box)
- Tube adapter
- Tedlar® bag for calibration
- Soft leather case
- Flex-I-Probe™
- External filter
- Rubber boot with straps
- Alkaline battery adapter
- Lamp-cleaning and tool kit
- Operation CD-ROM
- Operation & Maintenance Manual

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:

- ppm isobutylene calibration gas, 34L 100 ppm for MiniRAE 3000+, 10 ppm for ppbRAE 3000+
- Calibration regulator and flow controller

Optional Guaranteed Cost of Ownership Program:

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

*Specifications are subject to change.