

MiniRAE 3000

Portable Handheld VOC Monitor

The MiniRAE 3000 is the most advanced handheld volatile organic compound (VOC) monitor on the market. Its photoionization detector's (PID) extended range of 0 to 15,000 ppm makes it an ideal instrument for applications from industrial hygiene to leak detection and HazMat.

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



Key Features

- Proven PID technology The patented sensor provides the following unique features:
- 3-second response time
- Extended range up to 15,000 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 com**pounds** 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 autocleaning 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, 95dB 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
- 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 provide up to 2 miles' long-distance transmission
- Datalogging with up to 6 months of data at one-minute intervals
- 3-year 10.6 eV lamp warranty















MiniRAE 3000

Specifications*

Detector Specifications

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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-lon 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 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 bright yellow 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 999.9 ppm	0.1 ppm	< 3 s
	1000 to 15,000 ppm	1 ppm	< 3 s

Monitor only includes:

- MiniRAE 3000 Monitor, Model PGM-7320
- · 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
- Flex-I-Probe™
- · External filter
- · Rubber boot
- · 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:

- 100 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



