MultiRAE LITE

Wireless Portable Multi-Gas Monitor

The MultiRAE Lite is the optimal one-to-six[1]-gas monitor for personal protection and leak detection applications. The MultiRAE Lite is available in pumped and diffusion versions and features the broadest selection of sensor options in its class.

The MultiRAE Lite can be configured to exactly meet the detection needs and compliance requirements of various countries, industries, and applications.

The MultiRAE Lite's optional wireless capability improves safety by providing commanders and safety officers real-time access to instrument readings and alarm status from any location for better situational awareness and faster incident response.

APPLICATIONS

Personal protection and multi-gas leak detection in industries such as:

- Chemical
- Food and beverage
- Oil and gas (downstream)
- Pharmaceutical
- Telecommunications
- Wastewater treatment
- Fire overhaul

Confined space testing with the MultiRAE Lite

EASE & FLEXIBILITY

- Available in pumped and diffusion versions
- Highly versatile and customizable
- Man Down Alarm with real-time remote wireless notification[2]
- Easy maintenance with replaceable sensors, pump, and plug-and-play battery
- Fully automatic bump testing and calibration with AutoRAE 2

FEATURES AND BENEFITS

Wireless access to real-time instrument readings and alarm status from any location

Five-way local and remote wireless notification of alarm conditions including Man Down Alarm[3]

Interchangeable sensor options, including PID[4] for VOCs, NDIR5 and catalytic for combustibles, and NDIR for CO_2

Intelligent sensors store calibration data, so they can be swapped in the field[5]

Large graphical display with easy-to-use, icon-driven user interface

Continuous datalogging (6 months for 5 sensors, 24x7). Device Management with Honeywell SafetySuite

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MultiRAE Lite Specifications

INSTRUMENT SPECIFICATIONS[7]

SIZE	• Pumped model: 7.6 in H x 3.8 in W x 2.6 in D [193 mm x 96.5 mm x 66 mm] • Diffusion model: 6.9 in x 3.8 in x 2.2 in [175 mm x 96.5 mm x 56 mm]
WEIGHT	• Pumped model: 31 oz [880 g] • Diffusion model: 26.8 oz [760g]
SENSORS	Intelligent interchangeable field-replaceable sensors
BATTERY OPTIONS, RUNTIME[9] AND RECHARGE TIME	• 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) runtime
DISPLAY	Monochrome graphical LCD display (128 x 160) with backlighting. Automatic screen "flip" feature
DISPLAY READOUT	• Real-time reading of gas concentrations and correction factor; Man Down Alarm on/off; visual compliance indicator; instrument components' status • STEL, TWA, peak, and minimum values
KEYPAD BUTTONS	Automatic with AutoRAE 2 Test and Calibration System[4] or manual
SAMPLING	Built-in pump or diffusion
CALIBRATION	Automatic with AutoRAE 2 Test and Calibration System or manual
ALARMS	Wireless remote alarm notification; 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[3]
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 AND DATA DOWNLOAD	• Download data and upload instrument set-up from PC through charging cradle or using BLE module and dedicated APP • Wireless data and alarm status transmission via built-in RF modem (optional)
WIRELESS NETWORK	Mesh RAE Systems Dedicated Wireless Network
WIRELESS NETWORK (TYPICAL)	Up to 650 ft [200m] for sub1GHz Mesh Radio, Up to 330 ft [100m] for Wi-Fi and RAELink3 Mesh Modem, Up to 15 ft [5m] for BLE
OPERATING TEMPERATURE	-4°F to 122°F [-20°C to 50°C]
HUMIDITY	0% to 95% relative humidity (non-condensing)
DUST AND WATER RESISTANCE	IP65 (pumped); IP67 (diffusion) ingress protection rating
SAFETY CERTIFICATIONS	CSA: Class I, Division 1, Groups A, B, C, and D, T4 Class II, Division 1, Groups E, F, G, T85°C ATEX: 0575 II 1G Ex ia IIC T4 Ga 2G Ex ia d IIC T4 Gb with IR sensor installed I M1 Ex ia I Ma IECEx: Ex ia IIC T4 Ga Ex ia d IIC T4 Gb with IR sensor installed I M1 Ex ia I Ma IECEx/ANZEx: Ex ia IIC T4 Ga Ex ia d IIC T4 Gb with IR sensor installed Ex ia I Ma
EMC/RFI[8]	EMC directive: 2004/108/EC
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, Swedish, and Turkish
WARRANTY	• Four years on Liq O_2 sensors • Three years on CO and H_2S sensors • Two years on non-consumable components and catalytic LEL sensors • One year on all other sensors, pump, battery, and other consumable parts
WIRELESS FREQUENCY	ISM license-free band. IEEE 802.15.4 Sub 1 GHz, IEEE 802.11 bands b/n/g 2.4 GHz
WIRELESS APPROVALS	FCC Part 15, CE R&TTE, Others[11]

SENSOR SPECIFICATIONS[7]

	RANGE	RESOLUTION
PID SENSORS[4]		
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)	0 to 100% LEL	1% LEL
NDIR (0-100% VOL. METHANE)[6]	0 to 100% Vol.	0.1% Vol.
CARBON DIOXIDE SENSOR		
CARBON DIOXIDE (CO_2) NDIR	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) +	0 to 500 ppm	1 ppm
HYDROGEN SULFIDE (H_2S) COMBO	0 to 200 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[10]	0 to 500 ppm	10 ppm
FORMALDEHYDE (HCHO)	0 to 10 ppm	0.05 ppm
HYDROGEN (H_2)[10]	0 to 1,000 ppm	10 ppm
HYDROGEN CYANIDE (HCN)	0 to 50 ppm	0.5 ppm
HYDROGEN SULFIDE (H_2S)	0 to 100 ppm	0.1 ppm
HYDROGEN SULFIDE (H_2S), EXT. RANGE[10]	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	1 ppm
OXYGEN (O_2)	0 to 30% Vol.	0.1% Vol.
OXYGEN (LIQ O_2)	0 to 30% Vol.	0.1% Vol.
PHOSPHINE (PH_3)	0 to 20 ppm	0.1 ppm
PHOSPHINE H (PH_3 H)	0 to 20 ppm	0.1 ppm
SULFUR DIOXIDE (SO_2)	0 to 20 ppm	0.1 ppm

1. A two-gas combination sensor is required for a 6-gas configuration.
2. When used in line with Honeywell specifications.
3. Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.
4. AutoRAE 2 supports the MultiRAE Lite pumped version only.
5. PID sensor requires a pumped configuration.
6. NDIR combustible sensors require a pumped configuration in CSA countries.
7. RAE Systems recommends calibrating sensors on installation.
8. Specifications are subject to change.
9. Specification for non-wireless monitors.
10. Supported in MultiRAE Lite Diffusion only.
11. Please contact Honeywell RAE Systems for specific wireless approvals.

ORDERING INFORMATION

(MODELS: PGM-6208 and PGM-6208D)

• Wireless[3] and non-wireless configurations are available
• Refer to the Portables Pricing Guide for part numbers for monitors, accessories, sampling and calibration kits, gas, sensors, and replacement parts

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