

# MiniRAE® 3000 +

### 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. 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 real-



Workers can quickly measure VOCs and wirelessly transmit data

time 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<sup>TM</sup>
- 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

## FEATURES & BENEFITS

- Third-generation patented PID technology
- Reflex PID Technology<sup>TM</sup>
- 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

## APPLICATIONS

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











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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 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	4lines, 28x43mm, 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 probe • IP-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 calibratio dates
Sampling Pump	<ul><li>Internal, integrated flow rate at 500 cc/mn</li><li>Sample from 100' (30m) horizontally or vertically</li></ul>
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	<b>US and Canada:</b> CSA, Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D <b>Europe:</b> ATEX II 2G EEx ia IIC T4
Temperature	-4° to 122° F (-20° to 50° C)
Humidity	0% to 95% relative humidity (non-condensing)

Instrument Specifications				
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, Others <sup>1</sup>			
Radio Module	Supports BLE or Bluetooth or RM900			
<sup>1</sup> 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	

#### 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<sup>™</sup>
- 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

## Supplied & Serviced by;

# **Q** Instrument Services

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