The MultiRAE Lite is an optimal one-to-six4-gas monitoring solution for personal protection (including confined space entry) and multi-gas leak detection applications. Available in pumped and diffusion versions and featuring the broadest selection of sensor options in its class, it can be configured to exactly meet the needs and compliance requirements of various countries, industries, and applications.

The MultiRAE Lite's wireless capability elevates worker protection to the next level by providing safety officers real-time access to instrument readings and alarm status from any location for better visibility and faster incident response.

FEATURES

- Highly versatile and customizable for different applications
- Available in pumped and diffusion versions
- Man Down Alarm with real-time remote wireless notification
- Easy maintenance with replaceable sensors, pump, and plug-and-play battery
- Fully automated bump testing & calibration with Auto-RAE 2[1]
- Wireless access to real-time instrument readings and alarm status from any location[1,3]
- Unmistakable five-way local and remote wireless notification of alarm conditions
- 30 interchangeable sensor options, including PID[6] for VOCs, NDIR[7] and catalytic for combustibles, and NDIR[7] for CO_2[2]
- Intelligent sensors store calibration data, so they can be swapped in the field[2]
- Large graphical display with easy-to-use, icon-driver user interface
- Continuous datalogging (6 months for 5 sensors, 24 x 7)
- Wireless[1,3] and non-wireless configurations are available[1,3]

APPLICATIONS

- **Industrial hygiene, personal protection, and multi-gas leak detection in industries such as:**
  - Oil and gas (downstream)   -Chemical   -Food & Beverage
  - Telecommunications   -Wastewater treatment
- **Fire overhaul**

MONITOR-ONLY CONFIGURATION INCLUDES:

- MultiRAE Lite monitor with sensors, battery and wireless options as specified, and protective rubber boot and filter(s) installed.
- Continuous datalogging (6 months for 5 sensors @ 1-minute intervals)
- Travel charger/PC communications adapter
- PC communication cable
- AC adapter
- Calibration adapter
- Alkaline battery adapter
- Toolkit with Hex tool and Phillips screwdriver
- Quick Start Guide
- CD with documentation
- Safety Suite Premium Software
- Calibration and test certificate
- Warranty/registration card

The pumped model of MultiRAE Lite also includes:
- Built-in pump
- Belt clip installed
- 3 spare external filters
- PID sensor cap removal tool

Instrument ships in a cardboard box with a colorful sleeve.

Optional accessories, Confined Space Kit, calibration kits, automatic calibration systems, gas kits, individual gases and regulators, and 4-year extended warranty are available. Contact Geotech for more information.

MultiRAE Lite Diffusion Model

MultiRAE Lite Pumped Model

Request Information

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Technical Specifications[5]

Size	- Pumped model: 7.6" H x 3.8" W x 2.6" D (193 x 96.5 x 66 mm) - Diffusion model: 6.9" x 3.8" x 2.2" (175 x 96.5 x 56mm)
Weight	- Pumped model: 31 oz. (880 g) - Diffusion model: 26.8 oz. (760g)
Sensors	30 intelligent interchangeable field-replaceable sensors including PID for VOCs, electrochemical sensors for toxic gases and oxygen, combustible LEL and NDIR sensors, and CO2 NDIR sensor
Battery Options	- Rechargeable Li-ion ~12-hr. (pumped)/18-hr. (diffusion) runtime, < 6-hr. recharge time - Extended duration Li-ion ~18-hr. (pumped)/28-hr. (diffusion) runtime, < 9-hr. recharge time - Alkaline adapter with 4 x AA batteries ~6-hr. (pumped)/8-hr. (diffusion)
Display	Monochrome graphical LCD display (128 x 160) with backlighting. Automatic screen "flip" feature.
Display Readout	- Real-time reading of gas concentrations; PID measurement gas and correction factor; battery status; datalogging on/off; wireless on/off and reception quality. - STEL, TWA, peak, and minimum values
Keypad	3 operation and programming keys (Mode, Y/+, and N/-)
Sampling	Built-in pump or diffusion
Calibration	Automatic with AutoRAE 2 Test and Calibration System[1] or manual
Alarms	Wireless remote alarm notification; multi-tone audible (95 dB @ 30 cm), vibration, visible (flashing bright red LEDs), and on-screen indication of alarm conditions - Man Down Alarm with pre-alarm and real-time remote wireless notification
Datalogging	- Continuous datalogging (6 months for 5 sensors at 1-minute intervals, 24/7) - User-configurable datalogging intervals (from 1 to 3,600 seconds)
Communication & Data Download	- Data download and instrument set-up and upgrades on PC via charging and PC comm. cradle, travel charger, or AutoRAE 2 Automated Test and Calibration System[1] - Wireless data and alarm status transmission via built-in RF modem (optional)
Wireless Network	RAE Systems Dedicated Wireless Network
Wireless Frequency	ISM license-free bands
Wireless Range (Typical)	656 feet (200 meters)
Temperature	-4° to 122°F (-20° to 50°C)
Humidity	0% to 95% relative humidity (non-condensing)
Dust & Water Resistance	IP65 (pumped); IP67 (diffusion)
Hazardous Location Approvals	CSA: CSAUS Class I, Division 1, Groups A, B, C and D, T4 ATEX: CE 0575 Ex II 2G Ex ia d IIC T4 Gb IECEx: Ex ia d IIC T4 Gb
CE Compliance (European Conformity)	EMC directive: 2004/108/EC. R&TTE directive: 1999/5/EC. ATEX directive: 94/9/EC
EMI/RFI	No effect when exposed to 0.43mW/cm2 RF interference from a 5-watt transmitter at 12"
Performance Tests	LEL CSA C22.2 No. 152; ISA-12.13.01
Languages	Arabic, Chinese, Czech, Danish, Dutch, English, French, German, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, and Swedish
Warranty	- Two years on non-consumable components and catalytic LEL, CO, H2S, and O2 sensors - One year on all other sensors, pump, battery, and other consumable parts

Sensor Specifications[5]

Sensors	Range	Resolution
PID Sensor[6]		
VOC 10.6 eV	0 to 1,000 ppm	1 ppm
Combustible Sensors		
Catalytic LEL	0 to 100% LEL	1% LEL
NDIR (0-100% LEL Methane)[7]	0 to 100% LEL	1% LEL
NDIR (0-100% Vol. Methane)[7]	0 to 100% Vol.	0.1% Vol.
Carbon Dioxide Sensor		
Carbon Dioxide (CO$_2$) NDIR[7]	0 to 50,000 ppm	100 ppm
Electrochemical Sensors		
Ammonia (NH$_3$)	0 to 100 ppm	1 ppm
Carbon Monoxide (CO)	0 to 500 ppm	1 ppm
Carbon Monoxide (CO), Ext. Range	0 to 2,000 ppm	10 ppm
Carbon Monoxide (CO), H$_2$-comp.	0 to 2,000 ppm	10 ppm
Carbon Monoxide (CO) + Hydrogen Sulfide (H$_2$S) Combo	0 to 500 ppm 0 to 200 ppm	1 ppm 0.1 ppm
Chlorine (Cl$_2$)	0 to 50 ppm	0.1 ppm
Chlorine Dioxide (ClO$_2$)	0 to 1 ppm	0.03 ppm
Ethylene Oxide (EtO-A)	0 to 100 ppm	0.5 ppm
Ethylene Oxide (EtO-B)	0 to 10 ppm	0.1 ppm
Ethylene Oxide (EtO-C), Ext. Range	0 to 500 ppm	10 ppm
Formaldehyde (HCHO)	0 to 10 ppm	0.01 ppm
Hydrogen (H$_2$)	0 to 1,000 ppm	2 ppm
Hydrogen Chloride (HCl)	0 to 15 ppm	1 ppm
Hydrogen Cyanide (HCN)	0 to 50 ppm	0.5 ppm
Hydrogen Fluoride (HF)	0 to 10 ppm	0.1 ppm
Hydrogen Sulfide (H$_2$S)	0 to 100 ppm	0.1 ppm
Hydrogen Sulfide (H$_2$S), Ext. Range	0 to 1,000 ppm	1 ppm
Methyl Mercaptan (CH$_3$-SH)	0 to 10 ppm	0.1 ppm
Nitric Oxide (NO)	0 to 250 ppm	0.5 ppm
Nitrogen Dioxide (NO$_2$)	0 to 20 ppm	0.1 ppm
Oxygen (O$_2$)	0 to 30% Vol.	0.1% Vol.
Phosgene (COCl$_2$)	0 to 1 ppm	0.02 ppm
Phosphine (PH$_3$)	0 to 20 ppm	0.1 ppm
Phosphine (PH$_3$), Ext. Range	0 to 1,000 ppm	1 ppm
Sulfur Dioxide (SO$_2$)	0 to 20 ppm	0.1 ppm

1 Contact Geotech for availability.
2 RAE Systems recommends calibrating sensors on installation.
3 Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.
4 The CO + H$_2$S combo sensor is required for a 6-gas configuration.
5 Specifications are subject to change.
6 PID sensor requires a pumped configuration.
7 NDIR combustible sensors require a pumped configuration in CSA countries.

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