

UltraRAE

Specific Compound Monitor



UltraRAE is a quick, spot-check monitor, typically used by occupational health, safety and environmental personnel. The combination filter tube and PID removes the disadvantages associated with colorimetric tubes and gas chromatographs. Applications include tank entry pre-screening during refinery and plant maintenance, hazardous material response, marine spill response and refinery down-stream monitoring.

Interchangeable RAE Sep™ Filter Tubes

- Benzene
- Methylene Chloride (Halocarbon)
- Butadiene (Polymer manufacture)

Features

- The only compound specific monitor with combination of interchangeable separation tubes and PID
- 3-10 times faster analysis vs. conventional tube or portable gas chromatograph methods
 - Results obtained in seconds (<75 seconds) rather than minutes
 - Detects benzene down to 0.1 ppm in 60 seconds
- 3,000 point datalogging storage capacity for data download to PC compatible with Windows™ 95, 98, 2000 and NT
- Excellent range and linearity
 - Good down to 0.1 ppm and up to over 200 ppm benzene (no more GC column overload problems)
 - More accurate than gas detection tubes
- Internal pump
 - Allows you to sample deep (up to 30ft or 10m) into a confined space
 - Prevents liquid flow into the monitor
 - Warns if sample tubing is blocked or crimped

- Low cost of ownership
 - Inexpensive analysis due to low cost RAE-Sep™ tubes vs. gas detection tubes
 - Cheaper than portable GC and **no** annual factory calibration
- Large keys operable with 3 layers of gloves
- Large easy to read back light display
 - Alarm activated
 - Darkness or manually activated
- 3,000 point data logging storage capacity for data download to PC
- Optional vibration alarm
- Snap-in rechargeable or alkaline battery pack, 10 hours of operation with Smart battery charging.

Applications

Partial selection

- **Benzene**
 - Petrochemical
 - Transportation industry – tankers, railways, aircraft and barges
 - Pipelines
 - Military
 - Rubber manufacturers
- **Methylene Chloride**
 - Paint strippers in industries from airlines to furniture refinishers to ship building
 - Solvents for cleaning chemical tanks
 - Solvents in the manufacture of plastics, flexible foam, sealants, and photographic film stock
 - Adhesives in the assembly of plastic parts
- **Butadiene**
 - Polymers industries
- Manufacturers of plastics, resin, and rubber

Specifications

	VOC	Benzene	Halocarbons	Butadiene
Range	0-2000 ppm	0-200 ppm	0-200 ppm	0-200 ppm
Resolution	0.1 ppm 0-99.9 ppm 1 ppm 100-2000 ppm	0.1 ppm	0.2 ppm	0.1 ppm
Response Time	30 seconds	60 seconds	Compound Dependent	75 seconds
Calibration Gas	100 ppm Isobutylene	5 ppm Benzene	Compound Dependent	5 ppm Butadiene
UV Lamp	9.8, 10.6 or 11.7 eV	9.8 eV	11.7 eV	9.8 eV
Interference Rejection*	None	300 ppm Toluene*	300 ppm Acetone*	150 ppm Hexane*

*Refer to RAE Systems' Technical Notes no: 127, 133 and 147 for more details.

Intrinsic Safety	UL, cUL Class 1, Division 1, Group A, B, C, D EEx ia IIL C T4
Size	7.75" (19.7 cm) L x 2.75" (7 cm) W x 1.5" (3.8 cm) H
Weight	16 oz (455 gm) with battery pack
Detector	Photo-ionization sensor with vacuum UV lamp
Battery	Rechargeable, snap-in, field replaceable, NiCd battery pack
Battery Charging	10 hours charge through built-in charger
Operating Hours	10 hours
Display	Large LCD, manual and alarm activated back light
Repeatability	± 10% of reading or ± 0.1 ppm
RAE-Sep™ Tube	Field replaceable, bar coded, sealed at both ends for storage
Keypads	1 operation key and 2 program keys
Alarm Setting	Two adjustable alarm limit levels (Factory default 1 and 5 ppm)
Audible Alarm	90 dB buzzer
Visual Alarm	Flashing red LED
External Alarm	Optional plug in pen size vibration alarm
Datalogging	3000 points; includes sample number, gas reading, time/date, specific vapor. Header information includes monitor serial number, user ID and site number.
Communication	Download data to PC and up load instrument setup from PC through RS-232 link to serial port on PC
Calibration	Two point field calibration of zero and span
Sampling Pump	Internal. Flow rate 400 cc/min. with VOC tube
Temperature	0° to 40°C (32° to 113°F)
Humidity	0% to 95% relative humidity (non-condensing)

Ordering Information

Model PGM 7200 Monitor

- Rechargeable NiMH battery pack
- Alkaline battery adapter (accepts 4 AA size alkaline batteries)
- AC/DC charging adapter
- Inlet probe and water trap filter
- Operation and maintenance manual
- Soft carry case

Model PGM 7200 Kit

Items included with Monitor plus:

- Calibration gas
- Calibration regulator with flow controller
- Porous metal filter and O-ring kit
- Tool kit
- Hard transport case

Accessories

- Lamp cleaning kit
- Automotive charger/adaptor
- Remote access probe
- External vibration alarm

UltraRAE



DISTRIBUTED BY: