

Photoionization Detector (PID)

RAE UltraRAE 3000

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.

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**

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**



CALL GEOTECH TODAY (800) 833-7958

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SPECIFICATIONS		OPTIONS	
Monitor Specifications		Monitor Only Includes:	
Size	10" L x 3.0" W x 2.5" H (25.5 x 7.6 x 6.4 cm)	<ul style="list-style-type: none"> 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 	
Weight	26 oz. (738 g)	Monitor with Accessories Kit:	
Sensors	Photoionization sensor with standard 9.8 eV or optional 10.6 eV or 11.7 eV lamps	<ul style="list-style-type: none"> 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 	
Battery	Rechargeable, external field-replaceable lithium-ion battery pack Alkaline battery adapter	Optional Calibration Kit:	
Operating Hours	16 hours of operation	<ul style="list-style-type: none"> Calibration gas, 34L, as specified Calibration regulator and flow controller 	
Display Graphic	4 lines, 28 x 43mm	Optional Guaranteed Cost of Ownership Program:	
Keypad	1 operation and 2 programming keys, 1 flashlight on/off button	<ul style="list-style-type: none"> 4-year repair and replacement guarantee Annual maintenance service 	
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	IP65, 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	<i>US and Canada:</i> C CSA US, Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D. <i>Europe:</i> 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, 1 year for 9.8. eV lamp, pump, battery, sensor and instrument		
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

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