

MiniRAE 3000



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

Portable Handheld VOC Monitor

The MiniRA 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 Re-mote software is capable of monitoring the input of up to 64 remotely located monitors, including MiniRAE 3000, AreaRAE, etc.

Additional Features

- 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

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, 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 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 provide up to 2 miles' long-distance transmission
- Datalogging with up to 6 months of data at one-minute intervals
- 3-year 10.6eV lamp warranty

Monitor only includes:

- MiniRAE 3000 Monitor, Model PGM-7320
- Wireless communication module built in, as specified
- Datalogging with ProRAE Studio Package for Windows™ 95, 98, 2000, NT, ME & XP
- Charging/download adapter
- RAE UV lamp, as specified
- Flex-I-Probe™
- External filter
- 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
- 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

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Sensor Specifications

Gas Monitor	Range	Resolution	Response Time T90
VOCs	0 to 999.9 ppm 1000 to 15,000 ppm	0.1 ppm 1 ppm	< 3 s < 3 s

Technical Specification	
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 (738g)
Sensors:	Photoionization sensor with standard 10.6 eV or optional 9.8 eV or 11.7 eV lamps
Battery:	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • VOCs as ppm by volume • High values • Battery and shutdown voltage • STEL and TWA • Date, time, temperature
Alarms:	95 dB (at 30 cm) buzzer and flashing red LED to indicate exceeded preset limits <ul style="list-style-type: none"> • 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 9/336/EEC
IP Rating:	<ul style="list-style-type: none"> • IP67 unit off and without flexible probe • IP65 unit running
Datalogging:	Standard 6 months at one-minute intervals
Calibration:	<ul style="list-style-type: none"> • Download data and upload instrument set-up from PC through charging cradle or optional Bluetooth™ • Wireless data transmission through built-in RF modem
Sampling Pump:	<ul style="list-style-type: none"> • Internal, integrated flow rate at 400 cc/mn • Sample from 100' (30m) horizontally and vertically
Low Flow Alarm:	• Auto pump shutoff at low-flow condition
Communication:	<ul style="list-style-type: none"> • 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' (900 MHz, 433 Mhz, 869 Mhz), extendable with RAELink3 Repeater to 2 miles
Hazard Area Approval:	<ul style="list-style-type: none"> • US and Canada: UL, cUL, Classified as Intrinsically Safe for use in Class I, Division I Groups A, B, C, D • Europe: ATEX II 1G EEx ia IIC T4 (pending) • IECEx: II 1G EEx ia IIC T4 (pending)
Temperature:	-4° to 113° F (-20° to 50°C)
Humidity:	0% to 95% relative humidity (non-condensing)
Attachments:	Durable bright yellow rubber boot with belt clip
Warranty:	Lifetime on non-consumable components, 3-year warranty for 10.6 eV lamp, 1 year for pump and battery

*Specifications are subject to change

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