

UltraRAE 3000

Portable Handheld Compound-Specific VOC Monitor

MR03 / 20100201



The UltraRAE 3000 is the most advanced Compound-Specific Monitor on the market. Its Photoionization Detector's (PID) extended range of 0.05 to 10,000 ppm in VOC mode and 50 ppb to 200 ppm in benzene-specific mode makes it an ideal instrument for applications from entry pre-screening during refinery and plant maintenance to hazardous material response, marine spill response and refinery down-stream monitoring.

Dual detection mode for total benzene exposure assessment: 60-second snapshot or 15-minute STEL measurement

High sensitivity to benzene (down to 50 ppb) providing a lower detection range for potentially lower future benzene exposure limits

Lower risk of false alarms through advanced speciation method producing benzene readings you can trust

Total VOC measurement mode with extended range of 0.05 to 10,000 ppm



Key Features

Superior Performance

- Proven PID technology
 - 3-second response in VOC mode or 60 seconds in compound-specific mode
 - Extended range up to 10,000 ppm (in VOC mode) with improved linearity
 - Humidity compensation with built-in humidity sensor
 - Automatic temperature-controlled sampling time calculation
 - Detects benzene down to 50 ppb (0.05 ppm)
- Unique 15-minute benzene STEL calculation with 15-minute real-time benzene-specific measurement and recording
- Highly specific readings, combining a 9.8eV UV lamp and RAE-Sep™ benzene tube
- New sampling probe design provides instant tube-breakthrough visibility

Extremely Versatile

- VOC mode or Benzene-Specific mode for extreme versatility
- Real-time wireless data transmission with built-in Bluetooth and optional RAELink3 portable modem
- Integrated RAE Systems Correction Factors list for more than 200 compounds, measuring more compounds than any other PID
- Field-interchangeable battery pack is replaceable in seconds without tools

Easy to Use

- Large graphic display
- Multi-language support
- Easy access to lamp and sensor in seconds without tools

Low Cost of Ownership

- Inexpensive analysis using low-cost RAE-Sep tubes vs. gas detection tubes
- Much less expensive than a portable GC, and no annual factory calibration is required

Applications

- Confined space entry pre-screening during refinery and plant maintenance
- Hazardous material response
- Marine spill response
- Refinery down-stream monitoring



Waterra



ATEX

UltraRAE 3000

Specifications

Monitor Specifications*

Size	10" L x 3.0" W x 2.5" H (25.5 x 7.6 x 6.4 cm)
Weight	26 oz (738 g)
Sensors	Photoionization sensor with standard 9.8 eV or optional 10.6 eV or 11.7 eV lamps
Battery	• Rechargeable, external field-replaceable lithium-ion battery pack • Alkaline battery adapter
Operating Hours	16 hours of operation
Display Graphic	4 lines, 28 x 43mm
Keypad	1 operation and 2 programming keys, 1 flashlight on/off button
Direct Readout	• VOCs as ppm by volume • High and low values • STEL and TWA • Battery and shutdown voltage • Date, time, temperature
Alarms	• 95dB buzzer (at 12"/30 cm) 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	IP-65, unit running
Datalogging	Standard 6 months at one-minute intervals
Calibration	2-point or 3-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 400 cc/min • Sample from 100' (30m) horizontally and vertically
Low Flow Alarm	Auto shut-off pump at low-flow condition
Communication	• Download data and upload instrument setup from PC through charging cradle • Wireless data transmission through built-in Bluetooth™
Frequency for RAELink3 Optional Modem	902 to 928 MHz (License free), 2.400 to 2.4835 GHz (license-free), 433 MHz, 869 MHz
RF Range	Up to 15'/4.5m (2.400 GHz - Bluetooth™), extendable with RAELink3 modem to 2 miles (3.2km)
Hazardous Area Approval	US and Canada: cCSus, Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D. Europe: ATEX II 2G EEx ia IIC T4
Operating Temperature	-4° to 113° F (-20° to 50°C)
Humidity	0% to 95% relative humidity (non-condensing)
Attachments	Durable bright red rubber boot
Warranty	3 years for 10.6 eV lamp, 6 months for 9.8. eV lamp, 1 year for pump, battery, sensor and instrument

*Specifications are subject to change

www.raesystems.com

Sensor Specifications*

Gas Monitor	Range	Resolution	Response Time (T90)
VOCs	0 to 99.99 ppm	0.05 ppm	< 3 sec
	100 to 999.9 ppm	0.1 ppm	< 3 sec
	1000 to 9999 ppm	1 ppm	< 3 sec
Benzene	0 to 200 ppm	0.05 ppm	< 60 sec
Butadiene	0 to 200 ppm	0.05 ppm	< 60 sec

UltraRAE 3000 Ordering Options

Monitor Only Includes

- UltraRAE 3000 Monitor, Model PGM-7360
- Wireless communication module built-in, as specified
- Datalogging with ProRAE Studio Package for Windows™ 2000, NT and XP
- Travel Charger
- RAE UV lamp and RAE-Sep™ Tubes, as specified
- Flex-I-Probe™ and short probe
- External filter
- Red rubber boot
- 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 carrying case

Monitor with Accessories Kit

- Hard transport case with pre-cut foam padding
- Charging/download cradle (instead of charging/download travel adapter)
- 5 Porous metal filters and O-rings
- Organic vapor zeroing kit
- Gas outlet port adapter and tubing

Optional Calibration Kit

- Calibration gas, 34L, as specified
- Calibration regulator and flow controller

Waterra

Waterra UK Limited

Tel: +44 (0) 121 733 7743 / 7745

sales@waterrauk.com / www.waterrauk.com

