MINIRAE® 3000 +



Life-saving solutions

Portable Handheld VOC Monitor

The MiniRAE 3000 + is a comprehensive handheld VOC (Volatile Organic Compound) monitor that uses a third-generation patented PID technology to accurately measure one of the highest levels of ionizable chemicals available on the market.

It provides full-range measurement from 0 to 15,000 ppm of VOCs. The MiniRAE 3000 + has a built-in wireless modem that allows realtime data connectivity with the command center located up to 2 miles (3 km) away through a Bluetooth connection to a RAELink 3* portable modem or optionally via Mesh Network.



- Highly accurate VOC measurements
- Reflex PID Technology™
- 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

Workers can quickly measure VOCs and wirelessly transmit data



APPLICATIONS

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

FEATURES AND BENEFITS



Third-generation patented PID technology



Six-month datalogging



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



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



Minirae® 3000 + Technical Specifications

0:	40" 40" 40" 40" 40" 40" 40" 40" 40" 40"		
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 lamp		
Battery	Rechargeable, external field-replaceable Lithium-Ion battery pack Alkaline battery adapter		
Running time	16 hours of operation (12 hours with alkaline battery adapter)		
Display Graphic	$4\mbox{lines}, 28\mbox{x}43\mbox{mm}, \mbox{with LED}$ 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 (mg/m³) • 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		
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	IP-67 unit off and without flexible probeIP-65 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 calibrationdates		
Sampling Pump	 Internal, integrated flow rate at 500 cc/mn Sample from 100' (30m) horizontally or 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 15ft (5m) for BLE EchoView Host: LOS > 660 ft (200 m) ProRAE Guardian & RAEMesh Reader: LOS > 660 ft (200 m) ProRAE Guardian & 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 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		
Wireless Frequency	ISM license-free band. IEEE 802.15.4 Sub 1GHz		
Wireless Approvals	FCC Part 15, CE R&TTE, Others¹		
Radio Module	Supports BLE or Bluetooth or RM900		

¹ Contact RAE Systems for country-specific wireless approvals and certificates.
Specifications are subject to change.

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

MONITOR ONLY INCLUDES:

- MiniRAE 3000 + Monitor, Model PGM-7320
- Wireless communication module built in, as specified
- Datalogging with ProRAE Studio II Package
- Charging/download adapter
- RAE UV lamp, as specified
- Flex-I-Probe[™]
- External filter
- Rubber boot
- Alkaline battery adapter
- Lamp-cleaning kit
- Tool kit
- Soft leather case

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 warranty
- Annual maintenance service



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91-92 Shrivenham Hundred Business Park, Watchfield, Oxfordshire, SN6 8TY Tel: 01367 899558 Email: info@shawcity.co.uk www.shawcity.co.uk THE FUTURE IS WHAT WE MAKE IT

