

## MultiRAE Monitors (Model PGM-6228)

MultiRAE advanced chemical detectors for up to 5 gases + VOC

### Monitor-Only Configuration Includes:

- MultiRAE monitor with sensors, pump, battery and wireless options as specified, and protective rubber boot, swivel belt clip and filter installed
- Continuous datalogging (6 months for 5 sensors @ 1-minute intervals)
- Travel charger / PC communications adapter
- Desktop charging / PC communications cradle
- PC communication cable
- AC adapter
- Calibration adapter
- Alkaline battery adapter
- Toolkit with Hex tool and Phillips screwdriver
- PID sensor cap removal tool
- 3 spare external filters
- 6" flexi probe with inlet adapter
- Quick Start Guide
- CD with documentation
- ProRAE Studio II Instrument Configuration and Data Management Software
- Calibration and test certificate
- Warranty / registration card
- 10 charcoal VOC filters for CO sensor

Instrument ships in a hard transport case with custom foam that can also accommodate accessories and 2 calibration gas cylinders with 2 regulators (sold separately)

### Optional Accessories / Confined Space and Calibration Kit Adds:

- Remote Sample Draw Kit (P/N: 008-3015-200)
  - 10" (26 cm) aluminum sample probe with replaceable filters,
  - 3 hydrophobic barrier filters,
  - 10' (3 m) self-coiling Teflon® tubing w/ Luer-style quick-connect fitting
- 4-gas mix (34L; 50% LEL, 18% O<sub>2</sub>, 10 ppm H<sub>2</sub>S, 50 ppm CO) + regulator

### OR

- 100 ppm Isobutylene gas (34L) with regulator

### OR

- 4-gas mix (34L; 50% LEL, 18% O<sub>2</sub>, 10 ppm H<sub>2</sub>S, 50 ppm CO) + regulator
- AND 100 ppm Isobutylene gas (34L) with regulator

Additional accessories, automatic calibration systems, gas kits, individual gases and regulators are listed under Multi-Gas Accessories and Multi-Gas Calibration sections of the Portables Pricing Guide



AutoRAE 2  
Compatible





Listed below are some common configurations of the MultiRAE monitors. For others, please use the Assemble-to-Order (ATO) Configuration Guide below.

PID Sensor	CO <sub>2</sub> NDIR Sensor	Pumped	Wireless	Li-ion	Rechargeable	Accessories Kit	Calibration Kit
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### Standard Sensor Configurations - MultiRAE

Configuration	PART NUMBER
<b>Pumped / 10.6 eV PID / LEL / H<sub>2</sub> S / CO / O<sub>2</sub> / Li-ion / Non-Wireless</b>	
Unit only	MBA3-A1C112E-020
Unit with Accessories / Confined Space and Calibration (4-gas + Iso) Kits	MBA3-A1C112E-02M
<b>Pumped / 10.6 eV PID / LEL / H<sub>2</sub> S / CO / O<sub>2</sub> / Li-ion / Wireless (868 MHz)</b>	
Unit only	MBA3-A1C112E-320
Unit with Accessories / Confined Space and Calibration (4-gas + Iso) Kits	MBA3-A1C112E-32M
<b>Pumped / 10.6 eV PID / LEL / CO + H<sub>2</sub>S / SO<sub>2</sub> / O<sub>2</sub> / Li-ion / Non-Wireless</b>	
Unit only	MBA3-A1C1R3E-020
<b>Pumped / 10.6 eV PID / LEL / CO + H<sub>2</sub>S / SO<sub>2</sub> / O<sub>2</sub> / Li-ion / Wireless</b>	
Unit only	MBA3-A1C1R3E-320

## MultiRAE Monitors (Model PGM-6228)

<b>R</b>	Certification of Intrinsic Safety	
<b>A</b>	ATEX / IECEx	<b>* Note:</b> If the instrument is ordered with fewer than five sensors, a dummy sensor must be installed in the empty sensor slot(s)
<b>R</b>	IECEX / ANZEX	
<b>M</b>	Model / Base Unit Price	
<b>3</b>	MultiRAE (PGM-6228)	<b>* Note:</b> ATEX/IECEX Zone 0 unit cannot be configured with NDIR sensors
<b>2</b>	MultiRAE (PGM-6226), ATEX/IECEX Zone 0	
<b>00</b>	Empty Dummy sensor	+ \$ 0
<b>PID Sensors</b>		
<b>A1</b>	PID, HR, 10.6 eV PID sensor (0.1 - 5,000 ppm; 0.1 ppm res.; 10.6 eV lamp)	+ \$
<b>Combustible NDIR Sensors</b>		
<b>B4</b>	CH <sub>4</sub> NDIR, % LEL Combustible NDIR sensor (0-100% LEL CH <sub>4</sub> )	+ \$
<b>B5</b>	CH <sub>4</sub> NDIR, % Vol. Combustible NDIR sensor (0-100% Vol. CH <sub>4</sub> )	+ \$
<b>CO<sub>2</sub> NDIR Sensors</b>		
<b>B8</b>	CO <sub>2</sub> NDIR, HR Carbon dioxide (CO <sub>2</sub> ) NDIR sensor (up to 50,000 ppm)	+ \$
<b>Electrochemical Sensors</b>		
<b>01</b>	H <sub>2</sub> S Hydrogen Sulfide (H <sub>2</sub> S) sensor (up to 100 ppm)	+ \$
<b>02</b>	CO Carbon Monoxide (CO) sensor (up to 500 ppm)	+ \$
<b>03</b>	SO <sub>2</sub> Sulfur Dioxide (SO <sub>2</sub> ) sensor	+ \$
<b>04</b>	NO Nitric Oxide (NO) sensor	+ \$
<b>05</b>	NO <sub>2</sub> Nitrogen Dioxide (NO <sub>2</sub> ) sensor	+ \$
<b>06</b>	Cl <sub>2</sub> Chlorine (Cl <sub>2</sub> ) sensor	+ \$
<b>07</b>	HCN Hydrogen Cyanide (HCN) sensor	+ \$
<b>08</b>	NH <sub>3</sub> Ammonia (NH <sub>3</sub> ) sensor	+ \$
<b>09</b>	PH <sub>3</sub> Phosphine (PH <sub>3</sub> ) sensor (up to 20 ppm reading)	+ \$
<b>0A</b>	ClO <sub>2</sub> Chlorine Dioxide (ClO <sub>2</sub> ) sensor	+ \$
<b>0D</b>	CO, HR Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	+ \$
<b>0E</b>	O <sub>2</sub> Oxygen (O <sub>2</sub> ) sensor	+ \$
<b>0F</b>	CO comp. H <sub>2</sub> Carbon Monoxide (CO) sensor (H <sub>2</sub> -compensated)	+ \$
<b>0H</b>	CH <sub>3</sub> -SH Methyl Mercaptan (CH <sub>3</sub> -SH) sensor	+ \$
<b>0J</b>	EtO-A Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	+ \$
<b>0K</b>	EtO-B Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	+ \$
<b>0Q</b>	HCHO Formaldehyde (HCHO) sensor	+ \$
<b>0R</b>	CO+H <sub>2</sub> S Carbon Monoxide+Hydrogen Sulfide (CO+H <sub>2</sub> S) combo	+ \$
<b>0S</b>	O <sub>2</sub> Liquid Oxygen (O <sub>2</sub> ) sensor	+ \$

**MB A 3 AA BB C D E - F G H**

### MultiRAE Configuration Guide

Select one option for Certification, Model, and one for each Feature Group (AA through H), to build a complete model number:

<b>MB</b>	<b>A</b>	<b>3</b>	-	<b>AA</b>	<b>BB</b>	<b>C</b>	<b>D</b>	<b>E</b>	-	<b>F</b>	<b>G</b>	<b>H</b>
MultiRAE	Certificate (Always A)	Model (Always 3)		Sensor1	Sensor2	Sensor3	Sensor 4	Sensor 5		Wireless	Battery	Kits



00	Empty	Dummy sensor	+
<b>LEL Catalytic Bead Sensor</b>			
C1	LEL	Combustible catalytic bead % LEL sensor	+
<b>Electrochemical Sensors</b>			
01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	+
02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	+
03	SO2	Sulfur Dioxide (SO2) sensor	+
04	NO	Nitric Oxide (NO) sensor	+
05	NO2	Nitrogen Dioxide (NO2) sensor	+
06	Cl2	Chlorine (Cl2) sensor	+
07	HCN	Hydrogen Cyanide (HCN) sensor	+
08	NH3	Ammonia (NH3) sensor	+
09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	+
0A	ClO2	Chlorine Dioxide (ClO2) sensor	+
0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	+
0E	O2	Oxygen (O2) sensor	+
0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	+
0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	+
0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	+
0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	+
0Q	HCHO	Formaldehyde (HCHO) sensor	+
0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	+
0S	O2	Liquid Oxygen (O2) sensor	+

**\* Note: ClO<sub>2</sub> and H<sub>2</sub>S** sensors cannot be installed in the same instrument

**\*\* Note: NO and NH<sub>3</sub>** sensors cannot be installed in the same instrument

**\* Note:** When ordering electrochemical sensors, please select the lower number first

MB A 3-AA BB C D E - F G H

**MultiRAE Configuration Guide**

Select one option for Certification, Model, and one for each Feature Group (AA through H), to build a complete model number:

<b>MB</b>	<b>A</b>	<b>3</b>	-	<b>AA</b>	<b>BB</b>	<b>C</b>	<b>D</b>	<b>E</b>	-	<b>F</b>	<b>G</b>	<b>H</b>
MultiRAE	Certificate (Always A)	Model (Always 3)		Sensor 1	Sensor 2	Sensor3	Sensor4	Sensor 5		Wireless	Battery	Kits

**C Low-Power Sensor (Options: Dummy / Electrochemical Sensors Incl. CO+H2S Combo)**

0	Empty	Dummy sensor	+
<b>Electrochemical Sensors</b>			
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	+
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	+
3	SO2	Sulfur Dioxide (SO2) sensor	+
4	NO	Nitric Oxide (NO) sensor	+
5	NO2	Nitrogen Dioxide (NO2) sensor	+
6	Cl2	Chlorine (Cl2) sensor	+
7	HCN	Hydrogen Cyanide (HCN) sensor	+
8	NH3	Ammonia (NH3) sensor	+
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	+
A	ClO2	Chlorine Dioxide (ClO2) sensor	+
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	+
E	O2	Oxygen (O2) sensor	+
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	+
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	+
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	+
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	+
Q	HCHO	Formaldehyde (HCHO) sensor	+
R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	+
S	O2	Liquid Oxygen (O2) sensor	+

**\* Note: ClO<sub>2</sub> and H<sub>2</sub>S** sensors cannot be installed in the same instrument

**\*\* Note: NO and NH<sub>3</sub>** sensors cannot be installed in the same instrument

**\* Note:** When ordering electrochemical sensors, please select the lower number first

MB A 3-AA BB C D E - F G H

**MultiRAE Configuration Guide**

Select one option for Certification, Model, and one for each Feature Group (AA through H), to build a complete model number:

<b>MB</b>	<b>A</b>	<b>3</b>	-	<b>AA</b>	<b>BB</b>	<b>C</b>	<b>D</b>	<b>E</b>	-	<b>F</b>	<b>G</b>	<b>H</b>
MultiRAE	Certificate (Always A)	Model (Always 3)		Sensor 1	Sensor 2	Sensor3	Sensor4	Sensor 5		Wireless	Battery	Kits



0	Empty	Dummy sensor	
<b>Electrochemical Sensors</b>			
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	+
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	+
3	SO2	Sulfur Dioxide (SO2) sensor	+
4	NO	Nitric Oxide (NO) sensor	+
5	NO2	Nitrogen Dioxide (NO2) sensor	+
6	Cl2	Chlorine (Cl2) sensor	+
7	HCN	Hydrogen Cyanide (HCN) sensor	+
8	NH3	Ammonia (NH3) sensor	+
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	+
A	ClO2	Chlorine Dioxide (ClO2) sensor	+
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	+
E	O2	Oxygen (O2) sensor	+
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	+
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	+
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	+
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	+
Q	HCHO	Formaldehyde (HCHO) sensor	+
S	O2	Liquid Oxygen (O2) sensor	+

\* Note: ClO<sub>2</sub> and H<sub>2</sub>S sensors cannot be installed in the same instrument

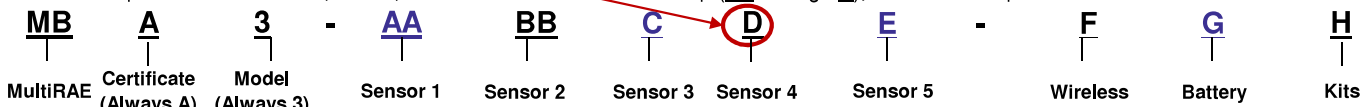
\*\* Note: NO and NH<sub>3</sub> sensors cannot be installed in the same instrument

\* Note: When ordering electrochemical sensors, please select the lower number first

**MB** **A** **3** - **AA** **BB** **C** **D** **E** - **F** **G** **H**

**MultiRAE Configuration Guide**

Select one option for Certification, Model, and one for each Feature Group (**AA** through **H**), to build a complete model number:



<b>E</b>	<b>Low-Power Sensor (Options: Dummy / Electrochemical Sensors)</b>		
0	Empty	Dummy sensor	+
<b>Electrochemical Sensors</b>			
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm)	+
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm)	+
3	SO2	Sulfur Dioxide (SO2) sensor	+
4	NO	Nitric Oxide (NO) sensor	+
5	NO2	Nitrogen Dioxide (NO2) sensor	+
6	Cl2	Chlorine (Cl2) sensor	+
7	HCN	Hydrogen Cyanide (HCN) sensor	+
8	NH3	Ammonia (NH3) sensor	+
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	+
A	ClO2	Chlorine Dioxide (ClO2) sensor	+
D	CO, HR	Carbon Monoxide (CO) sensor (up to 2,000 ppm)	+
E	O2	Oxygen (O2) sensor	+
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	+
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	+
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	+
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	+
Q	HCHO	Formaldehyde (HCHO) sensor	+
S	O2	Liquid Oxygen (O2) sensor	+

\* Note: ClO<sub>2</sub> and H<sub>2</sub>S sensors cannot be installed in the same instrument

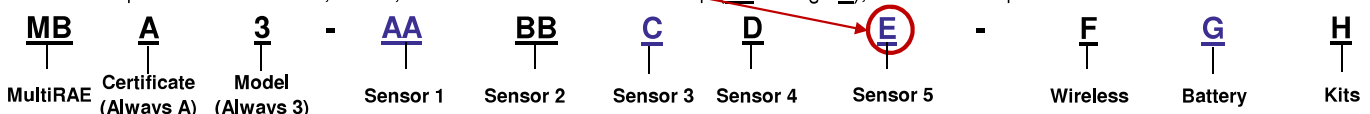
\*\* Note: NO and NH<sub>3</sub> sensors cannot be installed in the same instrument

\* Note: When ordering electrochemical sensors, please select the lower number first

**MB** **A** **3** - **AA** **BB** **C** **D** **E** **F** **G** **H**

**MultiRAE Configuration Guide**

Select one option for Certification, Model, and one for each Feature Group (**AA** through **H**), to build a complete model number:





F   Wireless Options			
0	Empty	Non-wireless	
3	W-868	Wireless, 868 MHz (built-in wireless modem)	
4	W-900	Wireless, 900 MHz (built-in wireless modem)	
1	Extended-duration (Li-ion) battery with alkaline adapter		+
2	Rechargeable (Li-ion) battery with alkaline adapter		+
3	Alkaline battery pack		+
H   Kits and Accessories			
0	Monitor only		+
2	Accessories / Conf. Space + 100ppm Isobutylene Cal. Kit (with 1 regulator)		+
9	Accessories / Conf. Space + 4-gas (LEL/O <sub>2</sub> /CO/H <sub>2</sub> S) Cal. Kit (with 1 regulator)		+
M	Access. / Conf. Space + 4-gas (LEL/O <sub>2</sub> /CO/H <sub>2</sub> S) + 100ppm Iso Cal. Kit (with 2 regulators)		+
4	Pelican case upgrade: Monitor only		+
5	Pelican case upgrade: Access. / Conf. Space + 100ppm Isobutylene Cal. Kit (w/1 reg.)		+
6	Pelican case upgrade: Access. / Conf. Space + 4-gas (LEL/O <sub>2</sub> /CO/H <sub>2</sub> S) Cal. Kit (w/1 reg)		+
7	Pelican case upgr.: Access. / Conf. Sp. + 4-gas (LEL/O <sub>2</sub> /CO/H <sub>2</sub> S) + 100ppm Iso Kit (w/2		+

**MB** **A** **3** - **AA** **BB** **C** **D** **E** - **F** **G** **H** **Total**

### MultiRAE Configuration Guide

Select one option for Certification, Model, and one for each Feature Group (**AA** through **H**), to build a complete model number:

