



# MultiRAE Pro

## Wireless Portable Multi-Threat Radiation and Chemical Detector

The MultiRAE Pro is the industry's only portable wireless multi-threat monitor. The MultiRAE Pro's ability to simultaneously detect gamma radiation and toxic industrial chemicals (TICs/TIMs) enables responders to reduce the equipment footprint and achieve greater agility when operating downrange.

The MultiRAE Pro's optional wireless capability improves safety by providing commanders and safety officers real-time access to instrument readings and alarm status from any location<sup>1</sup> for better situational awareness and faster incident response.



### APPLICATIONS

- Civil defense (search and rescue)
- Homeland security
- HazMat response
- Military
- Semiconductor manufacturing
- Environmental

- *Detector of choice for government agencies and top HazMat teams worldwide*
- *Highly versatile and customizable*
- *Man Down Alarm with real-time remote wireless notification*
- *Compliant with MIL-STD-810G and 461F performance standards*
- *Fully automatic bump testing and calibration with AutoRAE 2*

*CBRN detection with the MultiRAE Pro*

## FEATURES & BENEFITS

- All-in-one monitoring capabilities for radiation, VOCs, oxygen, toxic and combustible gases, up to 6 threat types at a time<sup>2</sup>
- Over 25 interchangeable sensor options, including parts-per-billion PID and gamma radiation
- Wireless access to real-time instrument readings and alarm status from any location
- Unmistakable five-way local and remote wireless notification of alarm conditions
- Intelligent sensors store calibration data, so they can be swapped in the field<sup>3</sup>
- Large graphical display with easy-to-use, icon-driven user interface
- Device Management with Honeywell SafetySuite

# MultiRAE Pro Specifications

INSTRUMENT SPECIFICATIONS <sup>4</sup>	
SIZE	7.6" H x 3.8" W x 2.6" D (193 x 96.5 x 66 mm)
WEIGHT	31 oz (880 g)
SENSORS	Over 25 intelligent interchangeable field-replaceable sensors including gamma radiation, ppb and ppm PID sensors for VOCs, electrochemical sensors for toxic gases and oxygen, combustible LEL and NDIR sensors, and CO <sub>2</sub> NDIR sensor
BATTERY OPTIONS, RUNTIME <sup>5</sup> AND RECHARGE TIME	- Rechargeable Li-ion (~12-hr. runtime, < 6-hr. recharge time) - Extended duration Li-ion (~18-hr. runtime, < 9-hr. recharge time) - Alkaline adapter with 4 x AA batteries (~6-hr. runtime)
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; - Man Down Alarm on/off; visual compliance indicator; battery status; datalogging on/off; wireless on/off and reception quality. - STEL, TWA, peak, and minimum values
KEYPAD BUTTONS	3 operation and programming keys (Mode, Y/+, and N/-)
SAMPLING	Built-in pump. Average flow rate: 250 cc/min. Auto shutoff in low-flow conditions
CALIBRATION	Automatic with AutoRAE 2 Test and Calibration System 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 AND DATA DOWNLOAD	- Data download and instrument set-up and upgrades on PC via desktop charging and PC comm. cradle, travel charger, or AutoRAE 2 Automatic Test and Calibration System - Wireless data and alarm status transmission via built-in RF modem (optional)
WIRELESS NETWORK	ProRAE Guardian Real-Time Wireless Safety System or EchoView Host-based Closed-Loop System
WIRELESS RANGE (TYPICAL)	MultiRAE Pro to RAELink3 [Z1] Mesh modem ~330 feet (100 meters) MultiRAE Pro to EchoView Host, RAEMesh Reader or RAEPoInt ~660 feet (200 meters) MultiRAE Pro to Access Point ~ 330 feet (100 meters)
OPERATING TEMPERATURE	-4° to 122°F (-20° to 50°C)
HUMIDITY	0% to 95% relative humidity (non-condensing)
DUST AND WATER RESISTANCE	IP-65 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
EMI/RFI <sup>5</sup>	EMC directive: 2004/108/EC
PERFORMANCE TESTS	MIL-STD-810G and 461F compliant. 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 - Four years on Liq O <sub>2</sub> sensors
WARRANTY	- Three years on CO and H <sub>2</sub> S 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 1GHz Wi-Fi 802.11 b/g
WIRELESS APPROVALS	FCC Part 15, CE R&TTE, Others <sup>4</sup>
RADIO MODULE	Supports RM900A

SENSOR SPECIFICATIONS <sup>4</sup>		
RADIATION SENSORS	RANGE	SENSOR TYPE
<b>GAMMA</b>	0 to 20,000 µRem/h (dose rate)	1cc CsI (TI) scintillator with photodiode
PID SENSORS	RANGE	RESOLUTION
<b>VOC 10.6 EV (EXT. RANGE)</b>	0 to 5,000 ppm	0.1 ppm
<b>VOC 10.6 EV (PPB)</b>	0 to 2,000 ppm	10 ppb
COMBUSTIBLE SENSORS	RANGE	RESOLUTION
<b>CATALYTIC LEL</b>	0 to 100% LEL	1% LEL
<b>NDIR (0-100% LEL METHANE)</b>	0 to 100% LEL	1% LEL
<b>NDIR (0-100% VOL. METHANE)</b>	0 to 100% Vol.	0.1% Vol.
CARBON DIOXIDE SENSOR	RANGE	RESOLUTION
<b>CARBON DIOXIDE (CO<sub>2</sub>) NDIR</b>	0 to 50,000 ppm	100 ppm
ELECTROCHEMICAL SENSORS	RANGE	RESOLUTION
<b>AMMONIA (NH<sub>3</sub>)</b>	0 to 100 ppm	1 ppm
<b>CARBON MONOXIDE (CO)</b>	0 to 500 ppm	1 ppm
<b>CARBON MONOXIDE (CO), EXT. RANGE</b>	0 to 2,000 ppm	10 ppm
<b>CARBON MONOXIDE (CO), H<sub>2</sub>-COMP.</b>	0 to 2,000 ppm	10 ppm
<b>CARBON MONOXIDE (CO) +</b>	0 to 500 ppm	1 ppm
<b>HYDROGEN SULFIDE (H<sub>2</sub>S) COMBO</b>	0 to 200 ppm	0.1 ppm
<b>CHLORINE (CL<sub>2</sub>)</b>	0 to 50 ppm	0.1 ppm
<b>CHLORINE DIOXIDE (CLO<sub>2</sub>)</b>	0 to 1 ppm	0.03 ppm
<b>ETHYLENE OXIDE (ETO-A)</b>	0 to 100 ppm	0.5 ppm
<b>ETHYLENE OXIDE (ETO-B)</b>	0 to 10 ppm	0.1 ppm
<b>FORMALDEHYDE (HCHO)</b>	0 to 10 ppm	0.05 ppm
<b>HYDROGEN CYANIDE (HCN)</b>	0 to 50 ppm	0.5 ppm
<b>HYDROGEN SULFIDE (H<sub>2</sub>S)</b>	0 to 100 ppm	0.1 ppm
<b>METHYL MERCAPTAN (CH<sub>3</sub>-SH)</b>	0 to 10 ppm	0.1 ppm
<b>NITRIC OXIDE (NO)</b>	0 to 250 ppm	0.5 ppm
<b>NITROGEN DIOXIDE (NO<sub>2</sub>)</b>	0 to 20 ppm	0.1 ppm
<b>OXYGEN (O<sub>2</sub>)</b>	0 to 30% Vol.	0.1% Vol.
<b>OXYGEN (LIQ O<sub>2</sub>)</b>	0 to 30% Vol.	0.1% Vol.
<b>PHOSPHINE (PH<sub>3</sub>)</b>	0 to 20 ppm	0.1 ppm
<b>PHOSPHINE (PH<sub>3</sub>, H)</b>	0 to 20 ppm	0.1 ppm
<b>SULFUR DIOXIDE (SO<sub>2</sub>)</b>	0 to 20 ppm	0.1 ppm

<sup>1</sup> Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.

<sup>2</sup> A two-gas combination sensor is required for a 6-gas configuration.

<sup>3</sup> RAE Systems recommends calibrating sensors on installation.

<sup>4</sup> Specifications are subject to change.

<sup>5</sup> Specification for non-wireless monitors.

<sup>6</sup> Please contact RAE Systems for specific wireless approvals

## ORDERING INFORMATION (MODEL: PGM-6248)

- Wireless<sup>1</sup> 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



Để biết giá cả hoặc thêm thông tin, vui lòng liên hệ với AZMarine theo thông tin chi tiết bên dưới

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