



# UltraRAE 3000

Portable Handheld Compound-Specific VOC Monitor



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.

## KEY FEATURES

- 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
  - Built-in humidity sensor
  - Automatic temperature-controlled sampling time calculation
  - Highly specific readings, combining a 9.8eV UV lamp and RAE-Sep™ benzene tube
- New sampling probe design provides instant tube-breakthrough visibility
- Versatile VOC or Benzene-Specific modes
- Real-time wireless with built-in Bluetooth and optional RAELink3 portable modem
- Integrated RAE Systems Correction Factors list for more than 200 compounds

## Easy to Use

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

## Low Cost of Ownership

- Inexpensive analysis using low-cost RAE-Sep tubes

## Applications

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

- Dual detection mode for total benzene exposure assessment: 60-second snapshot or 15-minute STEL measurement
- High sensitivity to benzene (as low as 50 ppb) provides a lower detection range for future benzene exposure limits
- Lower risk of false alarms through advanced speciation method
- Total VOC measurement mode with extended range of 0.05 to 10,000 ppm



Workers can easily and quickly obtain VOC readings anywhere in the facility with the RAE Systems UltraRAE 3000



IECEx

ATEX


# UltraRAE3000



## Portable Handheld Compound-Specific VOC Monitor

### 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	<ul style="list-style-type: none"><li>• Rechargeable, external field-replaceable lithium-ion battery pack</li><li>• Alkaline battery adapter</li></ul>
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	<ul style="list-style-type: none"><li>• VOCs as ppm by volume</li><li>• High and low values</li><li>• STEL and TWA</li><li>• Battery and shutdown voltage</li><li>• Date, time, temperature</li></ul>
Alarms	<ul style="list-style-type: none"><li>• 95dB buzzer (at 12"/30 cm) and flashing red LED to indicate exceeded preset limits</li><li>• High: 3 beeps and flashes per second</li><li>• Low: 2 beeps and flashes per second</li><li>• STEL and TWA: 1 beep and flash per second</li><li>• Alarms latching with manual override or automatic reset</li><li>• Additional diagnostic alarm and display message for low battery and pump stall</li></ul>
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	<ul style="list-style-type: none"><li>• Internal, integrated flow rate at 400 cc/min</li><li>• Sample from 100' (30m) horizontally and vertically</li></ul>
Low Flow Alarm	Auto shut-off pump at low-flow condition
Communication	<ul style="list-style-type: none"><li>• Download data and upload instrument setup from PC through charging cradle</li><li>• Wireless data transmission through built-in Bluetooth™</li></ul>
Frequency for RAELink3 Optional Modem	902 to 928 MHz (license-free), 2.400 to 2.4835 GHz (license-free), 433 MHz, 869 MHz
Wireless Network	ProRAE Guardian Real-Time Wireless Safety System
Wireless Frequency	ISM license-free bands
Wireless Range (Typical)	UltraRAE 3000 to RAELink3 or RAELink3 Z1 modems ~ 33 feet (10 meters)
Hazardous Area Approval	<ul style="list-style-type: none"><li>• US and Canada: , Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D.</li><li>• Europe: ATEX II 2G EEx ia IIC T4</li><li>• IECEx CSA 10.0005 Ex ia IIC/IIB GbT4</li></ul>
Operating Temperature	-4° to 122° 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, 1 year for 9.8. eV lamp, pump, battery, sensor and instrument

Specifications are subject to change

#### 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
- Datalogging with ProRAE Studio II Package for Windows® XP, Windows® Vista, or Windows® 7
- Travel Charger
- RAE UV lamp and RAE-Sep™ Tubes
- 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
- 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

#### Optional Guaranteed Cost of Ownership Program

- 4-year repair and replacement guarantee
- Annual maintenance service

#### Ordering Information

Monitor with Accessories and Calibration Kit (PN 059-D311-200)

#### CORPORATE HEADQUARTERS

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