Honeywell

RAE SYSTEMS

2018 PRICING GUIDE

PORTABLE PRODUCTS

Effective Date for Prices

September 17th, 2018

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Tel: 1.877.723.2878
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Direct Drop Ship

- RAE Systems offers this at no extra cost, but we do need a written copy of these orders **(no call-ins)**. Standard shipping and handling rates apply.
- We also need detailed street address information, including the telephone number of the end user.

Handling Fees

- All shipping and handling charges are added to your invoice, FOB El Paso, TX
- If shipping is charged to your shipping account number, a Handling Fee is not added to your invoice.

Minimum Order Charges

- Any order under $250 net that is placed through Inside Sales, will be accessed a $50.00 Minimum Sales Order Fee.

Lead Times and Order Expedite Fees*

- For every increment of 5 units, add 24 hours to lead times listed below.
- Hot shipments (RED) may be expedited by 24 hours for a $35 surcharge.
- Standard Shipment Lead Times:
    - Standard individual sensors (CO, H_2S, O_2, LEL) – Next day shipment (cut-off is 1:00pm PST or PDT for RED)
    - Non-Standard sensors: NO_2, Cl_2, ClO_2, SO_2, HCN, PH_3, NH3, NO – 72 hour lead time
    - ToxiRAE 3, QRAE 3 standard configurations stocked

* All above commitments are based on availability of Finished Goods Inventory

Special Discounts

- All Special Discounts need to be stated on Purchase Order accompanied by a Special Pricing Form from your Regional Sales Manager.

Restocking Fees, Duplicate Orders, Shipments

We accept purchase orders via fax, e-mail, or directly via the Internet at www.raesystems.com (click on Customer Care, then Partners).

• For every order as to which we agree to accept a return, your account will be assessed a restocking fee of 25% of the order's total amount, plus shipping charges to return any orders (this includes duplicate orders).

• **All sales are final. No returns shall be accepted without a RAE Systems issued NSRMA# (Non-Service Return Material Authorization Number). Any returns received without an NSRMA# will be rejected and returned to sender.**

• No returns will be authorized and no NSRMA#s will be issued after 30 days from the date the order is shipped from RAE Systems.

• RAE Systems must receive returned material within 30 days of the date the NSRMA # is issued.

• Product must be unused, in the original RAE Systems packaging, and must include all accessories, documentation and any other parts.

• Colorimetric Tubes and Calibration Gas (with a shelf life 6 months or less) are **Non-Returnable.**

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How to Use RAE Systems Product Configurators

Unique Part Number

Each of our products has a unique 12-digit (or 14-digit for the MultiRAE family) part number.

The first few numbers – the **Product Code** – identify the product. For example, all QRAE 3 part numbers begin with M020.

The 12-digit part number: **XXXX - ABCD - EFGH**

Product Code   **Feature Groups**
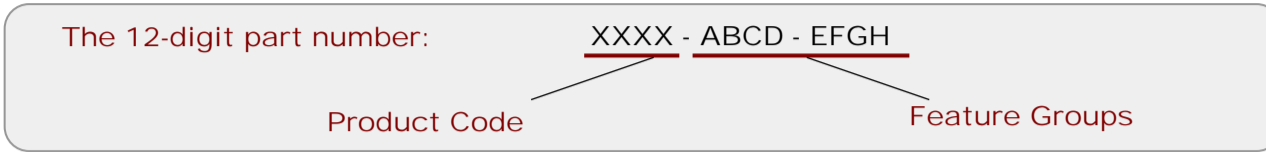
The next seven numbers – the **Feature Groups** - let you "configure" the product. You use these numbers to tell us which sensors, battery packs, accessory kits, etc., are to be used to build the specific product you are ordering.

Building a Part Number Using the Configurator

Using the Configuration page for the QRAE 3, let's build a part number:

Step 1. Find the **Product Code**. As you can see, down at the bottom of the page, the product code for the QRAE 3 is M020

Step 2. Select an option (1 or 2) from **Feature Group A** Write down the price for the option you selected (e.g., Feature Group A, option 1 = $689.00)

Step 3. Select an option (1) from **Feature Group B**

Steps 4 – 7. Select one option from each of the remaining Feature Groups C through H and write down the option number and the price.

Step 8. Use the guide to write the final, correct Part Number. Total up the cost of each Feature Group option. That's it! You've built a product number and calculated the cost. You are ready to quote the client.

QRAE 3, PGM-2500 Series

			USD $	
A	**Pump &Diffusion**			
1	QRAE 3 - Pump		USD $	689
2	QRAE 3 - Diffusion		USD $	589
B	**Certification**			
	cCSAus		USD $	0
C	**Wireless**			
1	no-wireless		USD $	0
2	900M wireless		USD $	200
D	**Socket1 Sensor**			
0	Empty		USD $	0
1	LEL		USD $	59
E	**Socket2 Sensor**			
0	Empty		USD $	0
1	H2S		USD $	59
2	CO		USD $	59
3	SO2		USD $	114
4	HCN		USD $	190
5	PH3		USD $	420
6	NH3		USD $	420
F	**Socket3 Sensor**			
0	Empty		USD $	0
1	OXY		USD $	59
G	**Socket4 Sensor**			
0	Empty		USD $	0
1	CO		USD $	59
2	H2S		USD $	59
3	SO2		USD $	114
4	HCN		USD $	190
5	PH3		USD $	420
6	NH3		USD $	420
H	**Kits**			
1	Accessory kit		USD $	0

* Note: QRAE 3 cannot be ordered with less than 2 sensors installed in the same instrument

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

We do not recommend the following EC sensor combinations:
NH3 / H2S
NH3 / SO2
HCN / H2S

* Note: Please refer to TN114 for cross interference between electrochemical sensors

M020 - A B   C D E - F   G H

Total

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Certifications, Classifications and Approvals

Certifications, Classifications and Approvals	UL	cULus	CSA	cCSAus	FCC	ATEX*	IECEX
MiniRAE 3000, PGM-7320				Yes	Yes	Yes	Yes
MultiRAE Lite, MultiRAE, and MultiRAE Pro, PGM-62x8 series				Yes	Yes	Yes	Yes
MultiRAE Benzene, PGM-6228				Yes	Yes	Yes	Yes
MicroRAE, PGM-26XX				Yes	Yes	Yes	Yes
ppbRAE 3000, PGM-7340				Yes	Yes	Yes	Yes
QRAE 3, PGM-25XX				Yes	Yes		
ToxiRAE 3, PGM-1700				Yes	Yes	Yes	Yes
ToxiRAE Pro Family, PGM-18xx series*[1]				Yes	Yes	Yes	Yes
UltraRAE 3000, PGM-7360				Yes	Yes	Yes	Yes

ATEX option must be specified at time of order

[1] *ToxiRAE Pro CO2 model is not covered by any certification*

Approximate Shipping Weights

PRODUCTS	UNIT ONLY		UNIT and KIT		Must Ship as HazMat	
					Unit only	Unit and Kit
MultiRAE Lite Pumped	2.0 lbs[2]	0.9 kg	11.7 lbs[3]	5.31 kg	No	Yes
MultiRAE	2.0 lbs[2]	0.9 kg	11.7 lbs[3]	5.31 kg	No	Yes
MultiRAE Benzene	2.0 lbs[2]	0.9 kg	11.7 lbs3	5.31 kg	No	Yes
MultiRAE Pro	2.0 lbs[2]	0.9 kg	18.7 lbs[3]	8.48 kg	No	Yes
MicroRAE	0.4 lbs	0.2 kg			No	N/A
MiniRAE 3000, PGM-7320	3.0 lbs	1.35 kg	17.0 lbs	7.65 kg	No	Yes
ppbRAE 3000, PGM-7340	3.0 lbs	1.35 kg	17.0 lbs	7.65 kg	No	Yes
QRAE 3, PGM-25XX	0.9lbs	0.41kg			No	Yes
ToxiRAE 3	0.3 lbs[2]	0.14 kg			No	N/A
ToxiRAE Pro Family, PGM-18xx series	1.9 lbs[2]	0.86 kg			No	N/A
UltraRAE 3000, PGM-7360	4.0 lbs	1.80 kg	17.0 lbs	7.65 kg	No	Yes
Accessories, Cal. Gases and Kits	**UNIT ONLY**		**UNIT and KIT**		**Must Ship as HazMat**	
					Unit only	Unit and Kit
Calibration kits with 1 calibration gas cylinder	13.0 lbs	5.85 kg	N/A		Yes	N/A
Calibration kits with 2 calibration gas cylinders	15.0 lbs	6.75 kg	N/A		Yes	N/A
Charger	1.0 lbs	0.45 kg	N/A		No	N/A
Colorimetric tubes, box of 10	0.5 lbs	0.23 kg	N/A		No	No
Cylinder of calibration gas	1.5 lbs	0.68 kg	N/A		Yes	N/A
Hand Pump, LP-1200	1.0 lbs	0.45 kg	3.0 lbs	1.35 kg	No	No
Regulator	1.0 lbs	0.45 kg	N/A		No	N/A
Sensor, catalytic bead LEL	0.5 lbs	0.23 kg	N/A		No	N/A
Sensor, EC for toxic gases and oxygen	0.5 lbs	0.23 kg	N/A		No	N/A
Vapor filters, package of 100	0.5 lbs	0.23 kg	N/A		No	N/A

* - *Unit with CSK Kit weight based on 2 cylinders cal gas (add 15 lbs. to weight of unit only)*

[1] - *MultiRAE Lite Diffusion weights are lower by 4.23 oz (120 grams) or more*

[2] - *Weight of the instrument with the standard packaging for instrument-only configurations and all standard in-the-box accessories*

[3] - *Weight of the instrument with the case with accessories and calibration kit*

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RAE Colorimetric Tubes

TYPE	PART NO.	Standard Range Standard Number of Pump Strokes	Extended Range Varied Number of Strokes	List Price [USD $] 10 Tubes per Box
Acetone	10-111-40	0.1 – 2%	0.05 – 4%	39
Amines	10-132-10	0.5 – 10 ppmv	0.25 – 20 ppmv	39
Ammonia	10-100-05	1 – 30 ppmv	0.5 – 60 ppmv	39
	10-100-10	5 – 100 ppmv	2.5 – 200 ppmv	39
	10-100-12	10 – 260 ppmv	5 – 520 ppmv	39
	10-100-15	25 – 500 ppmv	12 – 1,000 ppmv	39
	10-100-40	1 – 15%	0.5 – 30%	39
Benzene	10-101-01*	0.5 – 10 ppmv selective	0.25 – 30 ppmv	39
	10-101-10*	5.0 – 40 ppmv selective	25 – 200 ppmv	39
	10-101-20	5 – 100 ppmv	2.5 – 200 ppmv	39
Butadiene	10-135-04	0.5 – 5 ppmv	0.25 – 10 ppmv	39
Butane	10-137-30	25 – 1,400 ppmv	12.5 – 2,800 ppmv	39
Carbon Dioxide	10-104-30	300 – 5,000 ppmv	150 – 10,000 ppmv	39
	10-104-40	0.05 – 1%	0.025 – 2%	39
	10-104-45	0.25 – 3%	0.12 – 6%	39
	10-104-50	1 – 20%	0.25 – 50%	39
	10-104-60	5 – 40%	1.25 – 70%	39
Carbon Monoxide	10-102-18	5 – 100 ppmv selective	2.5 – 200 ppmv	39
	10-102-20	5 – 100 ppmv	2.5 – 200 ppmv	39
	10-102-30	20- 500	10 – 1000 ppmv	39
	10-102-45	0.2 – 4%	0.05 – 4%	39
Chlorine	10-106-10	0.5 – 8 ppmv	0.25 – 16 ppmv	39
	10-106-20	5 – 100 ppmv	2.5 – 200 ppmv	39
Chlorine Dioxide	10-130-10	0.25 – 15 ppmv	0.05 – 30 ppmv	39
Diesel & Jet Fuel	10-143-10	0.5 – 25 ppmv	N/A	39
Ethanol	10-141-30	100 – 2000 ppmv	50 – 2000 ppmv	39
Formaldehyde	10-121-05	0.1 – 5 ppmv	0.1 – 40 ppmv	39
Gasoline	10-138-30	30 – 1000 ppmv	15 – 2000 ppmv	39
Hydrocarbons	10-110-30	50 – 1,000 ppmv	25 – 2,000 ppmv	39
Hydrogen Chloride	10-108-09	1 – 20 ppmv	0.5 – 40 ppmv	39
	10-108-10*	1 – 20 ppmv w/ desiccant	0.5 – 40 ppmv	39
	10-108-22	20 – 500 ppmv	10 – 1000 ppmv	39
Hydrogen Cyanide	10-126-10	2.5 – 60 ppmv	1.25 – 120 ppmv	39
Hydrogen Fluoride	10-105-10	0.5 – 20 ppmv	0.25 – 40 ppmv	39
Hydrogen Sulfide	10-103-04	0.2 – 3 ppmv	0.1 – 6 ppmv	39
	10-103-05*	0.2 – 3 ppmv w/ desiccant	0.1 – 6 ppmv	39
	10-103-06	1 – 7 ppmv	0.5 – 7 ppmv	39
	10-103-10	2.5 – 60 ppmv	1.25 – 120 ppmv	39
	10-103-12	0 – 150 ppm	0 – 300 ppmv	39
	10-103-15	10 – 120 ppmv	5 – 240 ppmv	39
	10-103-18	25 – 250 ppmv	12.5 – 500 ppmv	39
	10-103-20	50 – 800 ppmv	25 – 1,600 ppmv	39
	10-103-30	100 – 2,000 ppmv	50 – 4,000 ppmv	39
	10-103-40	0.1 – 2%	0.05 – 4%	39
	10-103-50	2 – 40%	0.5 – 70%	39

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RAE Colorimetric Tubes (Continued)

TYPE	PART NO.	Standard Range	Extended Range	List Price [USD $]
		Standard Number of Pump Strokes	Varied Number of Strokes	10 Tubes per Box
MEK	10-113-20	0.02 – 0.6 %	0.01 – 1.8 %	39
Mercaptans	10-129-20	5 – 120 ppmv	2.5 – 240 ppmv	39
Methyl Bromide	10-131-10	1 – 18 ppmv	0.5 – 36 ppmv	39
	10-131-30	20 – 300 ppmv	10 – 600 ppmv	39
Nitric Acid	10-146-20	1 – 20 ppm	0.5 – 40 ppm	39
Nitrogen Dioxide	10-117-10	0.5 – 30 ppmv	N/A	39
Nitrogen Oxides	10-109-20*	1 – 50 ppmv	0.5 – 100 ppmv	39
Ozone	10-133-03	0.05 – 0.6 ppmv	0.15 – 1.8 ppmv	39
Phenol	10-139-05	1 – 25 ppmv	0.5 – 180 ppmv	39
Phosphine	10-116-10	5 – 50 ppmv	2.5 – 100 ppmv	39
	10-116-20	25 – 500 ppmv	12.5 – 1,000 ppmv	39
	10-116-25	50 – 1,000 ppmv	25 – 2,000 ppmv	39
Sulfur Dioxide	10-107-15	2 – 30 ppmv	1 – 60 ppmv	39
	10-107-20	5 – 100 ppmv	2.5 – 200 ppmv	39
	10-107-25	100 – 1,800 ppmv	50 – 3,600 ppmv	39
	10-107-30	200 – 4,000 ppmv	50 – 4,000 ppmv	39
	10-107-40	0.2 – 5 %	0.1 – 10 %	39
Toluene	10-114-20	10 – 300 ppmv	5 – 600 ppmv	39
Trichloroethylene	10-119-20*	5 – 100 ppmv	2.5 – 230 ppmv	39
Vinyl Chloride	10-128-10*	1 – 20 ppmv	0.5 – 40 ppmv	39
Water Vapor	10-120-10	2-10 lbs/MMCF (0.03-0.16 mg/L)	1 – 20 lbs/MMCF	39
	10-120-20	6-40 lbs/MMCF (0.1-0.64 mg/L)	3 – 80 lbs/MMCF	39
	10-120-30	0.05 – 1 mg/L	0.025 – 2 mg/L	39
	10-120-40	1 – 18 mg/L	0.5 – 32 mg/L	39
Xylene	10-112-20	10 – 200 ppmv	5 – 400 ppmv	39

Asterisk indicates boxes containing 5 colorimetric tubes and 5 pre-tubes, for a total of 5 measurements. Standard boxes w/o asterisk have 10 tubes.

RAE Specialty Tubes

TYPE	PART NO.	DESCRIPTION	List Price [USD $]
RAE-Sep™ VOC	012-2502-005*	VOC Tubes for UltraRAE Monitor (5 tubes/box)	45
RAE-Sep™ Benzene	012-3022-010	Benzene Separation Tubes for UltraRAE Series Monitor (10 tubes/box)	90
RAE-Sep™ Butadiene	012-3024-010	Butadiene Separation Tubes for UltraRAE Series Monitor (10 tubes/box)	90
RAE-Sep™ Halocarbon	012-3023-010	Halocarbon Separation Tubes for UltraRAE Series Monitor (10 tubes/box)	113
RAE Sep™ Tube Cartridge	M01-0312-000	Benzene Separation Tubes Cartridges for MultiRAE Benzene (6 cartridges/box)	506
VOC Zeroing (Single Use)	025-2000-010	Disposable, Single-Use VOC Zeroing Tubes for PID (10 tubes/box)	45
Humidity Filtering II	025-2002-010	Removes humidity during most PID measurements (10 tubes/box)	45
VOC/CO$_2$ Zeroing	025-2003-010	VOC/CO$_2$ Zeroing Tubes for IAQRAE and MultiRAE IR Monitors (10 tubes/box)	68
Smoke Generation	10-123-01*	Smoke Tubes (Stannic Chloride Irritant, 6 tubes/box)	45
	010-0004-000	Smoke Kit (aspirator bulb, tip breaker, box smoke tubes, leather case)	79

Asterisk indicates boxes do not contain 10 tubes. Standard boxes w/o asterisk have 10 tubes.

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Piston Hand Pump (Model LP-1200)

Piston Hand Pump Kit includes:

- 50/100 ml Piston Hand Pump – Model LP-1200
- Spare inlet filters (2)
- Spare rubber inlet
- Spare plunger gasket
- Carrying case

PISTON HAND PUMP	PART NUMBER	List Price [USD $]
Hand Pump Only	010-0901-000	208
Hand Pump Kit	010-0001-000	225

Tube and Pump Accessories

PART NUMBER	DESCRIPTION	Use With…	List Price [USD $]
010-3009-015	Remote sampling hose, 15' (5m), and adapter assembly	ALL	96
010-3009-035	Remote sampling hose, 35' (11m), and adapter assembly	ALL	173
010-3006-000	LP-1200 Accessory Kit (3 rubber inlets & filters, 2 gaskets, lubricant)	ALL	34
701-0002-000	Case, soft leather packing case (11" x 8.75" x 3")	ALL	62

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ToxiRAE Pro Personal Single-Gas Monitors for VOCs, O$_2$, Toxic, CO$_2$ and Combustible Gases

The ToxiRAE Pro is the industry's first and largest family of wireless[1] personal single-gas instruments that reliably and accurately monitor a full range of common toxic industrial gases, volatile organic compounds, carbon dioxide and combustible gases. ToxiRAE Pro is a unified wireless single-gas monitoring platform that customers standardize on to reduce costs and increase efficiencies pertaining to worker safety.

ToxiRAE Pro instruments boast intelligent interchangeable[2] sensors, continuous data logging functionality[3], Man Down alarm and policy enforcement functionalities, the largest backlit display in their class, and an unmistakable five-way alarm notification system that immediately alerts both the user and a remote observer of a hazardous condition by activating the buzzer, vibration alarm, display, and LED lights on the instrument and by sending a remote alarm over the RAE Systems Dedicated Wireless Network[4].

ToxiRAE Pro monitors require minimal user training due to their intuitive user interface that puts all critical readouts at the user's fingertips.
ToxiRAE Pro monitors are designed for simple and efficient maintenance and calibration. Their plug-and-play sensor and battery can be replaced in the field while the new AutoRAE 2 Automated Test and Calibration Station makes bump testing and calibration as easy as a press of a button.
ToxiRAE Pro monitors are rugged, intrinsically safe instruments engineered by RAE Systems to last, safeguarding workers day after day, month after month, and year after year.

The wireless ToxiRAE Pro monitors interface with both the the ProRAE Guardian System and the EchoView-Host-based Closed-Loop Wireless System.
The ProRAE Guardian Real-time Wireless Safety System allows incident commanders, plant managers and first responders to set up a rapidly deployable, secure wireless threat detection system that facilitates faster, data-driven decision-making that helps responders save lives and assets.
RAE Systems' EchoView Host-based Closed-Loop Wireless System provides safety-enhancing wireless monitoring in applications such as fireground and hazmat response, confined space entry, multi-gas leak detection, environmental remediation and refinery turnarounds.

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[1] - Wireless functionality is an optional feature. Instruments can be ordered with or without an integrated wireless modem.
     Instruments ordered as non-wireless cannot be upgraded to wireless at a later time

[2] - RAE Systems recommends calibrating sensors on installation

[3] - Available on all ToxiRAE Pro instruments except Safety Configurations of ToxiRAE Pro PID

[4] - Additional equipment and / or software licenses may be required to enable remote wireless monitoring and alarm transmission

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ToxiRAE Pro PID Personal Monitors for Volatile Organic Compounds (PGM-1800)

The ToxiRAE Pro PID is the world's smallest wireless photoionization detector. Featuring RAE Systems' next-generation PID sensor, the ToxiRAE Pro PID can promptly detect and accurately monitor over 300 VOCs. With an onboard library of 190 correction factors, the ToxiRAE Pro PID can be programmed to automatically read in concentrations of the specified compound. The ToxiRAE Pro PID is offered in Industrial Hygiene (advanced) and Safety (basic) configurations.

ToxiRAE Pro PID comes with:
• ToxiRAE Pro PID monitor with sensor and wireless option as specified,
rechargeable battery, alligator clip, and protective rubber boot installed
• Charging and PC communication cradle
• PC communication cable
• AC adapter (100 to 240 V, 50/60 Hz AC to 12 V DC)
• Calibration adapter
• Combined instrument / sensor cap removal tool
• Quick Start Guide
• CD with documentation
• CD with ProRAE Studio II monitor configuration & data management software
• Technical Note TN-106 with ionization energies and correction
factors for 300+ VOCs (Industrial Hygiene versions only)
• Calibration and test certificate
• Warranty/registration card

Available Instrument Configurations

ToxiRAE Pro PID Monitor (PGM-1800)	10.6 eV PID Lamp	Datalogging	Wireless	Rechargeable	Rubber boot	PART NUMBER	List Price [USD $]
Industrial Hygiene Configurations							
10.6 eV PID (0.1 - 2,000 ppm range, 0.1 ppm res.) / Datalogging / Wireless (900 MHz)	•	•	•	•	•	G02-B004-000	2,215
10.6 eV PID (0.1 - 2,000 ppm range, 0.1 ppm res.) / Datalogging / Non-Wireless	•	•		•	•	G02-B000-000	1,988
9.8 eV PID (0.1 - 2,000 ppm range, 0.1 ppm res.) / Datalogging / Wireless (900 MHz)		•	•	•	•	G02-B024-000	2,340
9.8 eV PID (0.1 - 2,000 ppm range, 0.1 ppm res.) / Datalogging / Non-Wireless		•		•	•	G02-B020-000	2,113
Safety Configurations							
10.6 eV PID (1 - 1,000 ppm range, 1 ppm res.) / No Datalogging / Wireless (900 MHz)	•		•	•	•	G02-B014-000	1,409
10.6 eV PID (1 - 1,000 ppm range, 1 ppm res.) / No Datalogging / Non-Wireless	•			•	•	G02-B010-000	1,181

ToxiRAE Pro LEL Personal Monitors for Combustible Gases (PGM-1820)

The ToxiRAE Pro LEL is the world's first wireless personal combustible gas monitor. Boasting the continuous data logging capability that comes standard and 34 built-in correction factors, the ToxiRAE Pro LEL enables measurement of combustible gas in % LEL of the selected compound.

ToxiRAE Pro LEL single-pack comes with:

• Individual packaging

• ToxiRAE Pro LEL monitor with sensor and wireless option as specified, rechargeable battery, alligator clip, and protective rubber boot installed

• Charging and PC communication cradle

• PC communication cable

• AC adapter (100 to 240 V, 50/60 Hz AC to 12 V DC)

• Calibration adapters

• Quick Start Guide

• CD with documentation

• CD with ProRAE Studio II monitor configuration and data management software

• Calibration and test certificate

• Warranty/registration card

Available Instrument Configurations

ToxiRAE Pro LEL / Datalogging	% LEL Reading	Datalogging	Wireless	Rechargeable	Rubber boot	PART NUMBER	List Price [USD $]
Combustibles (0-100 %LEL - 1%LEL res.) / Datalogging / Wireless (900 MHz)	•	•	•	•	•	G02-B034-000	818
Combustibles (0-100 %LEL - 1%LEL res.) / Datalogging / Non-Wireless	•	•		•	•	G02-B030-000	591

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ToxiRAE Pro Personal Monitors for Toxic Gases and Oxygen (PGM-1860)

The ToxiRAE Pro is a wireless personal monitor for toxic gases and oxygen deficiency / enrichment. Boasting a selection of over 20 intelligent interchangeable sensors, the ToxiRAE Pro can detect a broad range of gases - from carbon monoxide, hydrogen sulfide, and oxygen to ammonia, and chlorine. The ToxiRAE Pro's plug-and-play intelligent sensors store calibration data, so if you need to monitor one gas one day and another gas the next, swapping the sensors in your ToxiRAE Pro is all it takes.

ToxiRAE Pro Monitor (PGM-1860) Configurator

B		Base Unit with Sensor		
1	H_2S	Hydrogen Sulfide (H_2S) sensor (up to 100 ppm reading)	USD $	473
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	473
3	SO_2	Sulfur Dioxide (SO_2) sensor	USD $	585
4	NO	Nitric Oxide (NO) sensor	USD $	585
5	NO_2	Nitrogen Dioxide (NO_2) sensor	USD $	585
6	Cl_2	Chlorine (Cl_2) sensor	USD $	585
7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	585
8	NH_3	Ammonia (NH_3) sensor	USD $	585
9	PH_3	Phosphine (PH_3) sensor (up to 20 ppm reading)	USD $	585
A	ClO_2	Chlorine Dioxide (ClO_2) sensor	USD $	698
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	585
E	O_2	Oxygen (O_2) sensor	USD $	473
F	CO comp H_2	Carbon Monoxide (CO) sensor (H_2-compensated)	USD $	698
H	CH_3-SH	Methyl Mercaptan (CH_3-SH) sensor	USD $	698
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	585
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	585
L	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)	USD $	698
M	H_2	Hydrogen (H_2) sensor	USD $	585
N	H_2S, HR	Hydrogen Sulfide (H2S) extended-range sensor (up to 1,000 ppm reading)	USD $	473
Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810
	C	**Datalogging**		
	1	Datalogging Continuous datalogging capability	USD $	0
		D	**Wireless**	
		0	Empty Non-wireless (cannot be upgraded to wireless)	USD $	0
		4	W-900 Wireless, 900 MHz (built-in wireless modem)	USD $	225
			E	**Kits**
			1	Monitor with standard in-the-box accessories	USD $	0

G02 - B   1   D - 1 0 0   **Total**

ToxiRAE Pro ATO Configuration Guide

Select one option from each Feature Group, <u>A</u> through <u>E</u>, to build a complete model number following this guide:

G02	-	**B**	**B**	**1**	**D**	-	**1**	**0**	**0**
ToxiRAE Pro		CSA Cert. (Always B)	Base Unit / Sensor	Datalogging (Always 1)	Wireless		Kits (Always 1)	Always Zero	Always Zero

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ToxiRAE Pro CO2 Personal Monitors for Carbon Dioxide

The ToxiRAE Pro CO2 is the world's first wireless personal carbon dioxide gas monitor. Boasting the continuous datalogging capability that comes standard, the ToxiRAE Pro CO2 enables measurement of carbon dioxide in ppm.

ToxiRAE Pro CO2 comes with:
• ToxiRAE Pro CO2 monitor with sensor and wireless option as specified, rechargeable battery, alligator clip, and protective rubber boot installed
• Charging and PC communication cradle
• PC communication cable
• AC adapter (100 to 240 V, 50/60 Hz AC to 12 V DC)
• Calibration adapter
• Quick Start Guide
• CD with documentation
• CD with ProRAE Studio II Instrument Configuration and data management software
• Calibration and test certificate
• Warranty/registration card

Available Instrument Configurations

ToxiRAE Pro CO2 Monitor (PGM-1850)	NDIR CO2 Sensor	Datalogging	Wireless	Rechargeable	Rubber boot	PART NUMBER	List Price [USD $]
NDIR Sensor (200 - 50,000ppm, 100ppm res.) / Datalogging / Wireless (900 MHz)	•	•	•	•	•	G02-0009-000	1,170
NDIR Sensor (200 - 50,000ppm, 100ppm res.) / Datalogging / Non-Wireless	•	•		•	•	G02-0007-000	943

ToxiRAE Pro Replacement Sensors

PART NUMBER	SENSOR	DESCRIPTION	COMPATIBLE INSTRUMENTS	List Price [USD $]
PID (Photoionization Detector) Sensors				
C03-0912-000	PID, HR (TRP)	PID sensor (0.1 - 2,000 ppm; 0.1 ppm res.; 10.6 eV lamp)	ToxiRAE Pro PID (Industrial Hygiene) only	585
C03-0912-003	PID, LR	PID sensor (1 - 1,000 ppm; 1 ppm res.; 10.6 eV lamp)	ToxiRAE Pro PID (Safety) only	473
C03-0912-010	PID, 9.8 eV	PID sensor (0.1 - 2,000 ppm; 0.1 ppm res.; 9.8 eV lamp)[3]	ToxiRAE Pro PID (Industrial Hygiene) only	810
Electrochemical Toxic and Oxygen Sensors				
C03-0950-000	NH_3	Ammonia (NH_3) sensor	ToxiRAE Pro [EC] only	473
C03-0903-000	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	ToxiRAE Pro [EC] only	349
C03-0906-000	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	ToxiRAE Pro [EC] only	236
C03-0979-000	CO comp. H_2	Carbon Monoxide (CO) sensor (H_2-compensated)	ToxiRAE Pro [EC] only	405
C03-0978-000	Cl_2	Chlorine (Cl_2) sensor	ToxiRAE Pro [EC] only	349
C03-0956-000	ClO_2	Chlorine Dioxide (ClO_2) sensor	ToxiRAE Pro [EC] only	473
C03-0954-000	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	ToxiRAE Pro [EC] only	349
C03-0922-100	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	ToxiRAE Pro [EC] only	349
C03-0923-100	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)	ToxiRAE Pro [EC] only	473
C03-0982-000	HCHO	Formaldehyde (HCHO) sensor	ToxiRAE Pro [EC] only	810
C03-0981-000	H_2	Hydrogen (H_2) sensor	ToxiRAE Pro [EC] only	473
C03-0949-000	HCN	Hydrogen Cyanide (HCN) sensor	ToxiRAE Pro [EC] only	473
C03-0904-000	H_2S, HR	Hydrogen Sulfide (H_2S) extended-range sensor (up to 1,000 ppm reading)	ToxiRAE Pro [EC] only	236
C03-0907-001	H_2S	Hydrogen Sulfide (H_2S) sensor (up to 100 ppm reading)	ToxiRAE Pro [EC] only	236
C03-0980-000	CH_3-SH	Methyl Mercaptan (CH_3-SH) sensor	ToxiRAE Pro [EC] only	585
C03-0974-000	NO	Nitric Oxide (NO) sensor	ToxiRAE Pro [EC] only	405
C03-0975-000	NO_2	Nitrogen Dioxide (NO_2) sensor	ToxiRAE Pro [EC] only	405
C03-0942-000	O_2	Oxygen (O_2) sensor	ToxiRAE Pro [EC] only	236
C03-0976-000	PH_3	Phosphine (PH_3) sensor (up to 20 ppm reading)	ToxiRAE Pro [EC] only	473
C03-0973-100	SO_2	Sulfur Dioxide (SO_2) sensor	ToxiRAE Pro [EC] only	349
Combustible Sensors				
C03-0911-000	LEL	Combustible catalytic bead sensor	ToxiRAE Pro LEL only	236
NDIR - non certified				
C03-0961-000	CO2	Carbon Dioxide sensor	ToxiRAE Pro CO2 only	934

ToxiRAE Pro Accessories and Replacement Parts

PART NUMBER	DESCRIPTION	COMPATIBLE INSTRUMENTS	List Price [USD $]
Power and PC Communication Accessories			
G02-3004-000	Rechargeable Li-ion battery	All ToxiRAE Pro monitors	101
G02-3008-000	Cradle for charging and PC communications (AC adapter or PC cable NOT included)	All ToxiRAE Pro monitors	101
500-0036-100	AC adapter with international prong kit (for single-unit charging and PC communications cradle)	All ToxiRAE Pro monitors	68
410-0203-000	PC communications cable	All ToxiRAE Pro monitors	34
G02-3013-001	Multi-unit charger for ToxiRAE Pro (AC adapter included)	All ToxiRAE Pro monitors	473
500-0156-000	POWER ADAPTER,AC/DC,90-264V INPUT,12VDC/3A OUTPUT	All ToxiRAE Pro monitors	113
M02-3025-000	External Charger for Battery (ToxiRAE Pro and QRAE 3)	ToxiRAE Pro / QRAE 3	136
Calibration and Maintenance Accessories			
G02-2028-002	Calibration adapter - ToxiRAE Pro (non-PID) (Pack of 2)	All ToxiRAE Pro, except PID	34
G02-2027-002	Calibration adapter - ToxiRAE Pro PID (Pack of 2)	ToxiRAE Pro PID only	34
G02-0306-003	Combined instrument top cap / PID sensor cover removal tool - ToxiRAE Pro PID (Pack of 3)	ToxiRAE Pro PID only	37
081-0017-000	PID sensor lamp cleaning kit	ToxiRAE Pro PID only	56
G02-0304-000	PID sensor maintenance kit (includes sensor cap, electrode panel, and sensor cap removal tool)	ToxiRAE Pro PID only	37
G02-0304-100	9.8 eV PID sensor maintenance kit (includes sensor cap, electrode panel, and sensor cap removal tool)	ToxiRAE Pro PID only	34
G02-0307-003	Filter replacement kit - ToxiRAE Pro (non-PID) (includes cap, filter, and rubber gasket) (Pack of 3)	All ToxiRAE Pro, except PID	34
G02-0305-003	Filter replacement kit - ToxiRAE Pro PID (includes cap with screw, filter, & rubber gasket) (Pack of 3)	ToxiRAE Pro PID only	34
Replacement Parts			
G01-2005-010-FRU	Alligator clip assembly (with screws and washers) (Pack of 10)	ToxiRAE Pro, ToxiRAE 3, QRAE II	56
G02-3006-001	Fan assembly - ToxiRAE Pro PID (includes fan and O-ring)	ToxiRAE Pro PID only	236
G02-2029-000	Protective rubber boot for ToxiRAE Pro (non-PID)	All ToxiRAE Pro, except PID	34
G02-2029-100	Protective rubber boot for ToxiRAE Pro PID	ToxiRAE Pro PID only	34

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ToxiRAE 3 (PGM-1700)

Personal Gas Monitors for H₂S, CO, or CO (High Range)

The ToxiRAE 3 is one of the smallest gas monitors on the market with a high-performing, 3-electrode micro-sensor. The standard ToxiRAE 3 firmware offers the flexibility to meet each customer's unique requirements. The user can choose to set the instrument to either display gas concentrations or days of instrument life remaining (also referred to as "countdown" or "contractor" mode.) All ToxiRAE 3's provide data storage for 10 events that can be downloaded via the AutoRAE Lite for ToxiRAE 3 Automatic Bump and Calibration Station.

ToxiRAE 3 Each monitor includes:	ToxiRAE 3 Pack of 10 includes:	ToxiRAE 3 Pack of 100 includes:
• (1/ea) ToxiRAE 3 monitor with H₂S, CO or CO (High Range) sensor (as specified) • CD with Operation manual • Rugged alligator clip • Functional gas test adapter • Calibration certificate • Quick start guide	• (10/ea) ToxiRAE 3 monitor with H₂S, CO or CO (High Range) sensor (as specified) • (2) CDs with Operation Manual • (10) Rugged alligator clips • (2) Functional gas test adapters • (10) Calibration certificates • (2) Quick start guide	(10 packages of 10 or 100/ea) ToxiRAE 3 monitor with H₂S, CO or CO (High Range) sensor (as specified)

ToxiRAE 3 (PGM-1700)

GAS	DESCRIPTION	RANGE PPM	PART NUMBER (1)*	PART NUMBER (2)**	List Price [USD $]
H₂S	Hydrogen Sulfide (1)	0 – 100	G01-0102-000	N/A	248
H₂S	Hydrogen Sulfide (pack of 10)	0 – 100	G01-0102-010	G01-0104-010	2,228
H₂S	Hydrogen Sulfide (pack of 100)	0 – 100	G01-0102-100	G01-0104-100	19,491
H₂S (3)***	Hydrogen Sulfide (1)	0 – 100	G01-0107-000	N/A	248
H2S (3)***	Hydrogen Sulfide (pack of 10)	0 – 100	G01-0107-010	N/A	2,228
H2S (3)***	Hydrogen Sulfide (pack of 100)	0 – 100	G01-0107-100	N/A	19,491
CO	Carbon Monoxide (1)	0 – 500	G01-0101-000	N/A	248
CO	Carbon Monoxide (pack of 10)	0 – 500	G01-0101-010	G01-0105-010	2,228
CO	Carbon Monoxide (pack of 100)	0 – 500	G01-0101-100	G01-0105-100	19,491
CO	Carbon Monoxide (1)	0 – 1999	G01-0103-000	N/A	248
CO	Carbon Monoxide (pack of 10)	0 – 1999	G01-0103-010	G01-0106-010	2,228
CO	Carbon Monoxide (pack of 100)	0 – 1999	G01-0103-100	G01-0106-100	19,491

* Part Number (1) = for Units with Standard Alarm Points

** Part Number (2) = for Units with Custom Alarm Points (to be specified on order), with a minimum quantity of 50 units

*** Gas (3) = Units shipped with default count-down mode only

ToxiRAE 3 Parts and Accessories

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
500-0076-100	Replacement Lithium Battery	All ToxiRAE II, ToxiRAE 3	39
G01-2013-100	External filters (pack of 100)	ToxiRAE 3	93
G01-2010-010	Calibration Adapter with Tubing (Pack of 10)	All ToxiRAE 3	50

AutoRAE Lite for ToxiRAE 3 Automated Bump Test and Calibration Station

AutoRAE Lite for ToxiRAE 3

DESCRIPTION	PART NUMBER	List Price [USD $]
AutoRAE Lite Automated Test and Calibration Station for ToxiRAE 3	T01-0100-000	1,440

For more information please refer to AutoRAE Lite pricing information

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MicroRAE wireless Four-Gas Monitor (PGM-26XX Series)

The MicroRAE is a handheld wireless diffusion instrument that simultaneously monitors up to four gases, including Hydrogen Sulfide (H_2S), Carbon Monoxide (CO), Oxygen (O_2) and Combustibles (LEL). With its wireless connectivity options, the MicroRAE can deliver real-time instrument readings and alarm status to the Honeywell ConneXt Safety Ecosystem. This enables continuous, instant visibility of safety threats for faster, more informed decisions, to protect workers, facilities, and the environment, and to optimize operations.

Monitor-only configuration includes:
- Monitor as specified
- Sensors as specified
- Calibration adapter
- Travel charger cradle with computer cable
- Universal wall adapter
- Quick Reference guide
- CD ROM with product content

Optional Confined Space Kit 1 (CSK 1, P/N 020-0040-010) includes:
- Hard transport case with pre-cut foam
- Tool Kit
- Hand pump
- 10" stiff aluminum Sample probe with replaceable filter
- 6 feet (2 meters) Tygon® tubing
- External filter (pack of 3)

Optional Confined Space Kit 2 for PGM2500(D) (CSK 2, P/N 020-0040-020) includes:
- Four-gas mix in a 34L cylinder
  (50% LEL, 18% O_2, 10 ppm Hydrogen Sulfide, 50 ppm Carbon Monoxide)
- Regulator and tubing
- *Compatible with PGM2500; PGM2500D and PGM2600*

Note: MicroRAE is compatible with MicroRAE Cradle for AutoRAE 2 Automatic Test and Calibration Station. Please contact us for availability.

Listed below are some common configurations of the MicroRAE monitors. For others, please use the **Standard Sensor Configurations - MicroRAE**

PGM-2600 LEL / H_2S / CO / O_2 sensors	Diffusion	BLE	Wireless	GPS	PART NUMBER	LIST PRICE
MicroRAE (cCSAu) LEL / H_2S / CO / O_2 - Li-ion / BLE	•	•			M031-1111-200	818
MicroRAE (cCSAu) LEL / H_2S / CO / O_2 - Li-ion / BLE + 900MHz + GPS	•	•	•	•	M031-3111-200	987
MicroRAE (cCSAu) LEL / H_2S / CO / O_2 - Li-ion / BLE + Wi-Fi + GPS	•	•	•	•	M031-4111-200	1015

PGM-2600 LEL / O_2 / CO / HCN sensors	Diffusion	BLE	Wireless	GPS	PART NUMBER	LIST PRICE
MicroRAE (cCSAu) LEL / O_2 / CO / HCN - Li-ion / BLE	•				M031-1111-300	966
MicroRAE (cCSAu) LEL / O_2 / CO / HCN - Li-ion / BLE + 900MHz + GPS	•	•	•	•	M031-3111-300	1,135
MicroRAE (cCSAu) LEL / O_2 / CO / HCN - Li-ion / BLE + Wi-Fi + GPS	•	•	•	•	M031-4111-300	1,163

PGM-2600 Series

Basic Unit   USD $ **498**

			USD $	
A	**Certification**			
1	cCSAus	USD $	0
B	**Wireless**			
1	BLE	USD $	56
3	BLE+MESH(900MHz)+GPS	USD $	225
4	BLE+Wi-Fi+GPS	USD $	253
C	**Socket 1 Sensor**			
0	Empty	USD $	0
1	LEL[4]	USD $	66
2	LEL Filtered[5]	USD $	66
D	**Socket 2 Sensor**			
0	Empty	USD $	0
1	O_2	USD $	66
E	**Socket 3 Sensor**			
0	Empty	USD $	0
1	CO	USD $	66
2	H_2S	USD $	66
F	**Socket 4 Sensor**			
0	Empty	USD $	0
1	CO	USD $	66
2	H_2S	USD $	66
3	HCN	USD $	214
G	**Kits**			
0	Monitor Only	USD $	0

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

Note: HCN / H_2S sensor combinaison cannot be ordered

M03   A   -   B C D E - F G 0   **Total**

Configurator Guide

From the table above, select one option from each Feature Group, **A** through **G**, to build a complete model number:

M03   A   -   B   C   D   E   -   F   G   0

PGM-26XX | Certification | Wireless | Sensor 1 | Sensor 2 | Sensor 3 | Sensor 4 | Kits

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MicroRAE Accessories, Sensors, and Replacement Parts

DESCRIPTION	PART NUMBER	List Price [USD $]
Carbon Monoxide sensor (CO)	032-0600-001	146
Hydrogen Sulfide sensor (H$_2$S)	032-0601-002	146
Hydrogen Cyanide sensor (HCN)	032-0616-000	349
Oxygen sensor (O$_2$)	022-0617-000	203
%LEL combustibles sensor	014-0600-000	191
Filter H$_2$S, Mini LEL Sensor (Pack of 5)	014-3603-005	34
Filter H$_2$S+Si, Mini LEL Sensor (Pack of 5)	014-3604-005	34
Dummy Sensor,Mini EC (Pack of 5)	M03-2025-005	34
Dummy Sensor,Mini LEL (Pack of 5)	M03-2026-005	34
Travel charger[1]	M03-3005-000	101
Cradle charger[1]	M03-0301-000	90
AC adapter with international prong kit (for single-unit charging and PC comm's cradle)	500-0036-102	62
One-to-five Power Cable[2]	020-2480-000	56
Gang charger[2]	M03-0300-000	619
Power Adapter,AC/DC,90-264V Input,12VDC/3A Output	500-0156-000	113
ASSY,Automotive Charging Adapter	003-3004-000	68
PC Communication cable	410-0203-000	34
Calibration cap with tubing	M03-3003-000	56
CSK1 (does not include monitor)	020-0040-010	248
CSK2 (does not include monitor)	020-0040-020	743
Alligator clip assembly (with screw and washers) (Pack of 10)	G01-2005-010-FRU	56
Front cover Assy MicroRAE	M03-3011-000	124
Back Plate Screws W/O-Ring (Pack of 10)	M03-3010-000	28
Wrist strap	002-3013-000	34
Auxiliary filter	M03-3009-000	113
Product CD	M03-4005-000	34

Notes:

[1]- Compatible with PN:500-0036-102

[2]- Compatible with PN: 500-0156-000

[4]- Includes H$_2$S LEL filter (014-3603-000)

[5]- Includes H$_2$S+Si LEL filter (014-3604-000)

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Personal Communication Hub for Industrial Workers

Safety Communicator (SC) is an Android-based mobile application and phone that enable real-time communication between a worker's personal instruments and a remote monitoring system. The phone and the application act as a personal communication hub for a worker, which collects instrument readings and alarms from instruments over Bluetooth (BLE) or Wi-Fi and transmits in real time to a remote system over a 3G/4G communication network.The application also transmits a worker's information and location to the remote system, which allows safety managers to quickly react and provide necessary assistance in case of an emergency. This solution not only provides real-time visibility of worker safety, but it also improves productivity with real-time access to remote information and colaboration with peers.

RAE Systems offers two smartphones with the Safety Communicator app, a ruggedized non-certified smartphone or a ruggedized, intrinsically safe certified version. Both phones run the Android operating system and require a SIM card and subscription from your choice of carrier. The app can also be downloaded from the Google Play Store for those who choose to use their own Android device.

Note: A ProRAE Guardian license is needed to connect to RAE Systems' remote monitoring software.

Kit Includes:
• Sonim XP7 Phone (IS) or (non-IS)
• Wall Charger
• USB Cable with Safety Box (IS)
• Multi-tool

PART NUMBER	DESCRIPTION	List Price [USD $]
029-5402-000	**Sonim XP7 North America Handset Non-IS**	749
029-5401-000	**Sonim XP7 IS North America Handset IS**	1,499
029-5403-000	**Wall Charger US**	39
029-5410-000	**USB Cable with Safety Box (IS)**	99

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QRAE 3 One-to-Four-Gas Detector (PGM-25XX Series)

QRAE 3 wireless portable one-to-four gas personal protection / confined space monitors

The QRAE 3 is a durable and versatile diffusion or pumped one-to-four gas monitor for detection of combustibles, oxygen, hydrogen sulfide, carbon monoxide, sulfure dioxide, hydrogen cyanide and other sensors. Standard features include easy-to-change battery packs, easy access to sensors, internal vibrating alarm, loud 95dB audible alarm, and a water-resistant IP-65 case design. The rechargeable Lithium-ion battery delivers up to 14 hours of continuous operation in non-wireless diffusion mode.

QRAE 3 integrated wireless option allows the device to be used either in a closed loop system (compatible with EchoView host) or with ProRAE Guardian, Real-Time Wireless Safety System.

Monitor-only configuration includes:

- Monitor as specified
- Sensors as specified
- Sampling option as specified
- Calibration adapter (diffusion model only)
- T Calibration tube (pumped model only)
- Internal filters (mounted - diffusion model only)
- External filters (one mounted plus pack of 3 - pumped model only)
- Travel charger cradle with computer cable
- Lithium-ion battery pack
- Universal wall adapter
- CD ROM with ProRAE Studio II
- CD ROM with product content
- Quick Reference Guide

Optional Confined Space Kit 1 (CSK 1, P/N 020-0040-010) includes:

- Hard transport case with pre-cut foam
- Tool Kit
- Hand pump
- 10" stiff aluminum Sample probe with replaceable filter
- 6 feet (2 meters) Tygon® tubing
- External filter (pack of 3)

Optional Confined Space Kit 2 for PGM2500(D) (CSK 2, P/N 020-0040-020) includes:

- Four-gas mix in a 34L cylinder, part number 600-0050-007

(50% LEL, 18% O_2, 10 ppm Hydrogen Sulfide, 50 ppm Carbon Monoxide)

- Regulator and tubing

Note: Both the QRAE 3 diffusion and pumped models are compatible with QRAE 3 Cradle for AutoRAE 2 Automatic Test and Calibration Station. Please contact RAE Systems for availability

Listed below are some common configurations of the QRAE 3 monitors. For others, please use the Assemble-To-Order (ATO) Configuration Guide below.

Standard Sensor Configurations - QRAE 3

LEL / H_2S / CO / O_2 sensors	Diffusion	Pumped	Wireless	Accessories Kit	PART NUMBER	List Price [USD $]
QRAE 3 Pumped CSA LEL / H_2S / CO / O_2 - Li-ion / Non-Wireless		•		•	M020-11111-111	1,046
QRAE 3 Pumped CSA LEL / H_2S / CO / O_2 - Li-ion / Wireless (900MHz)		•	•	•	M020-11211-111	1,271
QRAE 3 Diffusion CSA LEL / H_2S / CO / O_2 - Li-ion / Non-Wireless	•			•	M020-21111-111	932
QRAE 3 Diffusion CSA LEL / H_2S / CO / O_2 - Li-ion / Wireless (900MHz)	•		•	•	M020-21211-111	1,157

LEL / O_2 / CO / HCN sensors	Diffusion	Pumped	Wireless	Accessories Kit	PART NUMBER	List Price [USD $]
QRAE 3 Pumped CSA LEL / O_2 / CO / HCN - Li-ion / Non-Wireless		•		•	M020-11112-141	1,194
QRAE 3 Pumped CSA LEL / O_2 / CO / HCN - Li-ion / Wireless (900MHz)		•	•	•	M020-11212-141	1,419
QRAE 3 Diffusion CSA LEL / O_2 / CO / HCN - Li-ion / Non-Wireless	•			•	M020-21112-141	1,080
QRAE 3 Diffusion CSA LEL / O_2 / CO / HCN - Li-ion / Wireless (900MHz)	•		•	•	M020-21212-141	1,305

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A	Pump &Diffusion			
1	QRAE 3 - Pump		USD $	782
2	QRAE 3 - Diffusion		USD $	668
	B	Certification		
	1	cCSAus	USD $	0
	C	Wireless		
	1	no-wireless	USD $	0
	2	900M wireless	USD $	225
		D	Socket1 Sensor	
		0	Empty	USD $	0
		1	LEL	USD $	66
		E	Socket2 Sensor	
		0	Empty	USD $	0
		1	H2S	USD $	66
		2	CO	USD $	66
		3	SO2	USD $	128
		4	HCN	USD $	214
		5	PH3	USD $	473
		6	NH3	USD $	473
		F	Socket3 Sensor	
		0	Empty	USD $	0
		1	OXY	USD $	66
		G	Socket4 Sensor	
		0	Empty	USD $	0
		1	CO	USD $	66
		2	H2S	USD $	66
		3	SO2	USD $	128
		4	HCN	USD $	214
		5	PH3	USD $	473
		6	NH3	USD $	473
		H	Kits	
		1	Accessory kit	USD $	0

Notes:

* **Note**: QRAE 3 cannot be ordered with less than 2 sensors installed in the same instrument

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

We do not recommend the following EC sensor combinations:
NH3 / H2S
NH3 / SO2
HCN / H2S

* **Note**: Please refer to TN114 for cross interference between electrochemical sensors

M020 - <u>A</u> <u>B</u>   <u>C</u> <u>D</u> <u>E</u> - <u>F</u>   <u>G</u> <u>H</u>

Total

QRAE 3 Configurator Guide

From the table above, select one option from each Feature Group, <u>A</u> through <u>H</u>, to build a complete model number:

<u>M020-</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	-	<u>F</u>	<u>G</u>	<u>H</u>
QRAE 3 PGM-2500	Sampling Option	Certification	Wireless	Sensor 1	Sensor 2		Sensor 3	Sensor 4	Kits

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QRAE 3, PGM-2560 Series

A	Pump &Diffusion				
1	QRAE 3 - Pump			USD $	782
2	QRAE 3 - Diffusion			USD $	668
	B	Certification			
	1	cCSAus		USD $	0
		C	Wireless		
		1	no-wireless	USD $	0
		2	900M wireless	USD $	225
			D	Socket1 Sensor	
			0	Empty	USD $	0
			1	LEL	USD $	66
				E	Socket2 Sensor
				0	Empty	USD $	0
				1	Cl2	USD $	394
				2	NO2	USD $	394
					F	Socket3 Sensor
					0	Empty	USD $	0
					1	OXY	USD $	66
						G	Socket4 Sensor
						0	Empty	USD $	0
						1	CO	USD $	66
						2	H2S	USD $	66
						3	SO2	USD $	128
						4	HCN	USD $	214
						5	PH3	USD $	473
						6	NH3	USD $	473
							H	Kits
							1	Accessory kit	USD $	0

Note: QRAE 3 cannot be ordered with less than 2 sensors installed in the same instrument

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

Note: Please refer to TN114 for cross interference between electrochemical sensors

M026 - <u>A</u> <u>B</u>   <u>C</u> <u>D</u> <u>E</u> - <u>F</u>   <u>G</u> <u>H</u>

Total

QRAE 3 Configurator Guide

From the table above, select one option from each Feature Group, <u>A</u> through <u>H</u>, to build a complete model number:

<u>M026-</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u> -	<u>F</u>	<u>G</u>	<u>H</u>
QRAE 3 PGM-2560	Sampling Option	Certification	Wireless	Sensor 1	Sensor 2	Sensor 3	Sensor 4	Kits

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QRAE 3 Accessories, Sensors, and Replacement Parts

DESCRIPTION	PART NUMBER	List Price [USD $]
Carbon Monoxide sensor	032-0200-003	191
Hydrogen Sulfide sensor	032-0202-003	191
Sulfure Dioxide sensor	032-0204-000	349
Hydrogen Cyanide sensor (4R format)	032-0127-000	384
Hydrogen Cyanide sensor (3R format)	032-0205-000	349
Oxygen sensor	022-0902-000	203
%LEL combustibles sensor	014-0216-000	191
Ammonia sensor	032-0207-000	506
Phosphine sensor	032-0206-000	506
Chlorine sensor	032-0208-000	461
Nitrogen Dioxide sensor	032-0209-000	428
T calibration tube for pump model	M02-3008-000	25
Calibration cap with tubing for diffusion model	M02-3009-100	23
Travel charger	M02-3005-000	101
AC adapter with international prong kit (for single-unit charging and PC comm's cradle)	500-0036-102	62
One-to-five Power Cable	020-2480-000	56
Battery pack (ToxiRAE Pro / QRAE 3)	G02-3004-000	101
External Charger for Battery (ToxiRAE Pro and QRAE 3)	M02-3025-000	136
Truck Mount Charging Cradle for QRAE 3	M02-0303-000	315
Automotive charging adapter (12V)	003-3004-000	68
PC Communication cable	410-0203-000	34
CSK1 (does not include monitor)	020-0040-010	248
CSK2 (does not include monitor)	020-0040-020	743
Four-Gas Calibration Mix ,34L Aluminum Cylinder (50%LEL / 2.5% VOL CH4,18% O2,10 PPM H2S, 50 PPM CO, BAL N2)	600-0050-007	260
Hydrogen Cyanide, 10 ppm (balance nitrogen), 58L alum cylinder	600-0057-000	320
Sulfur Dioxide, 5 ppm (balance nitrogen), 58L alum cylinder	600-0053-000	220
Carbon Monoxide, 50 ppm (balance air), 34L cylinder	600-0052-000	80
Constant-flow regulator, 0.5 liter/min (C-10 Male-threaded regulator: for use with 34L aluminum cylinders and all 58L and 103Lcylinders)	002-3011-000	203
Dust Filter for Diffusion model (pack of 20)	M02-2034-020	44
Dust Filter for Diffusion model (pack of 100)	M02-2034-100	197
External 25 mm filters (pack of 10) (without adapter)	008-3022-010	34
External filter tubing extension (pack of 1)	M02-3028-000	12
External filter tubing extension (pack of 10)	M02-3028-010	99
Mesh filter (pumped model -pack of 10)	M02-2033-010	17
Pump assembly	020-3603-000-FRU	236
Gas plate assembly with sensor sealing for pumped model	M02-3003-100	69
Sensor Cover Assy for diffusion model	M02-3006-001	62
Front cover Assy QRAE 3 (PGM-2500/D - PGM-2560/D)	M02-3015-000	124
Battery Cover	M02-3019-000	32
Alligator clip assembly (with screw and washers) (Pack of 10)	G01-2005-010-FRU	56
Swivel Belt Clip (with screw and sasher)	M02-3027-000	37
O-rings kit for pumped model	M02-3021-000	19
Product CD	M02-4008-000	34
Dummy sensor 4R format (pack of 5)	046-3012-005	37
Dummy sensor transparent 3R format(pack of 5)	046-3013-005	37
QRAE 3 holster case	M02-2041-000	62
QRAE 3 holster case with shoulder strap	M02-3024-000	84
Should strap for QRAE 3 holster case	M02-2042-000	32
4-point chest harness for QRAE 3 holster case	M02-2043-000	111

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ConneXt Pack

ConneXt Pack is a combination of leading wireless gas monitors combined with an EchoView Host portable controller. ConneXt Pack can provide real-time, man down alarms and alert Safety managers, Site operators or Attendants to atmospheric contaminants.

◦ Easy-to-use, rapidly deployable, turn-key pack
◦ Real-time alerts for faster response time and automatic datalogging for compliance
◦ Ideal as an entry-level solution for routine maintenance or compliance monitoring
◦ Up to 4 real-time wireless monitors connected to an Echoview Host

The EchoView Host mini-controller is the cornerstone of RAE Systems' Closed-Loop Wireless Solutions for portable gas monitors. This rugged handheld wireless device can establish a self-contained, self-sufficient network with up to eight supported RAE Systems portable wireless monitors (MultiRAE, QRAE 3 and ToxiRAE Pro family) and display their readings and alarm status in real time on an easy-to-read screen.

ConneXt Pack Includes:
• Pelican case with precut foam insert (can contain up to 4 gas monitors, 1 EchoView Host and accessories listed below)
• Up to 4 QRAE 3 units with sensors and sampling mode, battery and wireless option as specified, alligator clip and filter installed
• Built in battery charger system for QRAE 3 units
• 1 EchoView Host unit (antenna and battery included)
• 1 Extra spare battery for EchoView Host
• QRAE 3 units with continuous datalogging capability
• QRAE 3 units with AC adapter / Charger / PC communications solutions
• Gas monitor calibration adapters
• 1 laminated card with Quick Start Guide Instructions
• QRAE 3 and EchoView Host Quick Start Guide
• Product CDs with documentation
• ProRAE Studio II Configuration and Data Management Software
• Calibration and test certificate

For QRAE 3 pumped units:
• External 25 mm filters (pack of 10)

Listed below are some common configurations of the ConneXt Pack.

For additional accessories, automatic calibration systems, gas kits, calibration gases and regulators, see their respective sections in this price guide.

Standard ConneXt Pack Configurations

Wireless Confined Space Entry Kit	QRAE 3	Echoview Host	Accessory Kit	PART NUMBER	List Price [USD $]
ConneXt Pack, 1 Unit QRAE 3 LEL, O2, CO, H2S Pumped, 1 EchoView Host, Accessories	●	●	●	F04R-B1111-000	2,683
ConneXt Pack, 2 Units QRAE 3 LEL, O2, CO, H2S Pumped, 1 EchoView Host, Accessories	●	●	●	F04R-B2111-000	3,578
ConneXt Pack, 3 Units QRAE 3 LEL, O2, CO, H2S Pumped, 1 EchoView Host, Accessories	●	●	●	F04R-B3111-000	4,697
ConneXt Pack, 4 Units QRAE 3 LEL, O2, CO, H2S Pumped, 1 EchoView Host, Accessories	●	●	●	F04R-B4111-000	5,816
ConneXt Pack, 1 Unit QRAE 3 LEL, O2, CO, H2S Diffusion 1 EchoView Host, Accessories	●	●	●	F04R-B1211-000	2,571
ConneXt Pack, 2 Units QRAE 3 LEL, O2, CO, H2S Diffusion 1 EchoView Host, Accessories	●	●	●	F04R-B2211-000	3,353
ConneXt Pack, 3 Units QRAE 3 LEL, O2, CO, H2S Diffusion 1 EchoView Host, Accessories	●	●	●	F04R-B3211-000	4,359
ConneXt Pack, 4 Units QRAE 3 LEL, O2, CO, H2S Diffusion 1 EchoView Host, Accessories	●	●	●	F04R-B4211-000	5,366

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MultiRAE Multi-Threat Monitors (PGM-62X8 Series)

The MultiRAE Family of Wireless Multi-Threat Monitors - Wireless. Versatile. Proven (Models PGM-62X8)

MultiRAE portable multi-threat monitors combine best-in-class detection capabilities with optional integrated wireless functionality to help elevate safety of workers and responders and reduce facility downtime. MultiRAE monitors offer an industry-leading selection of interchangeable electrochemical, combustible, infrared, PID (photo-ionization detector), and radiation sensors to protect users from a broad range of toxic and combustible gases, volatile organic compounds (VOC), gamma radiation, and oxygen deficiency / enrichment in a wide variety of applications.

	MultiRAE Pro	MultiRAE	MultiRAE Lite
Appearance			
Gamma Radiation Sensor	Yes		
Ppb PID (10.6 eV; 0.01 - 2,000 ppm; 10 ppb res.)	Yes		
High-Range Ppm PID (10.6 eV; 0.1 - 5,000 ppm; 0.1 ppm res.)	Yes	Yes	
Ppm PID (10.6 eV; 1 - 1,000 ppm; 1 ppm res.)			MultiRAE Lite Pumped Only
20+ Electrochemical Sensors	Yes	Yes	Yes
ETO-C Extended-range Sensor			MultiRAE Lite Diffusion Only
Hydrogen (H_2) Sensor			MultiRAE Lite Diffusion Only
H_2S, HR Extended-range Sensor			MultiRAE Lite Diffusion Only
Catalytic %LEL Sensor	Yes	Yes	Yes
Combustible NDIR Sensors (%LEL or %Vol. CH_4)	Yes	Yes	MultiRAE Lite Pumped Only
CO_2 NDIR Sensor	Yes	Yes	Yes
Integrated Wireless Modem (Optional)	Yes	Yes	Yes
Sampling	Pumped	Pumped	Pumped or Diffusion
IP Rating	IP-65	IP-65	IP-65 (Pumped) / IP-67 (Diffusion)
Default Rubber Boot Color	Black	Yellow	Yellow
Automatic Test and Calibration System	AutoRAE 2	AutoRAE 2	AutoRAE 2 pumped version only
Monitor-Only (Ordered Without a Kit) Comes in a…	"Pelican" case	Hard plastic case	Cardboard box with sleeve

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MultiRAE Lite Monitors (Models PGM-6208 and PGM-6208D)

MultiRAE Lite wireless portable one-to-six gas personal protection / confined space monitors

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)

• 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

• ProRAE Studio II Instrument Configuration & Data Management Software

• Calibration and test certificate

• Warranty / registration card

• 10 charcoal VOC filters for CO sensor

The <u>pumped model</u> of MultiRAE Lite also includes:

• Built-in pump

• Belt clip installed

• 3 spare external filters

• PID sensor cap removal tool

Optional Accessories / Confined Space Kit Adds:

• Hard transport case with custom foam (P/N: M01-3203-000)

• 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

Optional Calibration Kits Add:

• 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO) + regulator

<u>**OR**</u>

• 100 ppm Isobutylene gas (34L) with regulator

<u>**OR**</u>

• 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO) + regulator

• <u>AND</u> 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

Instrument ships in a cardboard box with a colorful sleeve

Optional Guaranteed Cost of Ownership Program

• 4-year repair and replacement guarantee (available in North America only)

• Annual maintenance service included

SERVICE PROGRAM OPTION	PART NUMBER	List Price [USD $]	DESCRIPTION
4-Year Guaranteed Cost of Ownership	SVC-PTC4-MA0	35% of instrument-only list price	Extends warranty and covers replacement of all parts and sensors for 4 years from date of purchase

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

Standard Sensor Configurations - MultiRAE Lite

	PID Sensor	CO_2 NDIR Sensor	Pumped	Wireless	Li-ion Rechargeable	Accessories Kit	Calibration Kit	PART NUMBER	List Price [USD $]
Pumped / 10.6 eV PID / LEL / H$_2$S / CO / O$_2$ / Li-ion / Non-Wireless								PART NUMBER	List Price [USD $]
Unit only	•		•		•			MAB3-A2C112E-020	2,484
Unit with Accessories / Confined Space Kit (no gas or regulator)	•		•		•	•		MAB3-A2C112E-021	2,833
Unit with Accessories / Confined Space and Calibration (4-gas + Iso) Kits	•		•		•	•	•	MAB3-A2C112E-02M	3,654
Pumped / 10.6 eV PID / LEL / H$_2$S / CO / O$_2$ / Li-ion / Wireless								PART NUMBER	List Price [USD $]
Unit only	•		•	•	•			MAB3-A2C112E-420	2,822
Unit with Accessories / Confined Space Kit (no gas or regulator)	•		•	•	•	•		MAB3-A2C112E-421	3,171
Unit with Accessories / Confined Space and Calibration (4-gas + Iso) Kits	•		•	•	•	•	•	MAB3-A2C112E-42M	3,992
Pumped / 10.6 eV PID / LEL / CO + H$_2$S / SO$_2$ / O$_2$ / Li-ion / Non-Wireless								PART NUMBER	List Price [USD $]
Unit only	•		•		•			MAB3-A2C1R3E-020	2,834
Unit with Accessories / Confined Space Kit (no gas or regulator)	•		•		•	•		MAB3-A2C1R3E-021	3,183
Pumped / 10.6 eV PID / LEL / CO + H$_2$S / SO$_2$ / O$_2$ / Li-ion / Wireless								PART NUMBER	List Price [USD $]
Unit only	•		•	•	•			MAB3-A2C1R3E-420	3,172
Unit with Accessories / Confined Space Kit (no gas or regulator)	•		•	•	•	•		MAB3-A2C1R3E-421	3,521
Pumped / CO$_2$ / LEL / CO / O$_2$ / Li-ion / Non-Wireless								PART NUMBER	List Price [USD $]
Unit only		•	•		•			MAB3-B8C102E-020	2,709
Unit with Accessories / Confined Space Kit (no gas or regulator)		•	•		•	•		MAB3-B8C102E-021	3,058
Pumped / CO$_2$ / LEL / CO / O$_2$ / Li-ion / Wireless								PART NUMBER	List Price [USD $]
Unit only		•	•	•	•			MAB3-B8C102E-420	3,047
Unit with Accessories / Confined Space Kit (no gas or regulator)		•	•	•	•	•		MAB3-B8C102E-421	3,396
Pumped / O$_2$ / LEL / H$_2$S / CO / SO$_2$ / Li-ion / Non-Wireless								PART NUMBER	List Price [USD $]
Unit only			•		•			MAB3-0EC1123-020	2,360
Unit with Accessories / Confined Space Kit (no gas or regulator)			•		•	•		MAB3-0EC1123-021	2,709
Pumped / O$_2$ / LEL / H$_2$S / CO / SO$_2$ / Li-ion / Wireless								PART NUMBER	List Price [USD $]
Unit only			•	•	•			MAB3-0EC1123-420	2,698
Unit with Accessories / Confined Space Kit (no gas or regulator)			•	•	•	•		MAB3-0EC1123-421	3,047
Diffusion / CO$_2$ / LEL / H$_2$S / O2 / Li-ion / Non-Wireless								PART NUMBER	List Price [USD $]
Unit only		•			•			MAB6-B8C101E-020	2,584
Unit with Accessories / Confined Space Kit (no gas or regulator)		•			•	•		MAB6-B8C101E-021	2,933
Diffusion / CO$_2$ / LEL / H$_2$S / O$_2$ / Li-ion / Wireless								PART NUMBER	List Price [USD $]
Unit only		•		•	•			MAB6-B8C101E-420	2,922
Unit with Accessories / Confined Space Kit (no gas or regulator)		•		•	•	•		MAB6-B8C101E-421	3,271

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MultiRAE Lite Monitors (Models PGM-6208 and PGM-6208D)

R	**Certification of Intrinsic Safety**				
B	CSA		* **Note**: If the instrument is ordered with fewer than five sensors, a dummy sensor must be installed in the empty sensor slot(s)		
M	**Model / Base Unit Price**				
3	MultiRAE Lite - Pumped (PGM-6208)			USD $	943
6	MultiRAE Lite - Diffusion (PGM-6208D)			USD $	818
AA	**High-Power Sensor (Options: Dummy / PID / Combust. NDIR / CO$_2$ NDIR / Electrochemical Sensors Incl. CO+H$_2$S Combo)**				
00	Empty	Dummy sensor	* **Note**: *PID* sensors require a pump	USD $	0
PID Sensors					
A2	PID, LR, 10.6 eV	PID sensor (1 - 1,000 ppm; 1 ppm res.; 10.6 eV)		USD $	473
Combustible NDIR Sensors			* **Note**: *combustible NDIR sensors (%LEL or %Vol.)* require a pump		
B4	CH$_4$ NDIR, % LEL	Combustible NDIR sensor (0-100% LEL CH$_4$)		USD $	934
B5	CH$_4$ NDIR, % Vol.	Combustible NDIR sensor (0-100% Vol. CH$_4$)		USD $	934
CO$_2$ NDIR Sensors					
B8	CO$_2$ NDIR, HR	Carbon dioxide (CO2) NDIR sensor (up to 50,000 ppm)	* **Note***: NDIR % Vol. combustible* sensor must be accompanied by the catalytic % LEL sensor (installs in slot BB; see next page)	USD $	934
Electrochemical Sensors					
01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)		USD $	236
02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)		USD $	236
03	SO2	Sulfur Dioxide (SO2) sensor		USD $	349
04	NO	Nitric Oxide (NO) sensor		USD $	405
05	NO2	Nitrogen Dioxide (NO2) sensor		USD $	405
06	Cl2	Chlorine (Cl2) sensor	* **Note**: *ClO$_2$ and H$_2$S* sensors cannot be installed in the same instrument	USD $	349
07	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
08	NH3	Ammonia (NH3) sensor	** **Note**: *NO and NH$_3$* sensors cannot be installed in the same instrument	USD $	473
09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
0A	ClO2	Chlorine Dioxide (ClO2) sensor		USD $	473
0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)		USD $	349
0E	O2	Oxygen (O2) sensor		USD $	236
0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	585
0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)		USD $	349
0L	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)		USD $	473
0M	H2	Hydrogen (H2) sensor	* **Note**: H$_2$, H$_2$S HR and ETO-C sensors are only supported in the diffusion model	USD $	473
0N	H2S, HR	Hydrogen Sulfide (H2S) extended-range sensor (up to 1,000 ppm reading)		USD $	236
0Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810
0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo		USD $	473

MA B **M** - **AA** **BB** C D E - **F** G H

MultiRAE Lite Configuration Guide

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

MA	**B**	**M** -	**AA**	**BB**	**C**	**D**	**E** -	**F**	**G**	**H**
MultiRAE Lite	Certification (Always B)	Model	Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5	Wireless	Battery	Kits

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BB		High-Power Sensor (Options: Dummy / LEL / Electrochemical Sensors Incl. CO+H2S Combo)			
00	Empty	Dummy sensor		USD $	0
LEL Catalytic Bead Sensor					
C1	LEL	Combustible catalytic bead % LEL sensor		USD $	236
Electrochemical Sensors					
01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)		USD $	236
02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)		USD $	236
03	SO2	Sulfur Dioxide (SO2) sensor	* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument	USD $	349
04	NO	Nitric Oxide (NO) sensor		USD $	405
05	NO2	Nitrogen Dioxide (NO2) sensor		USD $	405
06	Cl2	Chlorine (Cl2) sensor	** **Note**: NO and NH_3 sensors cannot be installed in the same instrument	USD $	349
07	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
08	NH3	Ammonia (NH3) sensor		USD $	473
09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
0A	ClO2	Chlorine Dioxide (ClO2) sensor		USD $	473
0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	349
0E	O2	Oxygen (O2) sensor		USD $	236
0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor		USD $	585
0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	* **Note**: H_2S HR and ETO-C sensors are only supported in the diffusion model	USD $	349
0L	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)		USD $	473
0N	H2S, HR	Hydrogen Sulfide (H2S) extended-range sensor (up to 1,000 ppm reading)		USD $	236
0Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810
0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo		USD $	473

C		Low-Power Sensor (Options: Dummy / Electrochemical Sensors Incl. CO+H2S Combo)			
0	Empty	Dummy sensor		USD $	0
Electrochemical Sensors					
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)		USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)		USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument	USD $	349
4	NO	Nitric Oxide (NO) sensor		USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor		USD $	405
6	Cl2	Chlorine (Cl2) sensor	** **Note**: NO and NH_3 sensors cannot be installed in the same instrument	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
8	NH3	Ammonia (NH3) sensor		USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor		USD $	473
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	349
E	O2	Oxygen (O2) sensor		USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor		USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	* **Note**: H_2S HR and ETO-C sensors are only supported in the diffusion model	USD $	349
L	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)		USD $	473
N	H2S, HR	Hydrogen Sulfide (H2S) extended-range sensor (up to 1,000 ppm reading)		USD $	236
Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810
R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo		USD $	473

MA B **M** - **AA** **BB** **C** **D** **E** - **F** **G** **H**

MultiRAE Lite Configuration Guide

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

MA	**B**	**M**	-	**AA**	**BB**	**C**	**D**	**E**	-	**F**	**G**	**H**
MultiRAE Lite	Certification (Always B)	Model		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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D		Low-Power Sensor (Options: Dummy / Electrochemical Sensors)		
0	Empty	Dummy sensor	USD $	0
	Electrochemical Sensors			
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
4	NO	Nitric Oxide (NO) sensor	USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
6	Cl2	Chlorine (Cl2) sensor	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
8	NH3	Ammonia (NH3) sensor	USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
E	O2	Oxygen (O2) sensor	USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
L	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)	USD $	473
M	H2	Hydrogen (H2) sensor	USD $	473
N	H2S, HR	Hydrogen Sulfide (H2S) extended-range sensor (up to 1,000 ppm reading)	USD $	236
Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810

* Note: ClO_2 and H_2S sensors cannot be installed in the same instrument

** Note: NO and NH_3 sensors cannot be installed in the same instrument

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

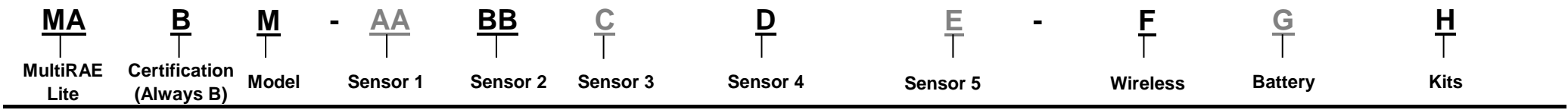* Note: H_2, H_2S HR and ETO-C sensors are only supported in the diffusion model

E		Low-Power Sensor (Options: Dummy / Electrochemical Sensors)		
0	Empty	Dummy sensor	USD $	0
	Electrochemical Sensors			
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm)	USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm)	USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
4	NO	Nitric Oxide (NO) sensor	USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
6	Cl2	Chlorine (Cl2) sensor	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
8	NH3	Ammonia (NH3) sensor	USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
D	CO, HR	Carbon Monoxide (CO) sensor (up to 2,000 ppm)	USD $	349
E	O2	Oxygen (O2) sensor	USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
L	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)	USD $	473
M	H2	Hydrogen (H2) sensor	USD $	473
N	H2S, HR	Hydrogen Sulfide (H2S) extended-range sensor (up to 1,000 ppm reading)	USD $	236
Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810

* Note: ClO_2 and H_2S sensors cannot be installed in the same instrument

** Note: NO and NH_3 sensors cannot be installed in the same instrument

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

* Note: H_2, H_2S HR and ETO-C sensors are only supported in the diffusion model

F		Wireless Options		
0	Empty	Non-wireless	USD $	0
4	W-900	Wireless, 900 MHz (built-in wireless modem)	USD $	338
P	P2P	P2P Communication capability	USD $	1,068

* Note: Please contact Inside Sales department for P2P option

G	Battery Options		
1	Extended-duration (Li-ion) battery with alkaline adapter	USD $	180
2	Rechargeable (Li-ion) battery with alkaline adapter	USD $	124
3	Alkaline battery pack	USD $	0

H	Kits and Accessories		
0	Monitor only	USD $	0
1	Accessories / Conf Space Kit (no gas or regulator)	USD $	349
2	Accessories / Conf. Space + 100 ppm Isobutylene Cal. Kit (with 1 regulator)	USD $	619
9	Accessories / Conf. Space + 4-gas (LEL/O2/CO/H2S) Cal. Kit (with 1 regulator)	USD $	900
M	Accessories / Conf. Space + 4-gas (LEL/O2/CO/H2S) + 100 ppm Iso Cal. Kit (with 2 reg's)	USD $	1,170

MA B M - AA BB C D E - F G H   **Total**

MultiRAE Lite Configuration Guide

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

MA	**B**	**M**	-	**AA**	**BB**	**C**	**D**	**E**	-	**F**	**G**	**H**
MultiRAE Lite	Certification (Always B)	Model		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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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
• 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)

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

Optional / 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_2, 10 ppm H_2S, 50 ppm CO) + regulator

OR

• 100 ppm Isobutylene gas (34L) with regulator

OR

• 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO) + regulator
• <u>AND</u> 100 ppm Isobutylene gas (34L) with regulator

Optional Guaranteed Cost of Ownership Program

• 4-year repair and replacement guarantee (available in North America only)
• Annual maintenance service included

SERVICE PROGRAM OPTION	PART NUMBER	List Price [USD $]	DESCRIPTION
4-Year Guaranteed Cost of Ownership	SVC-PTC4-MB0	35% of instrument-only list price	Extends warranty and covers replacement of all parts and sensors for 4 years from date of purchase

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

Standard Sensor Configurations - MultiRAE

	PID Sensor	CO₂ NDIR Sensor	Pumped	Wireless	Li-ion Rechargeable	Accessories Kit	Calibration Kit	PART NUMBER	List Price [USD $]
Pumped / 10.6 eV PID / LEL / H₂S / CO / O₂ / Li-ion / Non-Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•		•		•			MBB3-A1C112E-020	4,458
Unit with Accessories / Confined Space and Calibration (4-gas + Iso) Kits	•		•		•	•	•	MBB3-A1C112E-02M	5,403
Pumped / 10.6 eV PID / LEL / H₂S / CO / O₂ / Li-ion / Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•		•	•	•			MBB3-A1C112E-420	4,796
Unit with Accessories / Confined Space and Calibration (4-gas + Iso) Kits	•		•	•	•	•	•	MBB3-A1C112E-42M	5,741
Pumped / 10.6 eV PID / LEL / CO + H₂S / SO₂ / O₂ / Li-ion / Non-Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•		•		•			MBB3-A1C1R3E-020	4,808
Pumped / 10.6 eV PID / LEL / CO + H₂S / SO₂ / O₂ / Li-ion / Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•		•	•	•			MBB3-A1C1R3E-420	5,146

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MultiRAE Monitors (Model PGM-6228)

R	**Certification of Intrinsic Safety**				
B	CSA	* **Note**: If the instrument is ordered with fewer than five sensors, a dummy sensor must be installed in the empty sensor slot(s)			
M	**Model / Base Unit Price**				
3	MultiRAE (PGM-6228)			USD $	2,692
	AA	**High-Power Sensor (Options: Dummy / PID / Combust. NDIR / CO₂ NDIR / Electrochemical Sensors Incl. CO+H₂S Combo)**			
	00	Empty	Dummy sensor	USD $	0
	PID Sensors				
	A1	PID, HR, 10.6 eV	PID sensor (0.1 - 5,000 ppm; 0.1 ppm res.; 10.6 eV lamp)	USD $	698
	Combustible NDIR Sensors				
	B4	CH₄ NDIR, % LEL	Combustible NDIR sensor (0-100% LEL CH₄)	USD $	934
	B5	CH₄ NDIR, % Vol.	Combustible NDIR sensor (0-100% Vol. CH₄)	USD $	934
	CO₂ NDIR Sensors				
	B8	CO₂ NDIR, HR	Carbon dioxide (CO2) NDIR sensor (up to 50,000 ppm)	USD $	934
	Electrochemical Sensors				
	01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm)	USD $	236
	02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm)	USD $	236
	03	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
	04	NO	Nitric Oxide (NO) sensor	USD $	405
	05	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
	06	Cl2	Chlorine (Cl2) sensor	USD $	349
	07	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
	08	NH3	Ammonia (NH3) sensor	USD $	473
	09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
	0A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
	0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
	0E	O2	Oxygen (O2) sensor	USD $	236
	0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
	0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
	0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
	0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
	0Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810
	0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	USD $	473

Notes (right side):

* **Note**: *NDIR % Vol. combustible* sensor must be accompanied by the catalytic % LEL sensor (installs in slot BB; see next page)

* **Note**: *ClO₂ and H₂S* sensors cannot be installed in the same instrument

** **Note**: *NO and NH₃* sensors cannot be installed in the same instrument

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

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MB **B** **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:

MB	**B**	**3**	**-**	**AA**	**BB**	**C**	**D**	**E**	**-**	**F**	**G**	**H**
MultiRAE	Certification (Always B)	Model (Always 3)		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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BB		High-Power Sensor (Options: Dummy / LEL / Electrochemical Sensors Incl. CO+H2S Combo)			
00	Empty	Dummy sensor		USD $	0

LEL Catalytic Bead Sensor

C1	LEL	Combustible catalytic bead % LEL sensor		USD $	236

Electrochemical Sensors

Code	Name	Description	Note	Price	
01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)		USD $	236
02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)		USD $	236
03	SO2	Sulfur Dioxide (SO2) sensor	* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument	USD $	349
04	NO	Nitric Oxide (NO) sensor		USD $	405
05	NO2	Nitrogen Dioxide (NO2) sensor		USD $	405
06	Cl2	Chlorine (Cl2) sensor	** **Note**: **NO and NH_3** sensors cannot be installed in the same instrument	USD $	349
07	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
08	NH3	Ammonia (NH3) sensor		USD $	473
09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
0A	ClO2	Chlorine Dioxide (ClO2) sensor		USD $	473
0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	349
0E	O2	Oxygen (O2) sensor		USD $	236
0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor		USD $	585
0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)		USD $	349
0Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810
0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo		USD $	473

C		Low-Power Sensor (Options: Dummy / Electrochemical Sensors Incl. CO+H2S Combo)			
0	Empty	Dummy sensor		USD $	0

Electrochemical Sensors

Code	Name	Description	Note	Price	
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)		USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)		USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument	USD $	349
4	NO	Nitric Oxide (NO) sensor		USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor		USD $	405
6	Cl2	Chlorine (Cl2) sensor	** **Note**: **NO and NH_3** sensors cannot be installed in the same instrument	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
8	NH3	Ammonia (NH3) sensor		USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor		USD $	473
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	349
E	O2	Oxygen (O2) sensor		USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor		USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)		USD $	349
Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810
R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo		USD $	473

MB B 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:

MB	B	3	-	AA	BB	C	D	E	-	F	G	H
MultiRAE	Certification (Always B)	Model (Always 3)		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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			D	Low-Power Sensor (Options: Dummy / Electrochemical Sensors)			
			0	Empty	Dummy sensor	USD $	0
			Electrochemical Sensors				
			1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $	236
			2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	236
			3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
			4	NO	Nitric Oxide (NO) sensor	USD $	405
			5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
			6	Cl2	Chlorine (Cl2) sensor	USD $	349
			7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
			8	NH3	Ammonia (NH3) sensor	USD $	473
			9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
			A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
			D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
			E	O2	Oxygen (O2) sensor	USD $	236
			F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
			H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
			J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
			K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
			Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810

* **Note**: ClO_2 *and* H_2S sensors cannot be installed in the same instrument

** **Note**: *NO and* NH_3 sensors cannot be installed in the same instrument

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

			E	Low-Power Sensor (Options: Dummy / Electrochemical Sensors)			
			0	Empty	Dummy sensor	USD $	0
			Electrochemical Sensors				
			1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm)	USD $	236
			2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm)	USD $	236
			3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
			4	NO	Nitric Oxide (NO) sensor	USD $	405
			5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
			6	Cl2	Chlorine (Cl2) sensor	USD $	349
			7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
			8	NH3	Ammonia (NH3) sensor	USD $	473
			9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
			A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
			D	CO, HR	Carbon Monoxide (CO) sensor (up to 2,000 ppm)	USD $	349
			E	O2	Oxygen (O2) sensor	USD $	236
			F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
			H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
			J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
			K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
			Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810

* **Note**: ClO_2 *and* H_2S sensors cannot be installed in the same instrument

** **Note**: *NO and* NH_3 sensors cannot be installed in the same instrument

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

			F	Wireless Options			
			0	Empty	Non-wireless	USD $	0
			4	W-900	Wireless, 900 MHz (built-in wireless modem)	USD $	338
			P	P2P	P2P Communication capability	USD $	1068

* **Note:** Please contact Inside Sales department for P2P option

			G	Battery Options		
			1	Extended-duration (Li-ion) battery with alkaline adapter	USD $	180
			2	Rechargeable (Li-ion) battery with alkaline adapter	USD $	124
			3	Alkaline battery pack	USD $	0

			H	Kits and Accessories		
			0	Monitor only	USD $	0
			2	Accessories / Conf. Space + 100ppm Isobutylene Cal. Kit (with 1 regulator)	USD $	394
			9	Accessories / Conf. Space + 4-gas (LEL/O_2/CO/H_2S) Cal. Kit (with 1 regulator)	USD $	675
			M	Accessories / Conf. Space + 4-gas (LEL/O_2/CO/H_2S) + 100ppm Iso Cal. Kit (with 2 regulators)	USD $	945
			4	Pelican case upgrade: Monitor only	USD $	349
			5	Pelican case upgrade: Access. / Conf. Space + 100ppm Isobutylene Cal. Kit (w/1 reg.)	USD $	731
			6	Pelican case upgrade: Access. / Conf. Space + 4-gas (LEL/O_2/CO/H_2S) Cal. Kit (w/1 reg.)	USD $	1,024
			7	Pelican case upgr.: Access. / Conf. Sp. + 4-gas (LEL/O_2/CO/H_2S) + 100ppm Iso Kit (w/2 reg's)	USD $	1,294

MB **B** **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:

MB	**B**	**3**	**-**	**AA**	**BB**	**C**	**D**	**E**	**-**	**F**	**G**	**H**
MultiRAE	Certification (Always B)	Model (Always 3)		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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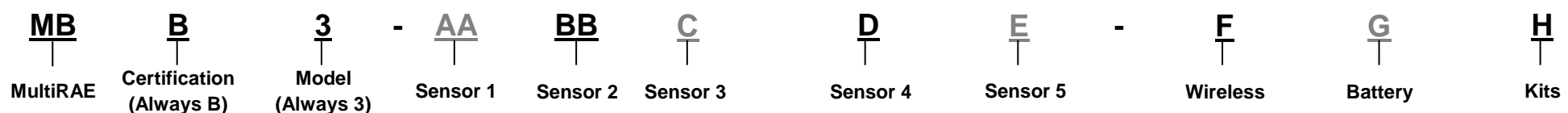
MultiRAE Pro wireless portable multi-threat monitors for radiation and advanced chemical detection

Monitor-Only Configuration Includes:
- MultiRAE Pro 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 Charger / PC communication cable
- AC adapter
- Calibration adapter
- Alkaline battery adapter
- Toolkit with Hex tool and Phillips screwdriver
- PID sensor cap removal tool
- PID zeroing filter (P/N: 008-3024-000)
- 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 "Pelican" case with custom foam that can also accommodate accessories and up to 4 gas cylinders and 3 regulators

Optional Guaranteed Cost of Ownership Program

- 4-year repair and replacement guarantee (available in North America only)
- Annual maintenance service included

Optional Accessories / Confined Space and Calibration Kits Add:
- 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 with Luer-style quick-connect filters
- 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO, w/ regulator)
OR
- 10 ppm **OR** 100 ppm Isobutylene gas (34L) with regulator
OR
- 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO, w/ regulator)
- **AND** 10 ppm **OR** 100 ppm Isobutylene gas (34L) with regulator
OR
- 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO, w/ regulator)
- **AND** 10 ppm Isobutylene gas (34L) with regulator
- **AND** 100 ppm Isobutylene gas (34L) with regulator

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

SERVICE PROGRAM OPTION	PART NUMBER	List Price [USD $]	DESCRIPTION
4-Year Guaranteed Cost of Ownership	SVC-PTC4-MC0	35% of instrument-only list price	Extends warranty and covers replacement of all parts and sensors for 4 years from date of purchase

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

Standard Sensor Configurations - MultiRAE Pro

	PID Sensor	Gamma Sensor	Pumped	Wireless	Li-ion Rechargeable	Accessories Kit	Calibration Kit	PART NUMBER	List Price [USD $]
Pumped / 10.6 eV ppb PID / LEL / CO + H₂S / O₂ / Gamma / Li-ion / Non-Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•	•	•		•			MCB3-A3C1REZ-020	7,264
Unit with Accessories / Confined Space and Calibration Kit (4-gas + 10 ppm Iso)	•	•	•		•	•	•	MCB3-A3C1REZ-02M	8,209
Unit with Access. / Conf. Space and Cal. Kit (4-gas + 10 ppm Iso + 100 ppm Iso)	•	•	•		•	•	•	MCB3-A3C1REZ-02N	8,479
Pumped / 10.6 eV ppb PID / LEL / CO + H₂S / O₂ / Gamma / Li-ion / Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•	•	•	•	•			MCB3-A3C1REZ-420	7,602
Unit with Accessories / Confined Space and Calibration Kit (4-gas + 10 ppm Iso)	•	•	•	•	•	•	•	MCB3-A3C1REZ-42M	8,547
Unit with Access. / Conf. Space and Cal. Kit (4-gas + 10 ppm Iso + 100 ppm Iso)	•	•	•	•	•	•	•	MCB3-A3C1REZ-42N	8,817
Pumped / 10.6 eV ppb PID / LEL / Cl₂ / NH₃ / O₂ / Li-ion / Non-Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•		•		•			MCB3-A3C168E-020	6,454
Pumped / 10.6 eV ppb PID / LEL / Cl₂ / NH₃ / O₂ / Li-ion / Wireless								**PART NUMBER**	**List Price [USD $]**
Unit only	•		•	•	•			MCB3-A3C168E-420	6,792

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R	Certification of Intrinsic Safety				
B	CSA		* **Note**: If the instrument is ordered with fewer than five sensors, a dummy sensor must be installed in the empty sensor slot(s)		
M	**Model / Base Unit Price**				
3	MultiRAE Pro (PGM-6248)			USD $	4,102
	AA	**High-Power Sensor (Options: Dummy / PID / Combust. NDIR / CO₂ NDIR / Electrochemical Sensors Incl. CO+H₂S Combo)**			
	00	Empty	Dummy sensor	USD $	0
	PID Sensors				
	A1	PID, HR, 10.6 eV	PID sensor (0.1 - 5,000 ppm; 0.1 ppm res.; 10.6 eV lamp)	USD $	698
	A3	PID, ppb, 10.6 eV	PID ppb sensor (10 ppb - 2,000 ppm; 10 ppb res.; 10.6 eV lamp)	USD $	934
	Combustible NDIR Sensors				
	B4	CH₄ NDIR, % LEL	Combustible NDIR sensor (0-100% LEL CH₄)	USD $	934
	B5	CH₄ NDIR, % Vol.	Combustible NDIR sensor (0-100% Vol. CH₄)	USD $	934
	CO₂ NDIR Sensors				
	B8	CO₂ NDIR, HR	Carbon dioxide (CO2) NDIR sensor (up to 50,000 ppm)	USD $	934
	Electrochemical Sensors				
	01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $	236
	02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	236
	03	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
	04	NO	Nitric Oxide (NO) sensor	USD $	405
	05	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
	06	Cl2	Chlorine (Cl2) sensor	USD $	349
	07	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
	08	NH3	Ammonia (NH3) sensor	USD $	473
	09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
	0A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
	0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
	0E	O2	Oxygen (O2) sensor	USD $	236
	0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
	0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
	0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
	0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
	0Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810
	0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	USD $	473

Notes (right column callouts):

* **Note**: *NDIR % Vol. combustible* sensor must be accompanied by the catalytic % LEL sensor (installs in slot BB; see next page)

* **Note**: *ClO₂ and H₂S* sensors cannot be installed in the same instrument

** **Note**: *NO and NH₃* sensors cannot be installed in the same instrument

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

MC B 3 - **AA** **BB** C D E - **F** G H

MultiRAE Pro Configuration Guide

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

MC	**B**	**3**	-	**AA**	**BB**	**C**	**D**	**E**	-	**F**	**G**	**H**
MultiRAE Pro	Certification (Always B)	Model (Always 3)		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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BB	**High-Power Sensor (Options: Dummy / LEL / Electrochemical Sensors Incl. CO+H₂S Combo)**			
00	Empty	Dummy sensor	USD $	0
LEL Catalytic Bead Sensor				
C1	LEL	Combustible catalytic bead % LEL sensor	USD $	236
Electrochemical Sensors				
01	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $	236
02	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	236
03	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
04	NO	Nitric Oxide (NO) sensor	USD $	405
05	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
06	Cl2	Chlorine (Cl2) sensor	USD $	349
07	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
08	NH3	Ammonia (NH3) sensor	USD $	473
09	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
0A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
0D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
0E	O2	Oxygen (O2) sensor	USD $	236
0F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
0H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
0J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
0K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
0Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810
0R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	USD $	473
C	**Low-Power Sensor (Options: Dummy / Electrochemical Sensors Incl. CO+H2S Combo)**			
0	Empty	Dummy sensor	USD $	0
Electrochemical Sensors				
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
4	NO	Nitric Oxide (NO) sensor	USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
6	Cl2	Chlorine (Cl2) sensor	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
8	NH3	Ammonia (NH3) sensor	USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
E	O2	Oxygen (O2) sensor	USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810
R	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	USD $	473

* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument

** **Note**: NO and NH_3 sensors cannot be installed in the same instrument
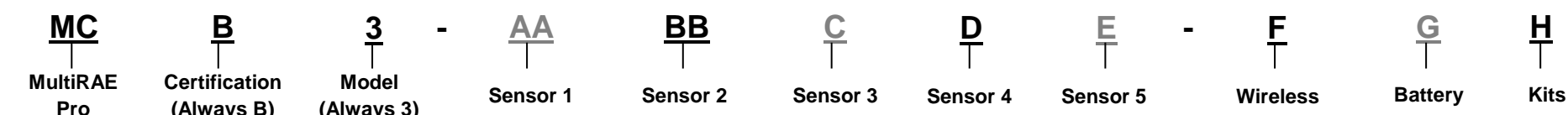
* **Note**: When ordering electrochemical sensors, please select the lower number first

MC B 3 - AA   BB C D E - F G H

MultiRAE Pro Configuration Guide

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

MC	B	3	-	AA	BB	C	D	E	-	F	G	H
MultiRAE Pro	**Certification (Always B)**	**Model (Always 3)**		**Sensor 1**	**Sensor 2**	**Sensor 3**	**Sensor 4**	**Sensor 5**		**Wireless**	**Battery**	**Kits**

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D	**Low-Power Sensor (Options: Dummy / Electrochemical Sensors)**				
0	Empty	Dummy sensor	USD $	0
Electrochemical Sensors					
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
4	NO	Nitric Oxide (NO) sensor	USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
6	Cl2	Chlorine (Cl2) sensor	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
8	NH3	Ammonia (NH3) sensor	USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $	349
E	O2	Oxygen (O2) sensor	USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810

* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument

** **Note**: *NO and NH_3* sensors cannot be installed in the same instrument

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

E	**Low-Power Sensor (Options: Dummy / Gamma / Electrochemical Sensors)**				
0	Empty	Dummy sensor	USD $	0
Gamma Radiation Sensor					
Z	Gamma	Gamma radiation sensor	USD $	1159
Electrochemical Sensors					
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm)	USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm)	USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	USD $	349
4	NO	Nitric Oxide (NO) sensor	USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor	USD $	405
6	Cl2	Chlorine (Cl2) sensor	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor	USD $	473
8	NH3	Ammonia (NH3) sensor	USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)	USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor	USD $	473
D	CO, HR	Carbon Monoxide (CO) sensor (up to 2,000 ppm)	USD $	349
E	O2	Oxygen (O2) sensor	USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)	USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor	USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $	349
Q	HCHO	Formaldehyde (HCHO) sensor	USD $	810

* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument
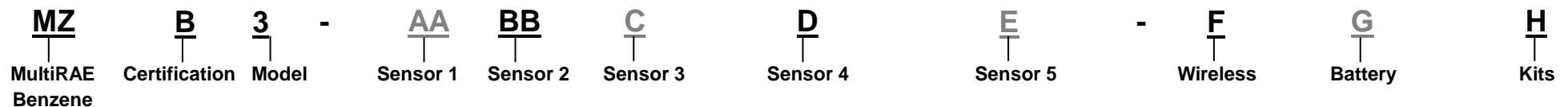
** **Note**: *NO and NH_3* sensors cannot be installed in the same instrument

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

F	**Wireless Options**				
0	Empty	Non-wireless	USD $	0
4	W-900	Wireless, 900 MHz (built-in wireless modem)	USD $	338
P	P2P	P2P Communication capability	USD $	1,911

* **Note:** Please contact Inside Sales department for P2P option

G	**Battery Options**			
1	Extended-duration (Li-ion) battery with alkaline adapter	USD $	180
2	Rechargeable (Li-ion) battery with alkaline adapter	USD $	124
3	Alkaline battery pack	USD $	0

H	**Kits and Accessories**			
0	Monitor only	USD $	0
2	Accessories / Conf. Space + 10 ppm Isobutylene Cal. Kit (with 1 regulator)	USD $	394
3	Accessories / Conf. Space + 100 ppm Isobutylene Cal. Kit (with 1 regulator)	USD $	394
9	Accessories / Conf. Space + 4-gas (LEL/O_2/CO/H_2S) Cal. Kit (with 1 regulator)	USD $	675
M	Access. / Conf. Space + 4-gas (LEL/O_2/CO/H_2S) + 10 ppm Iso Cal. Kit (with 2 reg's)	USD $	945
B	Access. / Conf. Space + 4-gas (LEL/O_2/CO/H_2S) + 100 ppm Iso Cal. Kit (with 2 reg's)	USD $	945
N	Acc. / Conf. Sp. + 4-gas (LEL/O_2/CO/H_2S) + 10 ppm Iso + 100 ppm Iso Cal. Kit (3 reg's)	USD $	1,215

MC B 3 - **AA**   **BB** C D E - **F** G H

MultiRAE Pro Configuration Guide

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

MC	**B**	**3**	-	**AA**	**BB**	**C**	**D**	**E**	-	**F**	**G**	**H**
MultiRAE Pro	Certification (Always B)	Model (Always 3)		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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MultiRAE Benzene (Model PGM-6228)

The MultiRAE Benzene monitor combines the ability to make quick benzene-specific assessment ("snapshot") measurements with the advantages of a versatile multi-gas monitor that can support up to 20 intelligent interchangeable sensor options. Its optional wireless capability improves safety and productivity by providing real-time access to instrument readings and alarm status from any location, which delivers better situational awareness and faster incident response.

Monitor-Only Configuration Includes:

• MultiRAE Benzene 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)

• Travel charger / PC communications adapter

• PC communication cable

• AC adapter

• Calibration adapter

• Alkaline battery adapter

• Toolkit with Hex tool and Phillips screwdriver

• Quick Start Guides

• CD with documentation

• ProRAE Studio II Instrument Configuration & Data Management Software

• Calibration and test certificate

• Warranty / registration card

• 10 charcoal VOC filters for CO sensor

• Built-in pump

• Belt clip installed

• 3 spare external filters

• PID sensor cap removal tool

• 1 Cartridge for Benzene specific measurement (6 measurements)

• 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

Instrument ships in a Hard transport case with custom foam

Optional Calibration Kit Adds:

• 4-gas mix (34L; 50% LEL, 18% O_2, 10 ppm H_2S, 50 ppm CO) with regulator

• 5 ppm Benzene 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

RAE Sep Tube Cartridges price can be found in the Tubes and Pumps section of this price guide

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

Standard Sensor Configurations - MultiRAE Benzene	PID Sensor	Pumped	Wireless	Li-ion Rechargeable	Accessories Kit	Calibration Kit		
Pumped / 9.8 eV PID / LEL / H₂S / CO / O₂ / Li-ion / Non-Wireless							**PART NUMBER**	**List Price [USD $]**
Unit with Accessories (no gas or regulator)	•	•		•	•		MZB3-A4C112E-021	4,770
Unit with Accessories / Confined Space and Calibration Kit (4-gas + Benzeze + regulators)	•	•		•	•	•	MZB3-A4C112E-022	5,512
Pumped / 9.8 eV PID / LEL / H₂S / CO / O₂ / Li-ion / Wireless							**PART NUMBER**	**List Price [USD $]**
Unit with Accessories (no gas or regulator)	•	•	•	•	•		MZB3-A4C112E-421	5,108
Unit with Accessories / Confined Space and Calibration Kit (4-gas + Benzeze + regulators)	•	•	•	•	•	•	MZB3-A4C112E-422	5,850

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MultiRAE Benzene Monitor (Model PGM-6228)

R		**Certification of Intrinsic Safety**			
B		cCSAus		* **Note**: If the instrument is ordered with fewer than five sensors, a dummy sensor must be installed in the empty sensor slot(s)	
	M	**Model / Base Unit Price**			
	3	MultiRAE Benzene - Pumped		USD $	2,543
		AA	**High-Power Sensor: PID**		
		A4	PID, 9.8 eV — PID sensor (2,000 ppm; 0.1 ppm res.; 9.8 eV)	USD $	810
			BB	**High-Power Sensor (Options: Dummy / LEL / Electrochemical Sensors Incl. CO+H$_2$S Combo)**	
			00	Empty — Dummy sensor	USD $ 0
				LEL Catalytic Bead Sensor	
			C1	LEL — Combustible catalytic bead % LEL sensor	USD $ 236
				Electrochemical Sensors	
			01	H2S — Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)	USD $ 236
			02	CO — Carbon Monoxide (CO) sensor (up to 500 ppm reading)	USD $ 236
			03	SO2 — Sulfur Dioxide (SO2) sensor	USD $ 349
			04	NO — Nitric Oxide (NO) sensor	USD $ 405
			05	NO2 — Nitrogen Dioxide (NO2) sensor	USD $ 405
			06	Cl2 — Chlorine (Cl2) sensor	USD $ 349
			07	HCN — Hydrogen Cyanide (HCN) sensor	USD $ 473
			08	NH3 — Ammonia (NH3) sensor	USD $ 473
			09	PH3 — Phosphine (PH3) sensor (up to 20 ppm reading)	USD $ 473
			0A	ClO2 — Chlorine Dioxide (ClO2) sensor	USD $ 473
			0D	CO, HR — Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	USD $ 349
			0E	O2 — Oxygen (O2) sensor	USD $ 236
			0F	CO comp. H2 — Carbon Monoxide (CO) sensor (H2-compensated)	USD $ 405
			0H	CH3-SH — Methyl Mercaptan (CH3-SH) sensor	USD $ 585
			0J	EtO-A — Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	USD $ 349
			0K	EtO-B — Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	USD $ 349
			0Q	HCHO — Formaldehyde (HCHO) sensor	USD $ 810
			0R	CO+H2S — Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo	USD $ 473
				C	**Low-Power Sensor (Options: Dummy / Electrochemical Sensors Incl. CO+H2S Combo)**
				0	Empty — Dummy sensor — USD $ 0
					Electrochemical Sensors
				1	H2S — Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading) — USD $ 236
				2	CO — Carbon Monoxide (CO) sensor (up to 500 ppm reading) — USD $ 236
				3	SO2 — Sulfur Dioxide (SO2) sensor — USD $ 349
				4	NO — Nitric Oxide (NO) sensor — USD $ 405
				5	NO2 — Nitrogen Dioxide (NO2) sensor — USD $ 405
				6	Cl2 — Chlorine (Cl2) sensor — USD $ 349
				7	HCN — Hydrogen Cyanide (HCN) sensor — USD $ 473
				8	NH3 — Ammonia (NH3) sensor — USD $ 473
				9	PH3 — Phosphine (PH3) sensor (up to 20 ppm reading) — USD $ 473
				A	ClO2 — Chlorine Dioxide (ClO2) sensor — USD $ 473
				D	CO, HR — Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading) — USD $ 349
				E	O2 — Oxygen (O2) sensor — USD $ 236
				F	CO comp. H2 — Carbon Monoxide (CO) sensor (H2-compensated) — USD $ 405
				H	CH3-SH — Methyl Mercaptan (CH3-SH) sensor — USD $ 585
				J	EtO-A — Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.) — USD $ 349
				K	EtO-B — Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.) — USD $ 349
				Q	HCHO — Formaldehyde (HCHO) sensor — USD $ 810
				R	CO+H2S — Carbon Monoxide+Hydrogen Sulfide (CO+H2S) combo — USD $ 473

* **Note**: ClO_2 and H_2S sensors cannot be installed in the same instrument

** **Note**: NO and NH_3 sensors cannot be installed in the same instrument

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

MZ B M-AA BB C DE-FGH

MultiRAE Benzene Configuration Guide

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

MZ	**B**	**3**	-	**AA**	**BB**	**C**	**D**	**E**	-	**F**	**G**	**H**
MultiRAE Benzene	Certification	Model		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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D	Low-Power Sensor (Options: Dummy / Electrochemical Sensors)				
0	Empty	Dummy sensor		USD $	0
Electrochemical Sensors					
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm reading)		USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)		USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor	* **Note**: *ClO_2 and H_2S* sensors cannot be installed in the same instrument	USD $	349
4	NO	Nitric Oxide (NO) sensor		USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor		USD $	405
6	Cl2	Chlorine (Cl2) sensor	** **Note**: *NO and NH_3* sensors cannot be installed in the same instrument	USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
8	NH3	Ammonia (NH3) sensor		USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor		USD $	473
D	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	349
E	O2	Oxygen (O2) sensor		USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor		USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)		USD $	349
Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810

E	Low-Power Sensor (Options: Dummy / Electrochemical Sensors)				
0	Empty	Dummy sensor		USD $	0
Electrochemical Sensors					
1	H2S	Hydrogen Sulfide (H2S) sensor (up to 100 ppm)		USD $	236
2	CO	Carbon Monoxide (CO) sensor (up to 500 ppm)	* **Note**: *ClO_2 and H_2S* sensors cannot be installed in the same instrument	USD $	236
3	SO2	Sulfur Dioxide (SO2) sensor		USD $	349
4	NO	Nitric Oxide (NO) sensor		USD $	405
5	NO2	Nitrogen Dioxide (NO2) sensor	** **Note**: *NO and NH_3* sensors cannot be installed in the same instrument	USD $	405
6	Cl2	Chlorine (Cl2) sensor		USD $	349
7	HCN	Hydrogen Cyanide (HCN) sensor		USD $	473
8	NH3	Ammonia (NH3) sensor		USD $	473
9	PH3	Phosphine (PH3) sensor (up to 20 ppm reading)		USD $	473
A	ClO2	Chlorine Dioxide (ClO2) sensor	* **Note**: When ordering electrochemical sensors, please select the lower number first	USD $	473
D	CO, HR	Carbon Monoxide (CO) sensor (up to 2,000 ppm)		USD $	349
E	O2	Oxygen (O2) sensor		USD $	236
F	CO comp. H2	Carbon Monoxide (CO) sensor (H2-compensated)		USD $	405
H	CH3-SH	Methyl Mercaptan (CH3-SH) sensor		USD $	585
J	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)		USD $	349
K	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)		USD $	349
Q	HCHO	Formaldehyde (HCHO) sensor		USD $	810

F	Wireless Options			
0	Empty	Non-wireless	USD $	0
4	W-900	Wireless, 900 MHz (built-in wireless modem)	USD $	338

G	Battery Options		
1	Extended-duration (Li-ion) battery with alkaline adapter	USD $	180
2	Rechargeable (Li-ion) battery with alkaline adapter	USD $	124
3	Alkaline battery pack	USD $	0

H	Kits and Accessories		
1	Accessories (no gas or regulator) - Shipped in Hard case	USD $	349
2	Accessories / Cal. Kit (with 2 regulators) - Shipped in hard case 4-gas (LEL / O2 / CO / H2S) + 5ppm benzene	USD $	1091

MZBM-AA BB C D E- F G H			**Total**

MultiRAE Benzene Configuration Guide

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

MZ	**B**	**3**	-	AA	**BB**	C	**D**	E	-	**F**	G	**H**
MultiRAE Benzene	Certification	Model		Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sensor 5		Wireless	Battery	Kits

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MultiRAE Series Sensors, Accessories, and Replacement Parts

MultiRAE Replacement Sensors

PART NUMBER	SENSOR	DESCRIPTION	COMPATIBLE INSTRUMENTS	List Price [USD $]
C03-2028-000	Dummy	Dummy sensor (required if fewer than 5 sensors installed)	All MultiRAE Models	34
PID (Photoionization Detector) Sensors				
C03-0912-001	PID, ppb, 10.6 eV	PID ppb sensor (10 ppb - 2,000 ppm; 10 ppb res.; 10.6 eV lamp)	MultiRAE Pro	934
C03-0912-002	PID, HR, 10.6 eV	PID sensor (0.1 - 5,000 ppm; 0.1 ppm res.; 10.6 eV lamp)	MultiRAE or MultiRAE Pro	698
C03-0912-003	PID, LR, 10.6 eV	PID sensor (1 - 1,000 ppm; 1 ppm res.; 10.6 eV lamp)	MultiRAE Lite Pumped	473
C03-0912-010	PID, 9.8 eV	PID sensor (0.1- 2,000 ppm; 0.1 ppm res.; 9.8 eV lamp)	MultiRAE Benzene	810
Electrochemical Toxic and Oxygen Sensors				
C03-0950-000	NH_3	Ammonia (NH_3) sensor	All MultiRAE Models	473
C03-0903-000	CO, HR	Carbon Monoxide (CO) extended-range sensor (up to 2,000 ppm reading)	All MultiRAE Models	349
C03-0906-000	CO	Carbon Monoxide (CO) sensor (up to 500 ppm reading)	All MultiRAE Models	236
C03-0979-000	CO comp. H_2	Carbon Monoxide (CO) sensor (H_2-compensated)	All MultiRAE Models	405
C03-0913-000	CO+H2S	Carbon Monoxide+Hydrogen Sulfide (CO+H_2S) combo	All MultiRAE Models	473
C03-0978-000	Cl_2	Chlorine (Cl_2) sensor	All MultiRAE Models	349
C03-0956-000	ClO_2	Chlorine Dioxide (ClO_2) sensor	All MultiRAE Models	473
C03-0954-000	EtO-A	Ethylene Oxide (EtO-A) sensor (0 - 100 ppm; 1 ppm res.)	All MultiRAE Models	349
C03-0922-100	EtO-B	Ethylene Oxide (EtO-B) sensor (0 - 10 ppm, 0.1 ppm res.)	All MultiRAE Models	349
C03-0923-100	EtO-C, HR	Ethylene Oxide (EtO-C) extended-range sensor (0 - 500 ppm; 10 ppm res.)	MultiRAE Lite Diffusion	473
C03-0982-000	HCHO	Formaldehyde (HCHO) sensor	All MultiRAE Models	810
C03-0981-000	H_2	Hydrogen (H_2) sensor	MultiRAE Lite Diffusion	473
C03-0949-000	HCN	Hydrogen Cyanide (HCN) sensor	All MultiRAE Models	473
C03-0904-000	H_2S, HR	Hydrogen Sulfide (H_2S) extended-range sensor (up to 1,000 ppm reading)	MultiRAE Lite Diffusion	236
C03-0907-001	H_2S	Hydrogen Sulfide (H_2S) sensor (up to 100 ppm reading)	All MultiRAE Models	236
C03-0980-000	CH_3-SH	Methyl Mercaptan (CH_3-SH) sensor	All MultiRAE Models	585
C03-0974-000	NO	Nitric Oxide (NO) sensor	All MultiRAE Models	405
C03-0975-000	NO_2	Nitrogen Dioxide (NO_2) sensor	All MultiRAE Models	405
C03-0942-000	O_2	Oxygen (O_2) sensor	All MultiRAE Models	236
C03-0976-000	PH_3	Phosphine (PH_3) sensor (up to 20 ppm reading)	All MultiRAE Models	473
C03-0973-100	SO_2	Sulfur Dioxide (SO_2) sensor	All MultiRAE Models	349
Combustible Sensors				
C03-0911-000	LEL	Combustible catalytic bead % LEL sensor	All MultiRAE Models	236
C03-0962-000	CH_4 NDIR, % LEL	Combustible NDIR sensor (0-100% LEL CH_4)	All MultiRAE Models except MultiRAE Benzene	934
C03-0963-000	CH_4 NDIR, % Vol.	Combustible NDIR sensor (0-100% Vol. CH_4)	All MultiRAE Models except MultiRAE Benzene. Requires the catalytic % LEL sensor in the same instrument	934
Carbon Dioxide (CO_2) Sensor				
C03-0961-000	CO_2 NDIR, HR	Carbon dioxide (CO_2) NDIR sensor (up to 50,000 ppm)	All MultiRAE Models except MultiRAE Benzene	934
Gamma Radiation Sensor				
C03-0910-000	Gamma	Gamma radiation sensor	MultiRAE Pro	Call for price
C03-0986-000	Gamma	Gamma radiation sensor	MultiRAE Pro	Call for price

MultiRAE Accessories and Replacement Parts

PART NUMBER	DESCRIPTION	COMPATIBLE INSTRUMENTS	List Price [USD $]
Power, PC Communication and Automotive Accessories			
M01-3053-000	Rechargeable Li-ion battery	All MultiRAE Models	236
M01-3055-000	Extended-duration Li-ion battery	All MultiRAE Models	349
M01-3054-000	Alkaline battery adapter for 4 AA-sized batteries	All MultiRAE Models	79
M01-3025-000	External Battery charger (no power adapter)	All MultiRAE Models	146
M01-2110-000	Holder for External Battery charger	All MultiRAE Models	17
020-2480-000	One-to-five Power Cable	All MultiRAE Models	56
M01-3021-000	Travel charger / PC communications adapter (AC adapter or PC cable NOT included)	All MultiRAE Models	101
410-0036-000	Power Cord for AC adapter (US plug)	All MultiRAE Models	37
410-0036-001	Power Cord for AC adapter (EU plug)	All MultiRAE Models	34
M01-3021-100	Travel charger / PC communications adapter for P2P (AC adapter or PC cable NOT included)	All MultiRAE Models	101
500-0036-100	AC adapter with international prong kit (for desktop cradle or travel charger)	All MultiRAE Models	68
500-0156-000	Power Adapter,AC/DC,90-264V Input,12VDC/3A Output	All MultiRAE Models	113
M01-2066-000	PC communications cable (P2P)	All MultiRAE Models (with P2P capability)	34
410-0203-000	PC communications cable	All MultiRAE Models	34
M01-0306-000	KIT,DESKTOP CRADLE,MULTIRAE SERIES	All MultiRAE Models	349
M01-0307-000	KIT,TRUCK MOUNT FOR DESKTOP CRADLE,MULTIRAE SERIES	All MultiRAE Models	124
M01-0308-000	KIT,DESKTOP CRADLE AND TRUCK MOUNT COMBO,MULTIRAE SERIES	All MultiRAE Models	405
003-3004-000	Automotive charging adapter (12V)	All MultiRAE Models	68
Calibration and Maintenance Accessories			
008-3022-010	External 25 mm filters (pack of 10; without adapter)	MultiRAE Pumped Models	34
M01-3210-000	Filter and Sensor Compartment O-Ring Kit - MultiRAE Lite Diffusion	MultiRAE Lite Diffusion	34
008-3024-000	External PID zeroing filter	MultiRAE with PID	101
M01-3011-003	Calibration adapter (pack of 3) - MultiRAE Pumped models	MultiRAE Pumped Models	34
M01-3010-003	Calibration adapter (pack of 3) - MultiRAE Lite Diffusion	MultiRAE Lite Diffusion	37
G02-0306-003	PID sensor cover removal tool (pack of 3)	MultiRAE with PID	37
G02-0304-000	PID sensor maintenance kit (incl. sensor cap, cap removal tool, electrode panel)	MultiRAE with PID	37
M01-3224-000	Flexible inlet probe connector	MultiRAE Pumped Models	11
023-3012-000	6" flexible probe	MultiRAE Pumped Models	79
M01-3224-000	Gas inlet connector for Flexible probe	MultiRAE Pumped Models	11
M01-2050-010	Charcoal VOC filters for CO Sensor (pack of 10)	All MultiRAE Models	34
Carrying and Protective Accessories			
M01-3200-000	MultiRAE holster case (pumped models) with shoulder strap	MultiRAE Pumped Models	158
M01-3201-000	MultiRAE holster case (diffusion models) with 4-point chest harness and shoulder strap	MultiRAE Lite Diffusion	158
M01-2080-100	Protective rubber boot – yellow (pumped units; includes two Hex screws)	MultiRAE / MultiRAE Lite Pumped	90
M01-2082-100	Protective rubber boot – black (pumped units; includes two Hex screws)	MultiRAE Pro	90
M01-2081-100	Protective rubber boot – yellow (diffusion units; includes two Hex screws)	MultiRAE Lite Diffusion	99
M01-2086-100	Protective rubber boot – red (pumped units; includes two Hex screws)	MultiRAE Pumped Models	90
M01-2087-100	Protective rubber boot – orange (pumped units; includes two Hex screws)	MultiRAE Pumped Models	90
M01-2088-100	Protective rubber boot – blue (pumped units; includes two Hex screws)	MultiRAE Pumped Models	90
M01-2049-100	Swivel belt clip (includes screw and spring washer)	MultiRAE Pumped Models	34
M01-3202-000	"Pelican" carrying case with custom foam to accommodate the instrument + desktop cradle + Accessories and Calibration Kits with up to 4 gas cylinders and 3 regulators (accessories, cradle, instrument, gas and regulators not included)	All MultiRAE Models	644
M01-3203-000	Hard carrying case with custom foam to accommodate the instrument + desktop cradle + Accessories and Calibration Kits with 2 gas cylinders and 2 regulators (accessories, cradle, instrument, gas and regulators not included)	All MultiRAE Models	236

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SensorRAE Sensor Conditioning Stations

The SensorRAE is a four-socket electrochemical (EC) sensor conditioning station. It keeps RAE Systems' EC sensors warmed up and ready for immediate use even when they are not installed in a RAE Systems multi-sensor monitor.

Supports the following RAE Systems Products:

• AREARAE (EOL)

DESCRIPTION	PART NUMBER	List Price [USD $]
SensorRAE Sensor Conditioning Station (accommodates four 4R electrochemical sensors)	032-3100-000	349

SensorRAE 4R+

The SensorRAE 4R+ is a six-socket electrochemical (EC) sensor conditioning station that not only expands the assortment of 4R+ sensors available to the users of RAE Systems gas detection instruments (such as the ToxiRAE Pro and MultiRAE family) in the field, but also keeps such sensors on bias and ready for installation, calibration, and use without requiring the extra warm-up time. The SensorRAE 4R+ is also a convenient way to protect, carry, and store spare sensors.

Supports the following RAE Systems Products:

• MultiRAE Lite
• MultiRAE
• MultiRAE Pro
• MultiRAE Benzene
• ToxiRAE Pro
• AREARAE Plus
• AREARAE Pro

DESCRIPTION	PART NUMBER	List Price [USD $]
SensorRAE 4R+ Sensor Conditioning Station (accommodates six 4R+ electrochemical sensors)	T03-0001-000	506

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Multi-Gas Parts and Accessories

Probes and Tubing

PART NUMBER	DESCRIPTION	Use With…	List Price [USD $]
008-3015-100	Remote Tygon® sample draw kit for pump-equipped multi-sensor instruments. Kit includes a stiff 10" (26 cm) aluminum sample probe with replaceable particulate and hydrophobic barrier filters, 3 hydrophobic barrier filters, 15′ (5 m) Tygon® tubing with Luer style quick connect fittings. (Not for use with reactive gases or with PID equipped instruments.)	All except PID-equipped instruments	90
008-3015-200	Remote Teflon® sample draw kit for pump equipped multi-sensor instruments. Kit includes a stiff 10" (26 cm) aluminum sample probe with replaceable particulate and hydrophobic barrier filters, 3 hydrophobic barrier filters, 10′ (3 m) self-coiling Teflon® tubing with Luer-style quick-connect fittings. (For use with PID equipped instruments)	ALL	124
008-3015-001	Collapsible, aluminum Remote Access Probe with insulated handle and Teflon tubing 6.5′ (2 m). Probe Expands to 35".	ALL	113
411-0008-000	Teflon® tubing 1/16" ID (1.6mm)	ALL	5
411-0018-037	Tygon® tubing 1/8" ID (3 mm)	ALL, Except PIDs	5
411-0025-037	FEP-lined Tygon® tubing ¼" OD, 1/8" ID	ALL	5
002-2044-005	Tygon® to Teflon® Fitting (pack of 5)	ALL	34
008-3012-151	15′ (5 m) Teflon® tubing w/ male Luer fitting	ALL	79
490-0044-000	Rubber float with sintered metal filter weight	ALL	87
020-3413-000	Hand pump	QRAE II Diffusion	90
008-3025-000	Dilution fitting (nominal 5:1)	ALL	62
008-3026-000	Dilution fitting (nominal 1:1)	ALL	56

Filters and Special Attachments

PART NUMBER	DESCRIPTION	Use With…	List Price [USD $]
008-3006-010	Charcoal filter for CO sensor (pack of 10)	ALL	34
008-3006-020	Charcoal filter for CO sensor (pack of 20)	ALL	56

Accessories

PART NUMBER	DESCRIPTION	Use With…	List Price [USD $]
002-3009-000	Case, hard packing case with foam (18.5"x13"x6.5")	ALL	191
703-0000-000	Body Harness	ALL	62

Software and Training

PART NUMBER	DESCRIPTION	Use With…	List Price [USD $]
000-5007-001	ProRAE Studio II Instrument Configuration and Data Management Software CD	ToxiRAE Pro Family, MultiRAE Family, QRAE 3, QRAE II, MiniRAE 3000, MiniRAE Lite, UltraRAE 3000, ppbRAE 3000, NeutronRAE II, GammaRAE II R, GammaRAE II R (rechargeable)	62
000-5001-000	ProRAE Suite Software CD for Windows™ 95, 98 & NT, 2000, XP, and ME	ALL	45
410-0210-000	USB-to-serial cable	ALL	155
008-3003-000	Computer Interface Cable	ALL	65
000-5002-000	ProRAE Suite Software CD with Computer Interface Cable	ALL	90

MiniRAE Lite (Model PGM-7300)

The rugged MiniRAE Lite is a basic pumped handheld volatile organic compound (VOC) monitor. Its Photoionization Detector's (PID) range of 0 ppm to 5,000 ppm makes it an ideal instrument for applications such as environmental site surveying where **non-hazardous area certifications** are required .

Monitor only includes:
- MiniRAE Lite Monitor, Model PGM-7300. **Not Intrinsically Safe**
- RAE UV lamp, 10.6 eV
- Flex-I-Probe
- External filter
- Green rubber boot
- Alkaline battery adapter
- Lamp cleaning and Tool kit
- Li-Ion Battery with universal AC/DC adapter and international plug kit, if specified
- Travel download charger
- Operation and maintenance manual
- Soft leather carrying case

Monitor with Accessories Kit adds:
- Hard transport case with pre-cut foam
- 5 Porous metal filters and O-rings
- Organic vapor zeroing kit
- Gas outlet port adapter and tubing

Optional Calibration Kit adds:
- 100 ppm isobutylene calibration gas, 34L
- Calibration regulator & flow controller

Cal gas, part number 600-0002-000

LAMP	Li-Ion / Universal charger	Accessories Kit	Calibration Kit	PART NUMBER	List Price [USD $]
10.6 eV	•			059-A110-000	3,112
10.6 eV	•	•		059-A110-300	3,495
10.6 eV	•	•	•	059-A110-100	3,720

MiniRAE Lite Monitors (PGM-7300)

Basic Unit			USD $	2,504
A	**Lamps**			
1	10.6 eV lamp 1/2″		USD $	0
	B	**Batteries, Chargers**		
	1	Rechargeable Li-Ion battery, universal adapter, travel charger	USD $	608
		D	**Kits**	
		0	Monitor only — USD $	0
		1	Accessories and Calibration Kit (with gas and regulator) — USD $	608
		2	Accessories Kit (no gas, with regulator) — USD $	540
		3	Accessories Kit (no gas or regulator) — USD $	383

059-A 1   B 0 - D 0 0   **Total**

MiniRAE Lite Part Number Configuration Guide

059	-	**A**	**1**	**B**	**0**	-	**D**	**0**	**0**
MiniRAE Lite		Always A	Lamp	Battery	Always Zero		Kit	Always Zero	Always Zero

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MiniRAE 3000 Model PGM-7320

The rugged MiniRAE 3000 is the most advanced pumped handheld volatile organic compound (VOC) monitor on the market. Its Photoionization Detector's (PID) extended range of 0 to15,000 ppm makes it an ideal instrument for applications from industrial to HazMat / Homeland Security.

Monitor only includes:
- MiniRAE 3000 Monitor, Model PGM-7320
- Wireless communication in built, as specified
- Datalogging with ProRAE Studio
- Travel download charger
- RAE UV lamp, as specified
- Flex-I-Probe
- External filter
- Yellow rubber boot
- Alkaline battery adapter
- Lamp cleaning and Tool kit
- Li-Ion Battery with universal AC/DC adapter and international plug kit, if specified
- Resources CD-ROM and maintenance manual
- Soft leather carrying case

Monitor with Accessories Kit adds:
- Hard transport case with pre-cut foam
- Charging/download cradle (instead of travel charger)
- 5 Porous metal filters and O-rings
- Organic vapor zeroing kit
- Gas outlet port adapter and tubing

Optional Calibration Kit adds:
- 100 ppm isobutylene calibration gas, 34L
- Calibration regulator & flow controller

Optional Guaranteed Cost of Ownership
- Available in North America only
- 4-year repair and replacement guarantee
- Annual maintenance service

LAMP	Li-Ion / Universal charger	Accessories Kit	Calibration Kit	Wireless Bluetooth	PART NUMBER	List Price [USD $]
10.6 eV	•				059-B110-000	4,623
10.6 eV	•	•	•		059-B110-100	5,231
10.6 eV	•	•	•	•	059-B111-100	5,591

Service Program Option		List Price [USD $]	
Guaranteed Cost of Ownership	SVC-PTC4-592	1,609	Extends warranty and covers replacement of all parts and sensors for 4 years from date of purchase.

MiniRAE 3000 Monitors (PGM-7320)

Basic Unit		USD $	4,499
A	**Lamps**		
1	10.6 eV lamp 1/2"	USD $	0
2	11.7 eV lamp 1/2"	USD $	124
3	9.8 eV lamp 1/2"	USD $	68
B	**Batteries, Chargers**		
0	Alkaline only	USD $	0
1	Rechargeable Li-Ion battery, universal adapter	USD $	124
C	**Wireless, certification**		
0	No Wireless, UL/CUL	USD $	0
1	Wireless (Bluetooth) data transmission, UL/CUL (2.4 GHz)	USD $	360
2	Wireless (Mesh) data transmission, UL/CUL (900MHz)	USD $	338
D	**Kits**		
0	Monitor only	USD $	0
1	Accessories and Calibration Kit (with gas and regulator)	USD $	608
2	Accessories Kit (no gas, with regulator)	USD $	540
3	Accessories Kit (no gas or regulator)	USD $	383

059 - B A   B C - D 0 0

Total

MiniRAE 3000 Part Number Configuration Guide

059	-	B	A	B	C	-	D	0	0
MiniRAE 3000		Always B	Lamp	Battery	Wireless		Kit	Always Zero	Always Zero

UltraRAE 3000 Model PGM-7360

The rugged UltraRAE 3000 is the most advanced pumped handheld volatile specific organic compound (VOC) on the market. Its Photoionization Detector's (PID) extended range of 0-10,000 ppm and RAE-Sep tube technology makes it an ideal instrument for applications from environmental site surveying to Industrial Hygiene.

Monitor only includes:
- UltraRAE 3000 Monitor, Model PGM-7360
- Wireless communication in built, as specified
- Datalogging with ProRAE Studio
- Travel download charger
- RAE UV lamp and RAE-Sep™ Tubes, as specified
- Flex-I-Probe and short probe
- External filter
- Red rubber boot
- Alkaline battery adapter
- Lamp cleaning and Tool kit
- Li-Ion Battery with universal AC/DC adapter and international plug kit, if specified
- Resources CD-ROM and maintenance manual
- Soft leather carrying case

Monitor with Accessories Kit adds:
- Hard transport case with pre-cut foam
- Charging/download cradle (instead of travel charger)
- 5 porous metal filters and O-rings
- Gas outlet port adapter and tubing
- Organic Vapor Zeroing Kit

Optional Calibration Kit adds:
- Calibration gas, 34L, as specified
- Calibration regulator & flow controller

Optional Guaranteed Cost of Ownership
- Available in North America only
- 4-year repair and replacement guarantee
- Annual maintenance service

Standard Sensor Configurations

LAMP	Li-Ion / Universal charger	Accessories Kit	Calibration Kit	Wireless Bluetooth	PART NUMBER	List Price [USD $]
9.8 eV	•				059-D310-000	6,123
9.8 eV	•	•	•		059-D310-200	6,731
9.8 eV	•	•	•	•	059-D311-200	7,091

Service Program Option		List Price [USD $]	
Guaranteed Cost of Ownership	SVC-PTC4-596	1,879	Extends warranty and covers replacement of all parts and sensors for 4 years from date of purchase.

UltraRAE 3000 Monitors (PGM-7360)

Basic Unit		USD $	**5,931**

A		**Lamps**		
1		10.6 eV lamp 1/2″ for Total VOC mode only	USD $	0
2		11.7 eV lamp 1/2″ for Total VOC mode only	USD $	124
3		9.8 eV lamp 1/2″ with 10 RAE-Sep™ Tubes for Benzene	USD $	68
4		9.8 eV lamp 1/2″ with 10 RAE-Sep™ Tubes for Butadiene	USD $	68
	B	**Batteries, Chargers**		
	0	Alkaline only	USD $	0
	1	Rechargeable Li-Ion battery, universal adapter	USD $	124
		C Wireless, Certification		
		0 No Wireless, UL/CUL	USD $	0
		1 Wireless (Bluetooth) data transmission, UL/CUL (2.4 GHz)	USD $	360
		2 Wireless (Mesh) data transmission, UL/CUL (900MHz)	USD $	338
		D Kits		
		0 Monitor only	USD $	0
		1 Accessories and Isobutylene Calibration Kit (with gas and regulator)	USD $	608
		2 Accessories and Benzene Calibration Kit (with gas and regulator)	USD $	608
		3 Accessories Kit (no gas or regulator)	USD $	383

059 - D <u>A</u>   <u>B</u> <u>C</u> - <u>D</u> 0 0

Total

UltraRAE 3000 Part Number Configuration Guide

059	-	**D**	**A**	**B**	**C**	-	**D**	**0**	**0**
UltraRAE 3000		Always D	Lamp	Battery	Wireless		Kit	Always Zero	Always Zero

RAE-Sep tubes can be found in the Tubes and Pumps section of this price guide.

ppbRAE 3000 Model PGM-7340

The rugged ppbRAE 3000 is the most advanced pumped handheld volatile organic compound (VOC) monitor on the market. Its Photoionization Detector's (PID) extended range of 0 ppb to 10,000 ppm makes it an ideal instrument for applications from IAQ to HazMat/Homeland Security and Military.

Monitor only includes:
- ppbRAE 3000 Monitor, Model PGM-7340
- Wireless communication in built, as specified
- Datalogging with ProRAE Studio
- Travel download charger
- RAE UV lamp, as specified
- Flex-I-Probe
- External filter
- Black rubber boot with straps
- Alkaline battery adapter
- Lamp cleaning and Tool kit
- Li-Ion Battery with universal AC/DC adapter and international plug kit, if specified
- Resources CD-ROM and maintenance manual
- Soft leather carrying case
- VOC Zeroing tube (1 box), Tube adapter, Sampling bag

Monitor with Accessories Kit adds:
- Hard transport case with pre-cut foam
- Charging/download cradle (instead of travel charger)
- 5-porous metal filters and O-rings
- Gas outlet port adapter and tubing

Optional Calibration Kit adds:
- 10 ppm isobutylene calibration gas, 34L
- Calibration regulator & flow controller

Optional Guaranteed Cost of Ownership
- Available in North America only
- 4-year repair and replacement guarantee
- Annual maintenance service

LAMP	Li-Ion / Universal charger	Accessories Kit	Calibration Kit	Wireless Bluetooth	PART NUMBER	List Price [USD $]
10.6 eV	•				059-C110-000	7,635
10.6 eV	•	•	•		059-C110-100	8,243
10.6 eV	•	•	•	•	059-C111-100	8,603

Service Program Option		List Price [USD $]	
Guaranteed Cost of Ownership	SVC-PTC4-594	2,250	Extends warranty and covers replacement of all parts and sensors for 4 years from date of purchase.

ppbRAE 3000 Monitors (PGM-7340)

Basic Unit   USD $ **7,511**

			USD $	
A		**Lamps**		
1		10.6 eV lamp 1/2″	USD $	0
3		9.8 eV lamp 1/2″	USD $	68
	B	**Batteries, Chargers**		
	0	Alkaline only	USD $	0
	1	Rechargeable Li-Ion battery, universal adapter	USD $	124
		C **Wireless, Certification**		
		0 No Wireless, UL/CUL	USD $	0
		1 Wireless (Bluetooth) data transmission, UL/CUL (2.4 GHz)	USD $	360
		2 Wireless (Mesh) data transmission, UL/CUL (900MHz)	USD $	338
		D **Kits**		
		0 Monitor only	USD $	0
		1 Accessories and Calibration Kit (with gas and regulator)	USD $	608
		2 Accessories Kit (no gas, with regulator)	USD $	540
		3 Accessories Kit (no gas or regulator)	USD $	383

059 - C A   B C - D 0 0   **Total**

ppbRAE 3000 Part Number Configuration Guide

059	–	C	A	B	C	–	D	0	0
ppbRAE 3000		Always C	Lamp	Battery	Wireless		Kit	Always Zero	Always Zero

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PID Parts and Accessories

Accessories/Sensors for MiniRAE Lite / MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
059-3051-000	Rechargeable Lithium-ion battery (intrinsically safe)	MiniRAE3000 / ppbRAE3000 / UltraRAE3000	259
059-3053-000	Rechargeable Lithium-ion battery (NOT intrinsically safe)	MiniRAE Lite only	236
059-3052-000	Alkaline battery adapter	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	135
500-0114-000	Universal wall charging adapter, 110 VAC to 240 VAC, 12 VDC with international plug kit	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	90
059-2081-001	Slim Rubber Boot (Yellow), UL/CUL	MiniRAE 3000	45
059-3042-001	Rubber Boot with straps (Black), UL/CUL	ppbRAE 3000	45
059-2083-001	Slim Rubber Boot (Red), UL/CUL	UltraRAE 3000	45
059-2082-001	Slim Rubber Boot (Green)	MiniRAE Lite	50
059-3059-000	Desktop Charging Cradle (no cables included - PN: 500-0114-000 required for charge)	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	450
059-3014-000	Travel Charger (no cables included - PN: 500-0114-000 required for charge)	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	315
410-0086-000	PC Communications Cable (USB 2.0, Male A to Male B)	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	37
059-9100-100	Hard Case Kit, MiniRAE Lite, universal accessories with gas and flow regulator	MiniRAE Lite	799
059-9120-100	Hard Case Kit, MiniRAE3000, universal accessories with gas and flow regulator	MiniRAE3000	879
059-9140-100	Hard Case Kit, ppbRAE3000, universal accessories with gas and flow regulator	ppbRAE 3000	879
059-9160-100	Hard Case Kit, UltraRAE3000, universal accessories with gas and flow regulator	UltraRAE 3000	879
059-9100-000	Hard Case Kit, MiniRAE Lite, universal accessories without gas and flow regulator	MiniRAE Lite	540
059-9120-000	Hard Case Kit, MiniRAE3000, universal accessories without gas and flow regulator	MiniRAE3000	540
059-9140-000	Hard Case Kit, ppbRAE3000, universal accessories without gas and flow regulator	ppbRAE 3000	540
059-9160-000	Hard Case Kit, UltraRAE3000, universal accessories without gas and flow regulator	UltraRAE 3000	594
059-3009-000	Hard Case with Custom Foam	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	260
059-3015-000	Tube adapter assembly	UltraRAE3000	124

Lamps (for use ONLY with models listed)

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
023-3010-001	Sensor Detector	MiniRAE3000 / ppbRAE3000 / UltraRAE3000 / MiniRAE Lite	191
050-0020-000	9.8 eV Interchangeable 1/2″ PID lamp	MiniRAE 3000 / ppbRAE3000 / UltraRAE 3000	315
050-0000-004	10.6 eV Interchangeable 1/2″ PID lamp	MiniRAE 3000 / ppbRAE3000 / UltraRAE 3000 / MiniRAE Lite	248
050-0001-000	11.7 eV Interchangeable 1/2″ PID lamp	MiniRAE 3000 / UltraRAE 3000	371

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PID Parts and Accessories (Continued)

Filters and Special Attachments

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
012-3009-000	Gas outlet port adapter with tubing	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	34
025-2000-010	VOC zeroing tube (7-mm O.D.)(box of 10)	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	45
025-3002-000	Adapter for 7-mm O.D. tubes on Flex-I-Probe	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	68
025-3002-100	VOC zeroing kit (adapter & box of 10 VOC zeroing tubes)	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	124
490-0047-005	Porous metal filters (pack of 5)	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	34

Probes and Tubing

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
021-2400-000	6″ Flex-I-Probe w/cap	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	90
021-2500-000	12″ Flex-I-Probe w/cap	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	149
411-0005-000	Teflon® tubing 4 mm O.D. (fits Flex-I- Probe)	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	5
411-0008-000	Teflon® tubing 1/16" ID (1.6 mm)	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	5
411-0025-037	FEP-lined Tygon® tubing 1/4" O.D. x 1/8" I.D.	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	5

Miscellaneous Accessories

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
081-0017-000	Lamp Cleaning Kit (includes methanol cleaning solution)	MiniRAE3000 / ppbRAE3000 / UltraRAE 3000	56
000-5001-000	ProRAE Suite software package for Windows	MiniRAE 3000 / ppbRAE 3000 / UltraRAE 3000 / MiniRAE Lite	45

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ProRAE Guardian

Mobile Command Center For Rapid Threat Response

ProRAE Guardian represents an advanced generation of real-time wireless gas detection software, and serves as a mobile command center for all your threat-detection needs. It allows incident commanders and safety managers to receive instant updates of real-time data anywhere and anytime they need it. ProRAE Guardian software connects, integrates, and relays data from RAE Systems' and select partners' wireless products to remote monitors located anywhere you choose.

Make critical decisions with:

- Real-time display of device status, sensor readings, and alarms
- Intuitive user interface with simultaneous on-screen instrument readings
- Integrated Google Maps show precise instrument locations with alarm status
- Supports all RAE Systems' wireless-enabled products
- Display up to 500 instruments simultaneously
- Remote alarming via email and text messaging
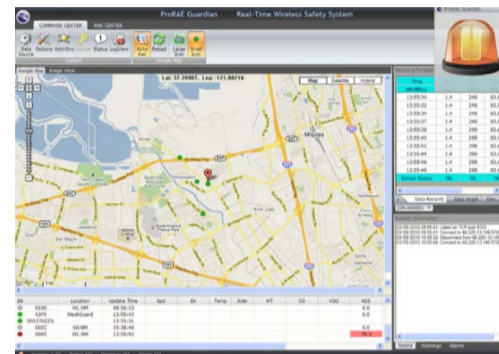
PART NUMBER	DESCRIPTION	List Price [USD $]
S01-A120-200	**ProRAE Guardian CD**	80
S01-A110-200	**ProRAE Guardian CD with Printed Manual**	110

ProRAE Guardian CloudServer

ProRAE Guardian CloudServer service from RAE Systems by Honeywell provides ProRAE Guardian users the ability to aggregate and share instrument data between installations and remote sites simply and easily with no extra hardware or maintenance costs. Your PRG CloudServer is available to all your installations day and night, all the time, world-wide*.

Benefits

- Your own private PRG CloudServer on the public Internet
- Your own static IP address
- Optional security Access Control for controlling unauthorized access
- No hardware to buy and maintain
- Many terms of service to choose from

Requirements

- One or more PRG installations that you want to connect to your PRG CloudServer
- One or more properly licensed PRG-compatible instruments
- Active Internet connection between all PRG installations and your PRG CloudServer
- Ability to open ports for PRG access if necessary
- No hardware to buy and maintain
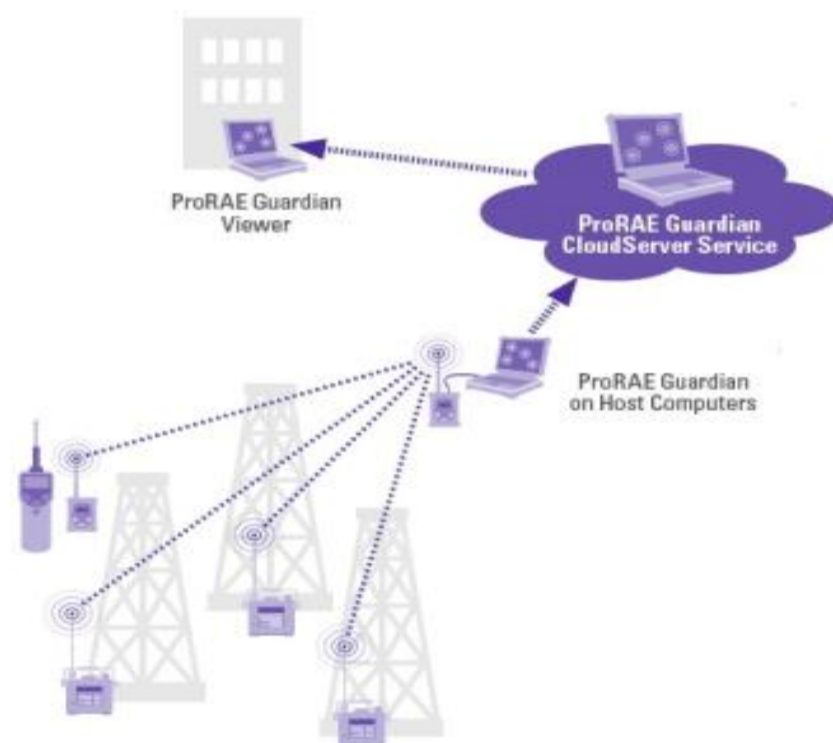
*Please refer to your PRG CloudServer Service Agreement for complete details of the service terms. Please reference the CASE #, Customer ID and SO number on the front of your Certificate of Service when requesting service. Your contract is non-transferable. All contracts are paid in advance for the full term of the agreement. Contracts become effective 15 days after shipment of this notice, or upon first use of the service, whichever comes first

PART NUMBER	DESCRIPTION	List Price [USD $]
S01-0A00-100	**PRG CloudServer Service,** (1 year term)	6,000
S01-0A00-200	**PRG CloudServer Service,** (2 year term)	8,500
S01-0A00-300	**PRG CloudServer Service,** (3 year term)	10,500
S01-0A00-400	**PRG CloudServer Service,** (4 year term)	12,500
S01-0A00-500	**PRG CloudServer Service,** (5 year term)	14,000

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ProRAE Guardian™ Software License

ProRAE Guardian supports concurrent instrument license model, which limits the maximum number of instruments in each Tier that can be monitored at the same time when connected through RAELink family Host modem or RAEMesh Reader. The Tier license is determined as per the table below.

Tier 1	Tier 2	Tier 3
ToxiRAE Pro Family	MultiRAE Lite	MultiRAE Pro
QRAE 3	MultiRAE	MultiRAE Benzene
MicroRAE	MiniRAE 2000	ppbRAE 3000
	MiniRAE 3000	UltraRAE 3000
	GammaRAE II R	AreaRAE Family
	MeshGuard Family	WEATHERPAK
		BioHarness
		RAEGuard 2 PID
		All other 3rd party instruments

* Wireless Infrastructure products do not require a license (e.g. RAELink2, RAELink3).

* Higher tier licenses can view lower tier license instruments (e.g. Tier 3 license can view any of the Tier 1 or Tier 2 instruments).

* No license is required for ProRAE Guardian Viewer or for monitoring instruments connected with remote ProRAE Guardian.

* Each ProRAE Guardian Host connecting with instruments through RAELink family Host modem requires separate licenses.

* ProRAE Guardian requires activation which locks the instrument licenses with the PC or laptop.

* Deactivation of ProRAE Guardian unlocks the licenses. Unlocked licenses can be installed on another machine.

ProRAE Guardian Guaranteed Cost of Ownership ("GCO") entitles customer to receive all ProRAE Guardian software releases during the GCO Term. It offers great savings over purchasing software upgrades, which are 50% of the Total Purchase Price (TPP) paid by customers for the ProRAE Guardian licenses.

* GCO is only for the ProRAE Guardian instrument monitoring licenses. It does not apply to the instruments. Separate GCO must be purchased for the instruments, if needed.

* GCO must be purchased within one year of the purchase of ProRAE Guardian Instrument Monitoring Licenses.

* GCO must be renewed before its Term expires in order to continue receiving the software upgrades.

* Active GCO Term is required to receive the software upgrades.

* GCO is associated with a Product Key and cannot be transferred.

* Prorated GCO must be purchased, when additional licenses are ordered for an existing Product Key (PRG Host) with active GCO Term.

PART NUMBER	DESCRIPTION	List Price [USD $]
S01-3000-000	**ProRAE Guardian License - Tier 3 Concurrent Instruments**	
	Quantity 1-9	1000 x Quantity
	Quantity 10-16	750 x Quantity
	Quantity 17-28	670 x Quantity
	Quantity 29-48	600 x Quantity
	Quantity 49+	500 x Quantity
S01-2000-000	**ProRAE Guardian License - Tier 2 Concurrent Instruments**	
	Quantity 1-24	500 x Quantity
	Quantity 25-49	375 x Quantity
	Quantity 50-99	335 x Quantity
	Quantity 100+	250 x Quantity
S01-1000-000	**ProRAE Guardian License - Tier 1 Concurrent Instruments**	
	Quantity 1-49	250 x Quantity
	Quantity 50-99	188 x Quantity
	Quantity 100-149	168 x Quantity
	Quantity 150+	125 x Quantity
S01-0000-003	**ProRAE Guardian 3 Years GCO**	26% of TPP
S01-0000-004	**ProRAE Guardian 4 Years GCO**	33% of TPP
S01-0000-005	**ProRAE Guardian 5 Years GCO**	39% of TPP
S01-0000-006	**ProRAE Guardian 6 Years GCO**	44% of TPP
S01-0000-007	**ProRAE Guardian 7 Years GCO**	49% of TPP
S01-0000-008	**ProRAE Guardian 8 Years GCO**	53% of TPP
S01-0000-009	**ProRAE Guardian 9 Years GCO**	56% of TPP
S01-0000-010	**ProRAE Guardian 10 Years GCO**	58% of TPP

TPP - Total Purchase Price

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ProRAE Guardian™ Software License

Real-Time Monitoring Subcription Base Model

The Subscription Model provides the end customers the ability to get license keys that are valid for a fixed duration of time or to allow rental houses to get license keys to lease out the software to their end customers for a fixed duration of time. Subscription based licenses cannot be combined with perpetual licenses.

PART NUMBER	DESCRIPTION	List Price [USD $]
	ProRAE Guardian License - Tier 3	
S01-3000-010	ProRAE Guardian Real-time Monitoring Tier 3 Monthly Subscription per Instrument	175
S01-3000-110	ProRAE Guardian Real-time Monitoring Tier 3 Quarterly Subscription per Instrument	394
S01-3000-210	ProRAE Guardian Real-time Monitoring Tier 3 Yearly Subscription per Instrument	840
	ProRAE Guardian License - Tier 2	
S01-2000-010	ProRAE Guardian Real-time Monitoring Tier 2 Monthly Subscription per Instrument	88
S01-2000-110	ProRAE Guardian Real-time Monitoring Tier 2 Quarterly Subscription per Instrument	197
S01-2000-210	ProRAE Guardian Real-time Monitoring Tier 2 Yearly Subscription per Instrument	420
	ProRAE Guardian License - Tier 1	
S01-1000-010	ProRAE Guardian Real-time Monitoring Tier 1 Monthly Subscription per Instrument	44
S01-1000-110	ProRAE Guardian Real-time Monitoring Tier 1 Quarterly Subscription per Instrument	98
S01-1000-210	ProRAE Guardian Real-time Monitoring Tier 1 Yearly Subscription per Instrument	210

Care Center

ProRAE Guardian Care Center is an advanced device management software used to manage fleets of instruments by providing tools to automate several common tasks for improving worker productivity. All Care Center license keys are valid for a fixed duration of time.

PART NUMBER	DESCRIPTION	List Price [USD $]
	ProRAE Guardian Care Center - Tier 3	
S01-3001-010	ProRAE Guardian Care Center Tier 3 Monthly Subscription per Instrument	25
S01-3001-110	ProRAE Guardian Care Center Tier 3 Quarterly Subscription per Instrument	55
S01-3001-210	ProRAE Guardian Care Center Tier 3 Yearly Subscription per Instrument	175
	ProRAE Guardian Care Center - Tier 2	
S01-2001-010	ProRAE Guardian Care Center Tier 2 Monthly Subscription per Instrument	15
S01-2001-110	ProRAE Guardian Care Center Tier 2 Quarterly Subscription per Instrument	35
S01-2001-210	ProRAE Guardian Care Center Tier 2 Yearly Subscription per Instrument	110
	ProRAE Guardian Care Center - Tier 1	
S01-1001-010	ProRAE Guardian Care Center Tier 1 Monthly Subscription per Instrument	5
S01-1001-110	ProRAE Guardian Care Center Tier 1 Quarterly Subscription per Instrument	12
S01-1001-210	ProRAE Guardian Care Center Tier 1 Yearly Subscription per Instrument	40

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ProRAE Guardian™ SDK

ProRAE Guardian helps incident commanders and safety managers improve safety through real-time remote monitoring of wireless gas and radiation-detector networks. ProRAE Guardian™ SDK (Software Development Kit) provides third-party product vendors and systems integrators the ability to integrate real-time data from ProRAE Guardian with external networks such as SCADA (Supervisory Control And Data Acquisition), public warning, and predictive analytics systems.

Benefits

- Easily build custom monitoring and control solutions.
- Broaden capabilities of existing applications and systems by including real-time gas and radiation data.
- Rapid and cost-effective integration.
- Open-platform for future expansion.
- Supports all RAE Systems wirelessly enabled products.

SDK License

- Separately licensed component.
- Perpetual license i.e. no term associated with the license.
- ProRAE Guardian Instrument Monitoring License is a prerequisite.

Ordering

- Requires Product Key for existing ProRAE Guardian Instrument Monitoring License.
- SDK license required for every instrument included in the Product Key.

Pricing

- SDK license price is 50% of the list price for the ProRAE Guardian Instrument Monitoring License.
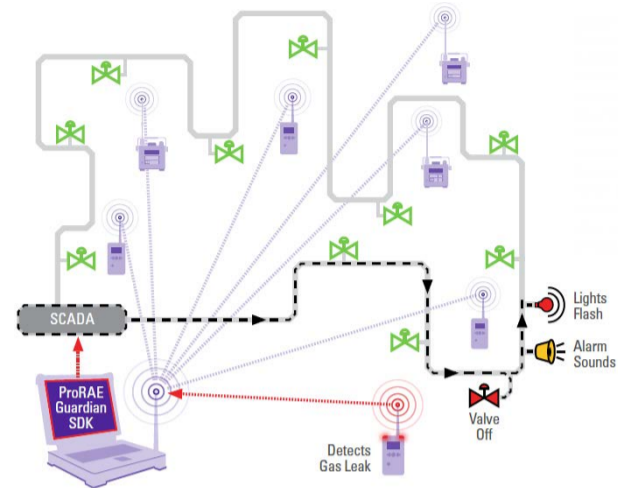
PART NUMBER	DESCRIPTION	List Price [USD $]
S01-0001-000	**ProRAE Guardian SDK License**	50% of LP

LP - List Price for PRG License(s) represented by the Product Key

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RAELink3 Mesh (Model RLM-3001)

RAELink3 Mesh enables RAE Systems personal gas and radiation detectors and select 3rd party monitors to communicate wirelessly with ProRAE Guardian safety monitoring software. The RAELink3 Mesh contains two internal radios, a mesh short-range radio to link to detectors within 333 feet, and a frequency hopping spread spectrum long-range radio to transmit the sensor readings up to 2 miles back to a host controller running ProRAE Guardian.

Kit Includes:
- RAELink3 Mesh modem with GPS
- Charging adapter with AC cable
- Alkaline battery pack
- Coiled RS-232 serial cable for RAE portable products
- RS-232 serial computer interface cable
- RS-232 serial to USB adapter
- Whip antenna
- Magnet mount antenna with 12' cable
- Quick reference guide
- Resource CD
- Hard transport case

Monitors Supported:

Wireless Connection:
- MicroRAE (Mesh version)
- MultiRAE (mesh version)
- MultiRAE Lite Pumped or Diffusion (mesh versions)
- MultiRAE Pro (mesh version)
- MultiRAE Benzene (mesh version)
- ToxiRAE Pro EC (wireless version)
- ToxiRAE Pro LEL (wireless version)
- ToxiRAE Pro PID (wireless version)
- ToxiRAE Pro CO2 (wireless version)
- QRAE 3 (wireless version)

Cabled Connection:
- AP4C [Chemical Warfare]*
- DustTrakII 8530 [Particulates]*

* - 3rd party products require specific communication cables to connect to the RAELink3 Mesh (see below).

PART NUMBER	DESCRIPTION	List Price [USD $]
029-0695-000	**RAELink3 Mesh Modem Kit** Multi-function modem with GPS can operate as a Remote modem with wirelessly-enabled portables, or as a Repeater in a ProRAE Guardian Wireless Safety System to bypass obstacles and extend the range, or as a Host modem to communicate with up to 64 remote devices. Kit includes a RAELink3 Mesh modem with charging adapter and complete accessories for all three modes of operation (902-928MHz).	2,869
029-0505-000	**RAELink3 Kit** Multi-function modem with GPS can operate as a Remote modem with wireless-enabled portables, or as a Repeater in an AreaRAE system to bypass obstacles, or as a Host modem to communicate with up to 64 remote devices. Kit includes a RAELink3 modem with charging cradle and complete accessories for all three modes of operation (902-928MHz).	2,869
029-3503-001	**RAELink3 Mini-Charger** Does not include AC/DC power adapter	113
500-0114-000	**RAELink3 Power Adapter** For use with RAELink3 charging cradle, 100–240VAC,12VDC	90
029-3502-000	**RAELink3 Alkaline Battery Pack** Does not include Alkaline batteries	45
029-3501-000	**RAELink3 Rechargeable Li-Ion Battery Pack**	191
029-3506-000	**RAELink3 Cable Assembly** Coiled serial cable for connection of RAELink3 with RAE portable monitors	74
029-3521-000	**RAELink3 Cable Assembly Kit for DustTrakII** USB to serial adapter to connect DustTrakII to RAELink3, and Quick Start Guide	210
550-7025-000	**RAELink3 Antenna** Swivel antenna (902-928MHz)	65
550-7018-000	**RAELink3 Magnetic Mount Cable Assembly** Magnetic mount base and 12' cable assembly for use with antenna (902-928MHz)	113
029-7100-000	**RAELink3 Antenna for Magnetic Mount** Does not include magnetic base with 12' cable (902-928MHz)	68
029-3507-000	**Cable, Computer Interface, RAELink3**	79
029-7104-TNC	**RAELink3 Remote Antenna with 25' Cable Extension (902-928MHz)**	495
029-7105-TNC	**RAELink3 Remote Antenna with 50' Cable Extension (902-928MHz)**	698

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EchoView Host

EchoView Host Wireless Mini-Controller for Wireless Portable Monitors

The EchoView Host mini-controller is the cornerstone of RAE Systems' Closed-Loop
Wireless Solutions for portable gas monitors. This rugged handheld wireless device
can establish a self-contained, self-sufficient network with up to eight supported
RAE Systems portable wireless monitors (ToxiRAE Pro, MicroRAE, QRAE 3, Handle PID monitors, MultiRAE lite, MultiRAE,
MultiRAE pro and MultiRAE Benzene) and display their readings and alarm status in real time on an easy-to-read screen.

Mesh Routers extend the communications range between the EchoView Host and supported portable gas monitors.

Description	Part Number	List Price [USD $]
EchoView Host Mini-Controller, 900 MHz	F04-A211-100	1,485
Mesh Router, 915 MHz	F04-B211-100	1,485
Replacement Battery for EchoView or Mesh Router, 3.6V	500-0111-000-01	45
Replacement Battery for EchoView or Mesh Router, 3.6V (pack of 5)	500-0111-000-05	169

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AutoRAE 2 Automatic Test and Calibration System

The AutoRAE 2 Automatic Test and Calibration System makes compliance with gas monitor test and calibration requirements as easy as pressing a button. Simply cradle the monitor and the system will take care of all calibration, testing, recharging, and calibration record keeping.

The AutoRAE 2 is a flexible, modular system that can be configured to meet your calibration requirements effectively and efficiently. An AutoRAE 2 system can be as simple as a single cradle deployed in standalone mode to calibrate one instrument at a time using up to 2 different gas cylinders, or as powerful as a controller-based system supporting 10 instruments and 5 gas cylinders.

PART NUMBER	DESCRIPTION	COMPATIBLE INSTRUMENTS	List Price [USD $]
T02-0107-000	**AutoRAE 2 Controller** Includes terminal adapter. No instrument cradles, gas, regulators, or external tubing included	Supports all AutoRAE 2 Cradles	2,081
T02-0103-000	**AutoRAE 2 Cradle for MultiRAE Pumped Models** Contains everything required for deployment in standalone mode or as part of a controller-based system with multiple cradles. No gas, regulators, or external tubing included	MultiRAE Family	1,744
T02-0003-000	**AutoRAE 2 Cradle for ToxiRAE Pro** Contains everything required for deployment in standalone mode or as part of a controller-based system with multiple cradles. No gas, regulators, or external tubing included	ToxiRAE Pro Family	945
T02-0203-000	**AutoRAE 2 Cradle for QRAE 3** Contains everything required for deployment in standalone mode or as part of a controller-based system with multiple cradles. No gas, regulators, or external tubing included	QRAE 3	1,238
T02-0503-000	**AutoRAE 2 Cradle for MicroRAE** Contains everything required for deployment in standalone mode or as part of a controller-based system with multiple cradles. No gas, regulators, or external tubing included	MicroRAE	1,238
T02-0403-000	**AutoRAE 2 Cradle for Handheld PID*** Contains everything required for deployment in standalone mode or as part of a controller based system with multiple cradles. Includes one Flex-I-Probe Quick Connector with each cradle	MiniRAE Lite, MiniRAE 3000, ppbRAE 3000, UltraRAE 3000	1,744
T02-0303-000	**Wi-Fi Module for AutoRAE 2 Controller** Includes Wi-Fi module, power charger, Ethernet cable and in-the-box accessories.	AutoRAE 2 Controller	169
T02-0108-000	**AutoRAE 2 Terminal Adapter**	All	260

AutoRAE 2 Accessories and Replacement Parts

PART NUMBER	Description	List Price [USD $]
410-0086-000	Cable USB 2.0, Male to Male	37
500-0141-000	Power Adapter, AC/DC/90-264V Input, 12VDC/7.5A 90W Output Requires power cord PN: 410-0036-000 (not included)	217
410-0225-000	Ethernet cable	6
008-3022-010	External Filter, Pack of 10	34
T02-3019-000	Side covers kit for stand alone operation (Consists of 2 end caps: 1 for left side - 1 for right side)	37
500-0114-000	Power adaptor, AC/DC 100-240V INPUT,12VDC/1.25A OUTPUT	90
410-0036-000	Power Cord, AC, 125V, 10A, US Plug, 1.8M	37
T02-3020-000	Power Adapter with US power cord	136
411-0008-000	Teflon® tubing 1/16" ID (1.6mm)	5
411-0018-037	Tubing Tygon, 1/8" Diameter inside,Each length: (1/2 inch) 15mm	5
T02-3106-100	2 ToxiRAEPro EC, LEL and CO2 adapters for ToxiRAE Pro cradle (include Product label)	25
T02-3106-000	2 ToxiRAEPro PID adapters for ToxiRAE Pro cradle (include Product label)	23

Ordering Instructions

Single-Cradle Standalone System

- To order an AutoRAE 2 cradle for standalone deployment, please order the AutoRAE 2 Cradle compatible with the unit.

Please note that ToxiRAE Pro Cradle is supplied with adapters in order to be compatible with all ToxiRAE Pro family devices.

Multi-Cradle System with the AutoRAE 2 Controller

- To order an AutoRAE 2 with 2 or more Cradles (the AutoRAE 2 Controller is required in this case), please order the controller (PN: T02-0107-000) PLUS as many individual cradles as specified in the purchase order (MultiRAE2 cradles and ToxiRAE Pro cradles can be mixed on the same system).

The Controller and each Cradle will come in its own individual box.

AutoRAE 2 Controlling Networking

- Networking is enabled for communication to ProRAE Studio 2 (version 1.8.1 or higher) via an Ethernet cable. The Wi-Fi module (T02-0303-000) allows the Controller to connect to ProRAE Studio 2 via a wireless network

* AutoRAE 2 Handheld PID cradle requires a Flex-I-Probe Quick Connector to be installed on each detector.
Each Handheld PID cradle comes with one Quick connector. Additional Quick Connectors must be purchased separately.

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AutoRAE Lite (Model GTS 1000)

AutoRAE Lite Bump Test and Calibration Station

- The AutoRAE Lite is a high-speed and low-operation cost bump test and calibration station with data storage in Excel format.

- The AutoRAE Lite provides the lowest cost of ownership on the market, and can perform up to 700 bump tests on a single set of batteries.

- The AutoRAE Lite software offers the flexibility to meet each customer's unique requirements. The automated bump and calibration station provides data storage as well as the ability to easily re-configure the monitor (or ToxiRAE 3).

AutoRAE Lite includes:

- AutoRAE Lite as specified
- USB cable for PC set-up
- 12-volt power supply
- Demand-flow regulator (male thread)
- SD memory card (minimum 512Mb)
- Quick Start Guide
- Inlet filter
- CD-ROM including
    - Operation Manual
    - Drivers
    - Utility Software

AutoRAE Lite

DESCRIPTION	PART NUMBER	List Price [USD $]
Bump Test and Calibration (ToxiRAE 3 version)	T01-0100-000	1,440

Gas Cylinders and Accessories

DESCRIPTION	PART NUMBER	List Price [USD $]
116 liters gas cylinder, 50 ppm CO	610-1000-000	175
34 liters gas cylinder, 50 ppm CO	610-0052-000	75
58 liters gas cylinder 25 ppm H_2S	610-0138-000	175

Green Calibration Gas Cylinders

Green cylinder technology not only saves the environment, it also saves time and money.

• Gas cylinder size options 34, 58 and 116 liter
• Green Refillable cylinder
• "Strip and Ship" program for easy return of empty cylinders
• Small cylinder footprint
• Cylinder technology offers exceptional gas stability
• All gas cylinders use the same valve

Note: Due to new product offering demands expect a one to two week delivery time on Green gas cylinders

4-Gas Mix

PART NUMBER	DESCRIPTION	CYLINDER SIZE	REGULATOR TYPE	WARRANTY	SHELF LIFE	List Price [USD $]
610-0050-007	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	34L	C-10	24 mo.	24 mo.	180
610-0050-070	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	58L	C-10	24 mo.	24 mo.	250
610-0004-000	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	116L	C-10	24 mo.	24 mo.	420
610-0050-004	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	34L	C-10	24 mo.	24 mo.	180
610-0050-003	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	58L	C-10	24 mo.	24 mo.	250
610-0050-001	Four-Gas Calibration Mix, CO 50 PPM/H2S 25 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	34L	C-10	24 mo.	24 mo.	180
610-0050-000	Four-Gas Calibration Mix, CO 50 PPM/H2S 25 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	58L	C-10	24 mo.	24 mo.	250
610-0050-008	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.2% VOL)/O2 20.9%,BALANCE N2	34L	C-10	24 mo.	24 mo.	180
610-0050-080	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.2% VOL)/O2 20.9%,BALANCEN2	58L	C-10	24 mo.	24 mo.	250
610-0031-000	Four-Gas Calibration Mix, CO 50 PPM/H2S 10 PPM/CH4 50% LEL (2.5% VOL)/O2 15%,BALANCE N2	58L	C-10	24 mo.	24 mo.	250
610-1089-000	Four-Gas Calibration Mix, CO 50 PPM/CO2 50000 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	34L	C-10	36 mo.	60 mo.	180
610-0028-000	Four-Gas Calibration Mix, CO 50 PPM/HCN 10 PPM/CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	58L	C-10	12 mo.	12 mo.	355
610-0027-000	Four-Gas Calibration Mix, CO 50 PPM/HCN 10 PPM/CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	116L	C-10	12 mo.	12 mo.	425
610-0050-002	Four-Gas Calibration Mix, CO 50 PPM/SO2 5 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	58L	C-10	12 mo.	12 mo.	Call

3-Gas Mix

PART NUMBER	DESCRIPTION	CYLINDER SIZE	REGULATOR TYPE	WARRANTY	SHELF LIFE	List Price [USD $]
610-0022-000	Three-Gas Calibration Mix, CO 50 PPM/CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	34L	C-10	36 mo.	60 mo.	75
610-0114-000	Three-Gas Calibration Mix, CO 50 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	116L	C-10	36 mo.	60 mo.	225
610-0017-000	Three-Gas Calibration Mix, CO 50 PPM/CH4 50% LEL (2.5% VOL)/O2 20.9%,BALANCE N2	34L	C-10	36 mo.	60 mo.	75

2-Gas Mix

PART NUMBER	DESCRIPTION	CYLINDER SIZE	REGULATOR TYPE	WARRANTY	SHELF LIFE	List Price [USD $]
610-0023-000	Two-Gas Calibration Mix, CH4 50% LEL (2.5% VOL)/O2 18%,BALANCE N2	34L	C-10	36 mo.	60 mo.	75
610-0030-000	Two-Gas Calibration Mix, CO 50 PPM/HCN 10 PPM,BALANCE AIR	58L	C-10	12 mo.	12 mo.	250
610-0029-000	Two-Gas Calibration Mix, CO 50 PPM/HCN 10 PPM,BALANCE AIR	116L	C-10	12 mo.	12 mo.	350

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Green Calibration Gas Cylinders

Single-Gas Mix

PART NUMBER	DESCRIPTION	CYLINDER SIZE	REGULATOR TYPE	WARRANTY	SHELF LIFE	List Price [USD $]
610-0002-000	AIR,ZERO GRADE	34L	C-10	36 mo.	60 mo.	75
610-0058-100	AMMONIA,50 PPM,BALANCE N2	34L	C-10	24 mo.	24 mo.	260
610-0058-000	AMMONIA,50 PPM,BALANCE N2	58L	C-10	24 mo.	24 mo.	320
610-0013-000	AMMONIA,50 PPM,BALANCE N2	116L	C-10	24 mo.	24 mo.	430
610-1085-000	BENZENE,5 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	80
610-0019-000	CARBON DIOXIDE,5000 PPM,BALANCE N2	34L	C-10	36 mo.	60 mo.	75
610-0052-000	CARBON MONOXIDE,50 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-1000-000	CARBON MONOXIDE,50 PPM,BALANCE AIR	116L	C-10	36 mo.	60 mo.	175
610-0020-000	CARBON MONOXIDE,100 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0021-000	CARBON MONOXIDE,250 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-1066-000	CHLORINE,2 PPM,BALANCE N2	34L	C-10	12 mo.	12 mo.	260
610-0010-000	CHLORINE,2 PPM,BALANCE N2	58L	C-10	12 mo.	12 mo.	320
610-0009-000	CHLORINE,2 PPM,BALANCE N2	116L	C-10	12 mo.	12 mo.	430
610-1055-000	CHLORINE,5 PPM,BALANCE N2	58L	C-10	12 mo.	12 mo.	320
610-0056-100	CHLORINE,10 PPM,BALANCE N2	34L	C-10	12 mo.	12 mo.	260
610-0056-000	CHLORINE,10 PPM,BALANCE N2	58L	C-10	12 mo.	12 mo.	320
610-0011-000	CHLORINE,10 PPM,BALANCE N2	116L	C-10	12 mo.	12 mo.	430
610-0068-000	ETHYLENE OXIDE,10 PPM,BALANCE N2	58L	C-10	12 mo.	12 mo.	275
610-1077-000	HYDROGEN,200 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-1558-100	HYDROGEN CHLORIDE,10 PPM,BALANCE N2	58L	C-10	12 mo.	12 mo.	320
610-0024-000	HYDROGEN CHLORIDE,10 PPM,BALANCE N2	116L	C-10	12 mo.	12 mo.	430
610-0057-100	HYDROGEN CYANIDE,10 PPM,BALANCE N2	34L	C-10	18 mo.	18 mo.	260
610-0057-000	HYDROGEN CYANIDE,10 PPM,BALANCE N2	58L	C-10	18 mo.	18 mo.	320
610-0012-000	HYDROGEN CYANIDE,10 PPM,BALANCE N2	116L	C-10	18 mo.	18 mo.	430
610-0051-100	HYDROGEN SULFIDE,10 PPM,BALANCE N2	34L	C-10	24 mo.	24 mo.	110
610-0051-000	HYDROGEN SULFIDE,10 PPM,BALANCE N2	58L	C-10	24 mo.	24 mo.	175
610-0005-000	HYDROGEN SULFIDE,10 PPM,BALANCE N2	116L	C-10	24 mo.	24 mo.	250
610-0138-000	HYDROGEN SULFIDE,25 PPM,BALANCE AIR	58L	C-10	24 mo.	24 mo.	175
610-0018-000	HYDROGEN SULFIDE,25 PPM,BALANCE AIR	116L	C-10	24 mo.	24 mo.	250
610-1086-000	ISOBUTYLENE,10 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0413-100	ISOBUTYLENE,10 PPM,BALANCE AIR	116L	C-10	36 mo.	60 mo.	150
610-1082-000	ISOBUTYLENE,100 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0001-000	ISOBUTYLENE,100 PPM,BALANCE AIR	116L	C-10	36 mo.	60 mo.	225
610-0003-000	ISOBUTYLENE,1000 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-1088-000	METHANE (CH4),20% LEL (1.0% VOL),BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0071-030	METHANE (CH4),20% LEL (1.0% VOL),BALANCE AIR	116L	C-10	36 mo.	60 mo.	225
610-1087-000	METHANE (CH4),50% LEL (2.5% VOL),BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0054-100	NITRIC OXIDE,25 PPM,BALANCE N2	34L	C-10	12 mo.	12 mo.	260
610-0054-000	NITRIC OXIDE,25 PPM,BALANCE N2	58L	C-10	12 mo.	12 mo.	320
610-0007-000	NITRIC OXIDE,25 PPM,BALANCE N2	116L	C-10	12 mo.	12 mo.	430
610-1112-000	NITROGEN,100%	34L	C-10	36 mo.	60 mo.	75
610-0055-100	NITROGEN DIOXIDE,5 PPM,BALANCE AIR	34L	C-10	6 mo.	6 mo.	260
610-0055-000	NITROGEN DIOXIDE,5 PPM,BALANCE AIR	58L	C-10	6 mo.	6 mo.	320
610-0008-000	NITROGEN DIOXIDE,5 PPM,BALANCE AIR	116L	C-10	6 mo.	6 mo.	430
610-0016-000	PENTANE,25% LEL (0.35% VOL),BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0059-000	PHOSPHINE,5 PPM,BALANCE N2	58L	C-10	18 mo.	18 mo.	350
610-0014-000	PHOSPHINE,5 PPM,BALANCE N2	116L	C-10	18 mo.	18 mo.	520
610-0015-000	PROPANE,100 PPM,BALANCE AIR	34L	C-10	36 mo.	60 mo.	75
610-0053-100	SULFUR DIOXIDE,5 PPM,BALANCE N2	34L	C-10	24 mo.	24 mo.	125
610-0053-000	SULFUR DIOXIDE,5 PPM,BALANCE N2	58L	C-10	24 mo.	24 mo.	180
610-0006-000	SULFUR DIOXIDE,5 PPM,BALANCE N2	116L	C-10	24 mo.	24 mo.	275

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Calibration Gas and Regulator

Calibration Gas and Regulator

Standard single-gas and multi-gas mixtures for monitor calibration

• Sizes range from 11 liters to 103 liters
• Convenient multi-gas mixtures
• Choose between demand-flow and constant-flow regulators

Calibration Gas Cylinders

PART NUMBER	DESCRIPTION	REGULATOR TYPE	SHELF LIFE	List Price [USD $]
600-0058-000	Ammonia, 50 ppm (balance nitrogen), 58L alum cylinder	C-10	9-12 mos	320
600-0063-000	Benzene, 5 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	210
600-0088-000	Butadiene, 5 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	140
600-0139-000	Carbon dioxide (CO_2) 34L steel cylinder (5000 ppm CO_2, bal. N_2)	CGA-600	16-24 mos	80
600-0052-000	Carbon Monoxide, 50 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0168-000	Carbon Monoxide, 100 ppm		16-24 mos	80
600-0056-000	Chlorine, 10 ppm (balance nitrogen), 58L alum cylinder	C-10	5-8 mos	320
600-0024-000	Dry Air, 0 ppm, 34L steel cylinder	CGA-600	16-24 mos	80
600-0050-007	Four-Gas Calibration Mix ,34L Aluminum Cylinder (50%LEL / 2.5% VOL CH_4,18% O_2,10 PPM H_2S, 50 PPM CO, BAL N_2)	C-10	9-12 mos	260
600-0050-070	Four-Gas Calibration Mix ,58L Aluminum Cylinder (50%LEL / 2.5% VOL CH_4,18% O_2,10 PPM H_2S, 50 PPM CO, BAL N_2)	C-10	9-12 mos	360
600-0050-008	Four-Gas Calibration Mix ,34L Aluminum Cylinder (50%LEL / 2.2% VOL CH_4, 20.9% O_2, 10 PPM H_2S, 50 PPM CO, BAL N_2)	C-10	9-12 mos	260
600-0050-080	Four-Gas Calibration Mix ,58L Aluminum Cylinder (50%LEL / 2.2% VOL CH_4, 20.9% O_2, 10 PPM H_2S, 50 PPM CO, BAL N_2)	C-10	9-12 mos	360
600-0050-002	Four-Gas Calibration Mix with SO_2, 58L aluminum cylinder (50% LEL CH_4, 20.9% O_2, 5 ppm SO_2, 50 ppm CO, bal. N_2)	C-10	9-12 mos	360
600-0050-001	Four-Gas Calibration Mix, 34L aluminum cylinder (50% LEL CH_4, 20.9% O_2, 25 ppm H_2S, 50 ppm CO, bal. N_2)	C-10	9-12 mos	260
600-0129-000	Four-Gas Calibration Mix, 34L steel cylinder (50% LEL CH_4, 20.9% O_2, 50 ppm CO, 5000 ppm CO_2, bal. N_2)	CGA-600	16-24 mos	110
600-0050-000	Four-Gas Calibration Mix, 58L aluminum cylinder (50% LEL CH_4, 20.9% O_2, 25 ppm H_2S, 50 ppm CO, bal. N_2)	C-10	9-12 mos	360
600-1002-000	Hydrogen (H_2), 200 ppm, 34L cylinder			80
600-0057-000	Hydrogen Cyanide, 10 ppm (balance nitrogen), 58L alum cylinder	C-10	9-12 mos	320
600-0051-000	Hydrogen Sulfide, 10 ppm (balance nitrogen), 58L alum. cylinder	C-10	9-12 mos	220
600-0159-000	H_2S Quick Check gas cylinder, 11L cylinder with built-in trigger for gas release and balloon reservoir (12-month shelf life) (Bump gas contains greater than 25 ppm balance nitrogen)			90
600-0138-000	Hydrogen Sulfide, 25 ppm (for bump testing), 58 L	C-10	9-12 mos	275
600-0069-000	Isobutylene, 10 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0002-000	Isobutylene, 100 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0002-001	Isobutylene, 100 ppm, 103L steel cylinder	C-10	16-24 mos	240
600-0026-000	Isobutylene, 1000 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0027-000	Isobutylene, 2000 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0001-000	Isobutylene, 50 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0083-000	LEL Hexane, 20% (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0071-020	LEL Methane, 20% (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0071-000	LEL Methane, 50% (balance air), 34L steel liter cylinder	CGA-600	16-24 mos	80
600-0070-000	LEL Pentane, 25% (balance air), 34L steel cylinder	CGA-600	16-24 mos	90
600-0071-030	Methane, 20 VOL% (balance N_2), 103L steel cylinder (requires 58L regulator)	C-10	16-24 mos	240
600-0137-000	Methane, 20 VOL% (balance N_2), 34L steel cylinder	CGA-600	16-24 mos	80

Calibration Gas Cylinders (Continued)

PART NUMBER	DESCRIPTION	REGULATOR TYPE	SHELF LIFE	List Price [USD $]
600-0054-000	Nitric Oxide, 25 ppm (balance nitrogen), 58L alum cylinder	C-10	9-12 mos	320
600-0055-000	Nitrogen Dioxide, 5 ppm (balance air), 58L alum cylinder	C-10	4-6 mos	320
600-0062-000	Nitrogen, 100%, 34L steel cylinder	CGA-600	16-24 mos	80
600-0061-001	Oxygen, 19% (balance nitrogen), 34L steel cylinder	CGA-600	16-24 mos	80
600-0061-000	Oxygen, 20.9% (balance nitrogen), 34L steel cylinder	CGA-600	16-24 mos	80
600-0059-000	Phosphine, 5 ppm (balance nitrogen), 58L cylinder	C-10	4-6 mos	320
600-0066-000	Propane, 100 ppm (balance air), 34L steel cylinder	CGA-600	16-24 mos	80
600-0053-000	Sulfur Dioxide, 5 ppm (balance nitrogen), 58L alum cylinder	C-10	9-12 mos	220
600-0114-000	Three-Gas Calibration Mix, 103L steel cylinder (50% LEL CH_4, 50 ppm CO, 20.9% O_2, balance N_2)	C-10	16-24 mos	250
600-0093-000	Three-Gas Calibration Mix, 34L aluminum cylinder (50% LEL CH_4, 10 ppm H_2S, 20.9% O_2, bal. N_2)	C-10	9-12 mos	250
600-0136-000	Three-Gas Calibration Mix, 34L steel cylinder (50% LEL CH_4, 50 ppm CO, 20.9% O_2, balance N_2)	CGA-600	16-24 mos	140

Constant-Flow Regulators And Adapters

PART NUMBER	DESCRIPTION	List Price [USD $]
002-3011-000	Constant-flow regulator, 0.5 liter/min (CGA-600 Female-threaded regulator: for use with 34L steel cylinders only)	203
007-3021-000	Constant-flow regulator, 1 liter/min (C-10 Male-threaded regulator: for use with 34L aluminum cylinders and all 58L and 103L cylinders)	293
012-3011-000	Constant-flow regulator, 3 liter/min kit includes Sampling® calibration gas bag (Female-threaded regulator: for use with 34L steel cylinders only)	161

Demand-Flow Regulators & Adapters

PART NUMBER	DESCRIPTION	List Price [USD $]
002-3051-000	Demand-flow regulator for pumped instruments (CGA-600 Female-threaded regulator: for use with 34L steel cylinders only) (not for use with HCN or Cl2)	473
490-0191-000	Demand-flow regulator for pumped instruments CL2 and HCL compatible (C-10 Male-threaded regulator: for use with 34L aluminum cylinders and all 58L and 103L cylinders)	520
008-3052-000	Demand-flow regulator for pumped instruments (C-10 Male-threaded regulator: for use with 34L aluminum cylinders and all 103L cylinders)	473

Calibration Accessories

PART NUMBER	DESCRIPTION	Use With...	List Price [USD $]
500-0034-000	Calibration kit case (no gas or regulator) holds two 34L, 58L or 103L cylinders of calibration gas		113
025-3002-100	VOC zeroing kit (adapter & box of 10 VOC zeroing tubes)	3G PID Series	124
025-3002-000	Adapter for 7-mm O.D. tubes on Flex-I-Probe	3G PID Series	68
025-2000-010	VOC zeroing tube, single use, pack of 10	3G PID Series	45
500-0003-000	Sampling® gas bag - 3 liter	All	56
002-2044-005	Tygon® to Teflon® Fitting (pack of 5)	All	34
411-0003-041	Tygon® tubing (connects to Sampling® bag)	All, except PIDs	6
411-0008-000	Teflon® tubing 1/16" ID (1.6 mm)	All	5
411-0018-037	Tygon® tubing 1/8" ID (3 mm)	All, except PIDs	5

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Calibration Kits

Calibration kits do not include a carrying case unless noted in the kit description

PART NUMBER	DESCRIPTION	List Price [USD $]
600-0060-000	**Four-Gas Mix, 11L** Gas, 4-gas mix / CO 50ppm / H2S 25ppm / LEL 50% / O2 20.9%, Balance N2, 11L, aerosol, with built-in trigger for gas release and reservoir (3-month shelf life)	90
002-3025-000	**Isobutylene, 34L Cylinder, Cal Gas and Regulator Kit, includes:** Isobutylene Calibration Gas, 100 ppm, 34L cylinder; constant-flow CGA-600 regulator with adapter	250
007-3111-000	**Hydrogen Sulfide (H$_2$S), 58L Cylinder, Cal Gas and Regulator Kit, includes:** • Hydrogen sulfide, 10 ppm (balance nitrogen), 58L cylinder • Constant-flow regulator with adapter C-10 regulator	460
600-0159-000	**BadgeRAE PGM-1020 H$_2$S Quick Check gas cylinder, 11L cylinder with built-in trigger** for gas release and balloon reservoir (12-month shelf life) (Bump gas contains greater than 25 ppm balance nitrogen)	90
007-3112-000	**Carbon Monoxide (CO), 34L Cylinder, Cal Gas and Regulator Kit, includes:** • Carbon monoxide, 50 ppm (balance air), 34L cylinder; Constant-flow CGA-600 regulator with adapter	250
600-0052-001	**Carbon Monoxide (CO), 11L Quick-response (Bump Test) Kit, includes:** • Carbon monoxide, 50 ppm (balance air), 11L cylinder with built-in trigger for gas release and balloon reservoir	90
007-3113-000	**Sulfur Dioxide (SO$_2$), 58L Cylinder, Cal Gas and Regulator Kit, includes:** • Sulfur dioxide, 5 ppm (balance nitrogen), 58L cylinder; Constant-flow regulator with adapter C-10 regulator	460
007-3114-000	**Nitric oxide (NO), 58L Cylinder, Cal Gas and Regulator Kit , includes:** • Nitric Oxide, 25 ppm (balance nitrogen), 58L cylinder; Constant-flow regulator with adapter C-10 regulator	560
007-3115-000	**Nitrogen Dioxide (NO$_2$), 58L Cylinder, Cal Gas and Regulator Kit , includes:** • Nitrogen dioxide, 5 ppm (balance air), 58L cylinder; Constant-flow regulator with adapter C-10 regulator	560
007-3116-000	**Chlorine (Cl$_2$), 58L Cylinder, Cal Gas and Regulator Kit, includes:** • Chlorine, 10 ppm (balance nitrogen), 58L cylinder; Constant-flow regulator with adapter C-10 regulator	560
007-3171-000	**Methane (LEL), 34L Cylinder, Cal Gas and Regulator Kit, includes:** • Methane, 50% LEL (balance air), 34L cylinder • Constant-flow CGA-600 regulator with adapter	250
007-3162-000	**Nitrogen (N$_2$), 34L Cylinder, Cal Gas and Regulator Kit, includes:** • Nitrogen, 100%, 34L cylinder • Constant-flow CGA-600 regulator with adapter	250
012-3002-000	**UltraRAE Benzene, 34L Cylinder, Cal Gas and Demand Flow Regulator Kit, includes:** • Benzene, 5 ppm (balance air), 34L cylinder • Demand-flow CGA-600 regulator with adapter	580

Service Parts for End of Life Products

This section contains parts and accessories for products which have been discontinued. These replacement parts will be available until the end of support date, as noted in the section for each product.

Sensors and Lamps

PART NUMBER	DESCRIPTION	End of Support Date	Use With...	List Price [USD $]
032-0200-000	CO Carbon Monoxide Sensor	12/31/2018	QRAE II	191
014-0212-000	LEL Combustible gas sensor	12/31/2018	QRAE II	191
032-0202-000	Hydrogen Sulfide sensor 0,1-100 ppm	12/31/2018	QRAE II	191
022-0300-000	Oxygen SPE sensor	12/31/2018	QRAE II	203
046-3012-005	Dummy sensor (4R; e.g. QRAE II SPE Oxygen sensor) (Pack of 5)	12/31/2018	QRAE II	37
046-3013-005	Dummy sensor (3R; e.g. QRAE II LEL, H2S, and CO sensors) (Pack of 5)	12/31/2018	QRAE II	37

Batteries

PART NUMBER	DESCRIPTION	End of Support Date	Use With...	List Price [USD $]
020-3461-000	Charging/download Station for QRAE II (with charger & cable)	12/31/2018	QRAE II	248
020-3461-005	Multi-unit charger (5 QRAE II cradles)	12/31/2018	QRAE II	473
020-3402-000	Re-chargeable Lithium-ion battery	12/31/2018	QRAE II	203
020-3403-000	Alkaline battery adapter	12/31/2018	QRAE II	34

Accessories

PART NUMBER	DESCRIPTION	End of Support Date	Use With...	List Price [USD $]
008-3022-010	External 25 mm filters (pack of 10) (without adapter)	12/31/2018	QRAE II	34
020-3412-000	Calibration / Flow through Adapter	12/31/2018	QRAE II	56
029-3003-000	Computer interface cable 9 pin male to female	12/31/2018	QRAE II	56
410-0210-000	Cable adapter (USB to serial)	12/31/2018	QRAE II	155
020-0040-010	CSK1 (does not include monitor)	12/31/2018	QRAE II	248
020-0040-020	CSK2 (does not include monitor)	12/31/2018	QRAE II	743
020-2419-005	Dust Filter (pack of 5) for diffusion model	12/31/2018	QRAE II	34
G01-2003-025	Dust Filter (pack of 25) for pumped model (SN>181-138374)	12/31/2018	QRAE II	34
G01-2004-025	Dust Filter (pack of 25) for pumped model (SN<181-138374)	12/31/2018	QRAE II	37
020-3604-002-FRU	Gas plate (pack of 2) for pumped version (SN>181-138374)	12/31/2018	QRAE II	45
020-3411-002-FRU	Gas plate (pack of 2) for diffusion version	12/31/2018	QRAE II	34
020-2476-000	Protective leather case with strap for QRAE II	12/31/2018	QRAE II	56
000-0020-000	CD, QRAE II	12/31/2018	QRAE II	34
500-0036-100	Universal wall charging adapter, 110 VAC to 240 VAC, 12 VDC, with international plug kit	12/31/2018	QRAE II	68

Guaranteed Cost of Ownership Plan

Guaranteed Cost of Ownership (GCO) plans are designed to lower the total cost of operating a gas detection instrument for a fixed period of time. More than just extending the warranty to cover repair costs, GCOs deliver the annual maintenance services that a gas detection instrument requires over the course of its service life. GCO plans offer great value, providing part and services at a lower cost than if purchased separately.

For owners of the following RAE Systems instruments:

• MiniRAE 3000	• MultiRAE Lite
• UltraRAE 3000	• MultiRAE
• ppbRAE 3000	• MultiRAE Pro
• MicroRAE	• MultiRAE Benzene
• QRAE 3	

In the United States and Canada, Guaranteed Cost of Ownership covers the annual maintenance, repair, and replacement cost of all elements in a RAE Systems gas detection instrument for four years from the instrument's date of original purchase.

Coverage includes:

4-Year Repair and Replacement Guarantee

• Pump and Battery	• Gas Plate and Probe
• All Sensors	• Lamp and Housing
• Housing and Membrane Panel	• Modem
• Printed Circuit Boards	• Service includes all labor charges and return shipping via UPS ground

Annual Maintenance Service includes:

• Factory Testing

• Calibration, Cleaning, and Filter Replacement

• Lamp Replacement (as required and applicable)

• Sensor Replacement (as required)

• Pump Service or Replacement (as required)

	Product	GCO Price	Part Number
Multi-Gas	MultiRAE Lite	35 % of the monitor-only list price	SVC-PTC4-MA0
	MultiRAE		SVC-PTC4-MB0
	MultiRAE Pro		SVC-PTC4-MC0
	MultiRAE Benzene		
	MicroRAE	348	SVC-PTC4-M03
	QRAE 3	432	SVC-PTC4-M02
PID	MiniRAE 3000	1,609	SVC-PTC4-592
	ppbRAE 3000	2,250	SVC-PTC4-594
	UltraRAE 3000	1,879	SVC-PTC4-596

Restrictions

• GCO must be purchased within one year of the covered product's original date of purchase

• Valid only to the product's original owner

• GCO only covers the sensors and components in the product's original configuration, as shipped

• GCO does not cover:

   – Water and chemical damage

   – Improper use or care of the product

   – Any product that is used for rental or demonstration purposes

   – Products owned by a RAE Systems Distributor or Representative

   – Laptop computer in RDK

   – 11.7 eV lamp

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RAE Systems by Honeywell Standard Limited Warranty

RAE Systems by Honeywell warrants products manufactured and sold by RAE Systems to be free from defects in materials and workmanship for the periods listed in the tables on the following pages. This warranty is expressly limited to the original owner who purchases the equipment directly from RAE Systems or from an authorized RAE Systems Distributor.

To maintain this limited warranty, the product must be operated, calibrated, and maintained in accordance with the Operation and Maintenance Manual supplied with the product. Abuse, mechanical damage, alteration, or repairs not made in accordance with the Operation and Maintenance Manual void the RAE Systems Standard Limited Warranty.

The obligation of RAE Systems under this limited warranty is limited to the repair or replacement of components deemed by the RAE Systems Service Department to have been defective under the scope of this Standard Limited Warranty. To receive consideration for warranty repair or replacement, the product must be returned to RAE Systems in San Jose, California, USA, with transportation and shipping charges prepaid. It is necessary to obtain a return authorization number (RMA) from RAE Systems prior to shipment.

This limited warranty is expressly in lieu of any and all representations, express or implied, including but not limited to the warranty of fitness for a particular purpose. RAE Systems will not be liable for loss or damage of any kind connected to the use of its products or failure of its products to function or operate properly.

RAE Systems Standard Limited Warranty covers the instrument and its critical components as follows:

Instruments, Product Electronics, Switch Panels, Enclosures, Displays	Warranty Period
MultiRAE Family	Two years from date of original purchase
ToxiRAE Pro Family	Two years from date of original purchase
QRAE 3	Two years from date of original purchase
MicroRAE	Two years from date of original purchase
MiniRAE 3000, MiniRAE Lite, ppbRAE 3000, UltraRAE 3000: electronic printed circuit boards, switch panels, displays, and enclosures	One year from the date of original purchase

[1] - RAE Systems Limited Lifetime Warranty covers specific parts only. It does not include labor charges to replace the covered component. An instrument that has a failure of a covered component often requires other services. RAE Systems will replace covered components at no additional charge if the work is performed as part of One Price Repair. Otherwise RAE Systems will charge a flat fee of $175 to replace the component covered by the Lifetime Limited Warranty.

Instrument Components	Warranty Period
Battery packs, sampling pumps, and other components (either installed in an instrument or purchased separately), which by their design are consumed or depleted during normal operation, or which may require periodic replacement	One year from the date of original purchase

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RAE Systems by Honeywell Standard Limited Warranty (continued)

Sensors and Lamps	Warranty Period
O_2, LEL, H_2S, and CO sensors	2 Years (see below) 3 Years (see below)*
All other electrochemical toxic gas sensors	1 Year (see below)
10.6eV photoionization detector lamps for MiniRAE 2000 and 3000, ppbRAE 3000	3 Years
10.6eV photoionization detector lamps for MultiRAE, ToxiRAE Pro, ppbRAE Plus, and RAEGuard PID	1 Year
9.8eV photoionization detector lamps	6 Months
11.7eV photoionization detector lamps	30 Days

Oxygen (O_2), combustible gas (LEL) and electrochemical sensors are normally consumed during their service life. RAE Systems will replace defective sensors under the following terms:

- Sensors with two-year warranties (O_2, LEL, H_2S, CO) that fail in their first year of service will be replaced with a sensor having a remaining warranty at least equal to that of the replaced sensor, up to a maximum of two years, at the option of RAE Systems.

- Sensors with two-year warranties (O_2, LEL, H_2S, CO) that fail in their second year of service will be replaced with a sensor having a remaining warranty at least equal to that of the replaced sensor, up to a maximum of one year, at the option of RAE Systems.

- Sensors with one-year warranties (all other electro-chemical sensors) that fail will be replaced with a sensor having a remaining warranty at least equal to that of the replaced sensor, up to a maximum of one year, at the option of RAE Systems.

Damage to combustible (LEL) sensors incurred by exposure to known sensor poisons (such as silicones, tetra-ethyl-lead, and/or other substances as noted in the operator's manual) may (at the unilateral discretion of the RAE Systems Service Department) void this warranty as it applies to the replacement of combustible sensors.

QRAE 3 sensors (sensor shipped with product). RAE Systems will replace defective sensors under the following terms:

- Sensors with three year warranties (O2, LEL, H2S, CO) that fail in their first year of service will be replaced with a sensor having a remaining warranty at least equal to that of the replaced sensor, up to a maximum of three years, at the option of RAE Systems.

- Sensors with three year warranties (O2, LEL, H2S, CO) that fail in their second year of service will be replaced with a sensor having a remaining warranty at least equal to that of the replaced sensor, up to a maximum of two years, at the option of RAE Systems.

- Sensors with three year warranties (O2, LEL, H2S, CO) that fail in their third year of service will be replaced with a sensor having a remaining warranty at least equal to that of the replaced sensor, up to a maximum of one year, at the option of RAE Systems.

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Warranty Matrix

Warranty is from date of sale. Any major component not specifically identified below is covered under the Standard Limited Warranty for the instrument.

| | Model | Product | Instrument[1] | Components[2] | PID Lamps | | | Sensors | |
					9.8 eV	10.6 eV	11.7 eV	O$_2$, LEL, H$_2$S, CO	All others
Single-Gas	PGM-18xx	ToxiRAE Pro	2 Yrs	1 Yr	6 Mos	1 Yr	NA	2 Yrs	1 Yr
	PGM-1700	ToxiRAE 3	2 Yrs	NA	NA	NA	NA	2 Yrs	NA
Multi- Gas	PGM-62x8	MultiRAE Family	2 Yrs	1 Yr	6 Mos	1 Yr	NA	2 Yrs	1 Yr
	PGM-26xx	MicroRAE	2 Yrs	2 Yrs	NA	NA	NA	2 Yrs	1 Yr
	PGM-25xx	QRAE 3	2 Yrs	2 Yr	NA	NA	NA	3 Yrs[3]	1 Yr
PID	PGM-7300	MiniRAE Lite	1 Yr	1 Yr	NA	3 Yrs	NA	NA	NA
	PGM-7320	MiniRAE 3000	1Yr	1 Yr	6 Mos	3 Yrs	1 Mo	NA	NA
	PGM-7360	UltraRAE 3000	1Yr	1 Yr	6 Mos	3 Yrs	1 Mo	NA	NA
	PGM-7340	ppbRAE 3000	1Yr	1 Yr	6 Mos	3 Yrs	NA	NA	NA
AutoRAE 2	DKS-6000	AutoRAE 2	2 Yrs	NA	NA	NA	NA	NA	NA
	DKS-6001	MultiRAE Cradle	2 Yrs	NA	NA	NA	NA	NA	NA
		MicroRAE Cradle	2 Yrs	NA	NA	NA	NA	NA	NA
	DKS-6002	ToxiRAE Pro Cradle	2 Yrs	NA	NA	NA	NA	NA	NA
	DKS-6003	QRAE 3 Cradle	2 Yrs	NA	NA	NA	NA	NA	NA
	DKS-6004	Handheld PID Cradle	2 Yrs	NA	NA	NA	NA	NA	NA

[1] Product electronics, switch panels, enclosures, displays

[2] Sampling pumps, rechargeable batteries, PID fan

[3] LEL, O2, H2S, CO sensors for QRAE 3 are warrantied for 3 years only if shipped inside a brand new product. Same sensors purchased as spare parts are 2 years warranty only.

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RAE Systems by Honeywell Terms and Conditions

The terms and conditions of sale and the RAE Order Placement Procedures contained herein apply to all quotations and purchases made and purchase orders received by RAE Systems Inc. ("RAE Systems") and are the exclusive binding agreement between the parties regarding the products or services purchased ("Products"), unless otherwise expressly agreed in writing by RAE Systems and buyer ("Buyer"). THE ACCEPTANCE OF ANY OR ALL OF THE BUYER'S PURCHASE ORDERS IS CONDITIONAL UPON BUYER'S ASSENT TO THE TERMS AND CONDITIONS IN THIS DOCUMENT, IN LIEU OF THE TERMS CONTAINED IN BUYER'S PURCHASE ORDER. RAE Systems hereby rejects all provisions contained in communications from Buyer that conflict with or are inconsistent with the terms contained herein. RAE Systems' failure to object to any of the provisions contained in Buyer's documentation shall not be deemed a waiver of these provisions.

1. Quotation and Prices: All quotations are subject to the terms and conditions stated herein as well as any additional Terms and Conditions that may appear on RAE Systems' quotation. In the case of a conflict between the terms and conditions stated herein and those appearing on RAE Systems' quotation, the latter shall control. RAE Systems prices and quotations are subject to the following:

a) Buyer will be billed at the prices in the list price or specifically quoted to Buyer at the time of RAE Systems' purchase order acceptance.

b) All published prices are subject to change without notice.

c) Unless otherwise specified in writing, all quotations are firm for, and will expire, thirty (30) days after date thereof. Budgetary quotations and estimates are for preliminary information only and shall neither constitute firm offers nor impose any responsibility or liability upon RAE Systems.

d) Unless otherwise stated in writing by RAE Systems, all prices quoted shall be exclusive of transportation fees, insurance, taxes (including without limitation any use tax, sales tax or similar tax), license fees, customs fees, duties and other charges related thereto, and Buyer shall report and pay any and all such shipping charges, premiums, taxes, fees, duties and other charges related thereto, and shall hold RAE Systems harmless therefrom.

e) The sale of any of RAE Systems' Products to Buyer in no way conveys to Buyer, either expressly or by implication, any intellectual property license or rights whatsoever, except any limited license rights as may be expressly granted by RAE Systems in the materials which accompany the Products as delivered.

2. Payment: Unless otherwise agreed to in writing, payment shall be paid Net 30 days from the date of invoice. Should custom work be involved, purchase orders shall be accompanied by a non-refundable 50% payment of the total amount with an additional 30% of such total amount due upon the scheduled shipment date, and the final 20% of such total amount is due 30 days after RAE Systems makes shipment. International orders must be accompanied by an irrevocable letter of credit confirmed through a U.S. bank acceptable to RAE Systems and to be drawn at sight when presented with proper documents consisting of (1) signed commercial invoice in triplicate and (2) clean airway bill for the Product. Alternately, wire transfer of funds must be received before shipment (International). Past due balances shall be subject to a finance charge of the lesser of 1.5% per month or the maximum amount allowed by law.

Buyer agrees to accept partial shipments in satisfaction of a single purchase order; when partial shipments are made, pro-rata payments shall become due in accordance with the designated terms for each shipment. RAE Systems may withdraw credit, suspend or cancel performance under any purchase orders or delay delivery of Products in the event Buyer fails to comply with these payment terms.

If Buyer becomes insolvent or bankruptcy proceedings are instituted against Buyer or Buyer makes an assignment for the benefit of its creditors, any such event shall be deemed a material default, entitling RAE Systems to cease performance under a purchase order and to avail itself of all legal or equitable remedies it may have against Buyer. In the event of a default by Buyer under these terms, and the matter is placed in the hands of an attorney for collection, or suit is brought at law, or in equity, to enforce the provisions herein, the Buyer agrees to pay a reasonable attorney's fee together with costs in addition to the amount due under said purchase order.

3. Title and Delivery: Unless otherwise agreed to in writing by RAE Systems, shipment shall be F.O.B. RAE Systems' location and the manner of shipment shall be any commercially reasonable option determined at RAE Systems' option. Buyer shall be responsible for all shipping charges. RAE Systems reserves the right to ship Products freight collect and to select the means of transportation and routing. Unless otherwise advised, RAE Systems will insure to full value of the Product or declare full value to the transportation company at the time of delivery and all such freight; provided that such insurance costs shall be for Buyer's account. Any and all taxes levied on or with respect to Products after delivery to the F.O.B. point, including without limitation taxes levied on or assessed to RAE Systems by reason of its retention of title, shall be paid by Buyer. In the event RAE Systems, in its sole discretion, chooses to pay such taxes, then Buyer shall reimburse RAE Systems in full upon demand. All Products must be inspected by Buyer upon receipt and claims should be filed with the transportation company when there is evidence of damage, either concealed or external.

Shipping dates are approximate and are based upon prompt receipt of all necessary information from Buyer. RAE Systems shall not be liable for delay in delivery or non delivery due to causes beyond RAE Systems' reasonable control, including but not limited to acts of God, acts of Buyer, acts of civil or military authority, war, riots, priorities, fires, strikes, lockouts, delays in transportation and inability due to causes beyond RAE Systems' reasonable control to obtain necessary labor, materials, manufacturing facilities, or compliance with any law, regulation or order, whether such circumstances or causes have been remedied. RAE Systems reserves the right, in its sole discretion, to allocate inventories and current production and substitute suitable materials when, its opinion, such allocation or substitution is necessary due to any such circumstances or causes. No penalty clause of any kind shall be effective.

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4. Testing Procedures: RAE Systems will conduct industry standard testing procedures to confirm RAE Systems' compliance with Buyer's purchase order. Such testing procedures include verification of model number and serialized inventory, power-up test confirmation, instrumentation calibration and diagnostics verification. Any requested changes to these testing procedures require a separate price quotation.

5. Termination: All purchase orders are firm and non-cancellable by Buyer. Buyer is responsible for the full price of Products as ordered. Termination by mutual agreement is subject to the following conditions: (a) Buyer will pay for all Products which are completely manufactured and allocable to Buyer at the time of RAE Systems receipt of notice of termination; and (b) Buyer will pay all costs which have been incurred by RAE Systems with regard to products which have not been completely manufactured at the time of RAE Systems receipt of notice of termination, plus a pro rata portion of normal profit on the purchase order using RAE Systems' standard accounting practices. To reduce termination charges, RAE Systems shall divert completed parts, material or work-in-process from terminated purchase orders to the Buyer whenever in RAE Systems' sole discretion, it is practical to do so.

6. Limited Warranty: RAE Systems' Product warranty is incorporated as part of the Product Operating and Service manual supplied with each individual Product shipment. Such warranty does not extend to any damage or failure which results from alteration, accident, theft, misuse, abuse, abnormal use, improper or unauthorized repairs or improper maintenance. RAE Systems neither assumes nor authorizes any other firm or person to assume on RAE Systems behalf any liability in any way connected with the sale of RAE Systems Products. The sole and exclusive remedy in the event of any breach of the foregoing warranty is to return Products to RAE Systems with delivery or postage prepaid for a refund pursuant to the terms of the applicable Product warranty.

THIS LIMITED WARRANTY SHALL EXTEND TO ORIGINAL BUYER ONLY AND NOT TO BUYER'S CUSTOMERS OR BUYER'S FOREIGN LOCATIONS AND, EXCEPT FOR THE WARRANTY OF TITLE, IT IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY.

7. Limitation of Liability: IN NO EVENT SHALL RAE SYSTEMS BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, PUNITIVE, SPECIAL OR OTHER DAMAGES WHATSOEVER RESULTING FROM RAE SYSTEMS' PERFORMANCE OR FAILURE TO PERFORM UNDER THESE TERMS OR THE FURNISHING, PERFORMANCE OR USE OF ANY GOODS SOLD PURSUANT HERETO, WHETHER DUE TO BREACH OF CONTRACT, BREACH OF WARRANTY, STRICT LIABILITY, PRODUCT LIABILITY, THE NEGLIGENCE OF RAE SYSTEMS OR OTHERWISE. IN NO EVENT SHALL RAE SYSTEMS' LIABILITY EXCEED THE U.S. DOLLAR AMOUNT EQUAL TO THE AMOUNT PAID BY BUYER FOR THE COST OF THE PRODUCTS PAID BY BUYER UNDER THE APPLICABLE INVOICE. THE DAMAGE LIMITATIONS PROVIDED IN THIS AGREEMENT AND THE REMEDIES STATED HEREIN SHALL BE EXCLUSIVE AND SHALL BE BUYER'S SOLE REMEDY. THIS LIMITATION ON LIABILITY SHALL SURVIVE FAILURE OF ANY ESSENTIAL PURPOSE. Certain jurisdictions do not permit the limitation of certain types of liability, so this limitation may not apply to the Buyer.

8. Governing Law and Disputes: The terms and conditions of sale stated herein shall be governed by and construed according to the laws of the State of California without regard to its conflict of law provisions. All disputes under any purchase order concerning Products not otherwise resolved between RAE Systems and Buyer shall be resolved in a court of competent jurisdiction at the location of RAE Systems' place of business fulfilling the purchase order, and in no other location. In RAE Systems' sole discretion, such action may be heard in some other place designated by RAE Systems (if necessary to acquire jurisdiction over third persons), so that the dispute can be resolved in an action. Buyer agrees to appear in any such action and consent to the jurisdiction of such court upon written notice. No action, regardless of form, arising out of, or in any way connected with, the Products furnished or services rendered by RAE Systems, may be brought by Buyer more than one (1) year after the cause of action has accrued.

9. Indemnification: In the event of a claim by a third party of infringement of proprietary rights, trademarks, or patents, resulting from compliance with Buyer's designs, specifications, or instructions Buyer will defend, indemnify and hold RAE Systems harmless against any expense or loss ensuing from such a claim.

Except as otherwise provided above, RAE Systems shall defend any suit or proceeding brought against Buyer to the extent the same is based upon a claim that any Product, or any part thereof, delivered to Buyer under a purchase order constitutes an infringement of any United States patent; provided that, RAE Systems is notified promptly in writing and given authority, information and assistance (at RAE Systems' expense) for the defense of same. In case said Product, or any part thereof, is in such suit held to constitute infringement and the use of said Product or part is enjoined, RAE Systems shall, at its sole and exclusive option and expense, either (i) procure for Buyer the right to continue using said Product or part, (ii) replace said Product with a comparable non-infringing product, (iii) modify said Product so it becomes non-infringing; or (iv) remove said Product and refund to Buyer the actual cost of said Product paid to RAE Systems by Buyer, less a reasonable amount for depreciation. The foregoing states the entire liability of RAE Systems for any patent infringement by the said Product or any part thereof. Notwithstanding the foregoing, in no event shall RAE Systems be obligated to indemnify Buyer pursuant to this Section 10 if a claim, suit or proceeding arises out of or is related to: (a) RAE Systems' compliance with Buyer's designs, specifications or instructions; (b) modifications made to the Products other than by RAE Systems; or (c) Buyer's combination or use of the Product with software, services or products developed by Buyer or a third party.

10. Compliance with Laws: RAE Systems represents that with respect to the production of the Products or the performance of the services covered by this purchase order, RAE Systems will fully comply with all applicable federal, state and local laws including, without limitation, all requirements of the Fair Labor Standards Act of 1938, as amended. RAE Systems is an Equal Opportunity Employer. It does not discriminate in any phase of the employment process against any person because of race, color, creed, religion, national origin, sex, age, veteran or handicapped status. The Equal Opportunity Certificate, which is mailed annually to all vendors, is hereby incorporated into these terms and conditions by reference.

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11. Assignment: Buyer shall not assign this purchase order or any interest therein or any rights hereunder without the prior written consent of RAE Systems.

12. Changes: Upon written acceptance of RAE Systems, Buyer may make changes within the scope of this purchase order in specifications, drawings, or type of Products ordered or in the time or place of delivery or order quantity. Engineering charges for any specification changes will be quoted under a separate purchase order. Reduction in purchase order quantities and/or extension or delay of scheduled shipment dates will be subject to price adjustment as determined by RAE Systems and agreed to by the Buyer. RAE Systems reserves the right to reject any changes and thus the original purchase order quantities, shipment dates, and prices shall remain in effect.

13. Export Controls: Buyer acknowledges that all shipments by RAE Systems are or may be subject to restrictions and limitations imposed by United States export controls, trade regulations and trade sanctions. Buyer at all times will comply with such sanctions, controls and regulations and will cause compliance with such sanctions, controls and regulations in its use and disposition of the Products. With respect to each Products shipment pursuant to these terms and conditions, Buyer will obtain and supply to RAE Systems in writing all information required by RAE Systems to obtain any U.S. export license, permit, approval or documentation applicable to such shipment. Notwithstanding any contrary provision in these terms and conditions, RAE Systems will have no obligation to make any shipment to Buyer until it has received all such information and has obtained the applicable licenses, permits, approvals or documentation for shipment, if any. If RAE Systems learns, or has reasonable cause to believe, or if any branch or agency of the government of the United States claims, that a violation of any applicable trade sanctions, export controls or trade regulations has occurred or is likely to occur because of any shipment, RAE Systems may , in addition to any other remedy it may have, suspend all shipments to Buyer until: (a) RAE Systems is satisfied that such violation did not occur or has ceased to occur, or (b) such claim is withdrawn or otherwise resolved in favor of RAE Systems. Neither Buyer nor its employees, agents, subcontractors, officers or representatives shall cause or permit any shipment of the Products to be made by Buyer or by anyone acting on behalf of Buyer or to whom Buyer may sell the Products, to any country for which a validated export license is required by the United States, or to which shipment is prohibited under trade regulations or trade sanctions of the United States. It shall be the duty of Buyer to inform itself in detail of such export controls, trade regulations and trade sanctions. Buyer will not cause or permit any customer or user in other parts of the world until all necessary import and/or export approvals and clearances have been obtained, and until all United States export controls, trade regulations or trade sanctions applicable to such shipments have been fully complied with. Buyer will indemnify and will hold RAE Systems harmless from and against any claim, loss or liability arising out of any breach of the foregoing covenants contained in this Section 14.

14. Notices: Any notice or report required or permitted by these terms and conditions shall be in writing and shall be deemed given if delivered personally or if sent by either party to the other by confirmed overnight delivery or by certified or registered mail, return receipt requested, postage prepaid, addressed to the other party to its address as set forth on the purchase order or at such other address as such party shall designate by notice hereunder. Where Buyer is giving notice to RAE Systems, all notices shall be sent to the attention of RAE Systems' account representative or customer service representative.

15. Government Contracts: Unless otherwise stated by reference on the face hereof, all purchase orders are considered commercial sales regardless of government contract or subcontract references. RAE Systems pricing and production and shipment commitments shall be based on published price lists and RAE Systems internal accounting and production allocation procedures which shall be applied equitably to all customers as determined by RAE Systems.

16. Service Warranty: RAE Systems warrants all repair work performed on Products theretofore purchased by Buyer from RAE Systems for a period of ninety (90) days after completion of the repairs and shipment to Buyer (the "Warranty Period"). In the event that a Product shall fail within the Warranty Period, Buyer's sole and exclusive remedy shall be to return said Product to RAE Systems during the Warranty Period, transportation prepaid, for re-repair. In this event, this warranty will not be deemed to have failed of its essential purpose. Transportation from Buyer to RAE Systems shall be via a carrier selected by Buyer with all charges borne by Buyer. The aforementioned provisions will not extend the original warranty period for any Product that has been repaired by RAE Systems.

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1. Grant of License. In consideration of payment of the License Fee, which is a part of the price paid for this product as evidenced by the payment receipt (the "Receipt"), RAE Systems hereby grants to the Licensee, a nonexclusive right to use and display RAE Systems' SOFTWARE. The License granted covers all users on the above-mentioned SOFTWARE. RAE Systems reserves all rights not expressly granted to Licensee.

2. Ownership of the software. As the Licensee, you own the magnetic or other physical media on which the SOFTWARE is originally or subsequently recorded or fixed, but RAE Systems retains the title and ownership of the SOFTWARE and all subsequent copies of the SOFTWARE, regardless of the form or media in or on which the original and other copies may exist. This License is not a sale of the original SOFTWARE or any copy thereof.

3. Copy Restrictions. This SOFTWARE and the accompanying written materials are copyrighted. Unauthorized copying of the SOFTWARE, including SOFTWARE that has been modified, merged or included with other software, or the written materials provided herewith, is expressly forbidden. You may be held legally responsible for any copyright infringement that is caused or encouraged by your failure to abide by the terms of this License. Subject to these restrictions, and to the extent the SOFTWARE is not copy-protected, you may make one copy of the SOFTWARE solely for backup and archival purposes. Copyright notices must be posted on any and all reproduced copies.

4. Use Restrictions. As the Licensee, you may physically transfer the SOFTWARE from one computer to another provided the SOFTWARE is used on only one computer at a time. You may not electronically transfer the SOFTWARE from one computer to another. You may not distribute copies of the SOFTWARE or accompanying written materials to others. You may not modify, adapt, translate, reverse engineer, de-compile, disassembly, or create derivative works based on the SOFTWARE or the written materials without the prior written consent of RAE Systems.

5. Transfer Restrictions. The foregoing License to use the SOFTWARE is granted only to you and may not be transferred, except a transfer of all your rights, title and interest in and to the License to another person upon that person's agreement to abide by the terms and conditions of the Agreement. In no event may you transfer, assign, rent, lease, sell or otherwise dispose of the SOFTWARE on a temporary or permanent basis except as expressly provided herein. All other attempts to transfer your License under this Agreement are void.

6. Upgrade Policy. RAE Systems may create, from time to time, upgraded versions of the SOFTWARE. At its option, RAE Systems will make such upgrades available to Licensee and transferees who have paid the upgrade fee, if any, and returned the Registration Card to RAE Systems.

7. Termination. This License is effective until terminated. This License will terminate automatically without notice from RAE Systems if you fail to comply with any provision of this License. Upon termination, you agree to destroy, delete or purge the written materials and all copies of the SOFTWARE, including modified copies, if any.

8. Disclaimer of Warranties. The SOFTWARE and accompanying materials (including the user's manual) are provided "as is" without warranty of any kind including the implied warranties of merchantability and fitness for a particular purpose, even if RAE Systems has been advised of that purpose. Further RAE Systems does not warrant, guarantee, or make any representation regarding the use, or the results of the use, of the SOFTWARE or written materials in terms of correctness, accuracy, reliability, current revision, or otherwise. RAE Systems specifically does not warrant the software after you assume the operation. If the SOFTWARE or written materials are defective, you and not RAE Systems or its dealers, distributors, agents, or employees, assume the entire risk and costs of all necessary servicing, repair, or correction, except as stated in paragraph (9) below.

9. Defective Disks. As the only warranty under this Agreement, RAE Systems warrants, to the original Licensee only, that the disk(s) on which the SOFTWARE is recorded is free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of delivery as evidenced by a copy of the Receipt. Some states do not allow limitations on duration of an implied warranty, so the above limitation may not apply.

10. Replacement of Defective Disks. RAE Systems' entire liability and the original Licensee's exclusive remedy under this Agreement are at RAE Systems' option, to either (a) return of payment as evidenced by a copy of the Receipt, or (b) replacement of the disk that does not meet RAE Systems' limited warranty and which is returned to RAE Systems with a copy of the Receipt. If failure of the disk has resulted from accident, abuse, or misapplication, RAE Systems will have no responsibility to either replace the disk or refund payment. Any replacement disk will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. This warranty gives you limited, specific legal rights. You may have other rights, which vary from state to state.

11. No Right to Rely. No oral or written information or advice given by RAE Systems, its dealers, distributors, agents or employees will create a warranty or in any way increase the scope of RAE Systems' obligations under this agreement, and you may not rely on any such information or advice.

12. Limitation of Liability. NEITHER RAE SYSTEMS NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION, OR DELIVERY OF THIS PRODUCT WILL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, POSSIBILITY OF SUCH DAMAGES). IN NO EVENT SHALL RAE SYSTEMS' LIABILITY EXCEED THE U.S. DOLLAR AMOUNT EQUAL TO THE AMOUNT PAID BY BUYER FOR THE COST OF THE PRODUCTS PAID BY BUYER UNDER THE APPLICABLE INVOICE. THE DAMAGE LIMITATIONS PROVIDED IN THIS LICENSE AND THE REMEDIES STATED HEREIN SHALL BE EXCLUSIVE AND SHALL BE LICENSEE'S SOLE REMEDY. THIS LIMITATION ON LIABILITY SHALL SURVIVE FAILURE OF ANY ESSENTIAL PURPOSE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY.

13. U.S. GOVERNMENT RESTRICTED RIGHTS. The SOFTWARE and documentation is provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subdivision (c)(1)(ii) of The Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or `subparagraphs (c)(1) and (2) of the Commercial Computer Software – Restricted Rights at 48 CFR 52.227-19, as applicable. Contractor/manufacturer is RAE Systems Inc., 3775 N. First Street, San Jose, California 95134.

14. Governing Law. This Agreement is governed by the laws of the State of California.

RAE Systems by Honeywell PRG CloudServer Terms of Service

This ProRAE Guardian (PRG) CloudServer Service Agreement ("Agreement") contains the terms and conditions that govern your access to and use of the PRG CloudServer Service (as defined below) and is an agreement between RAE Systems Inc. ("COMPANY," "we," "us," or "our") and you or the entity you represent ("you"). This Agreement takes effect the fifteenth (15th) day after we notify you (by mail, email, phone, or otherwise) of your PRG CloudServer IP Address ("PRG IPAdd"), or upon your first use of the PRG CloudServer Service (the "Effective Date"), whichever comes first. By your use of the Service, you agree to these terms and conditions, and you represent to us that you are lawfully able to enter into contracts (e.g., you are not a minor). If you are entering into this Agreement for an entity, such as the company you work for, you represent to us that you have legal authority to bind that entity to these terms.

1. PRG CloudServer Service.

1.1 What we will deliver. We agree to provide to you a hosting service for your ProRAE Guardian (PRG) Installation(s). For each PRG CloudServer service contract entered into between you and us, we will provide ONE (1) instance of ProRAE Guardian operating on the public Internet. The PRG instance will be installed, operated, and maintained by us. We will provide to you, at time of Service activation, an IP Address (PRG IPAdd) which will allow you to access your private PRG CloudServer instance from your PRG Installation(s). Your PRG IPAdd will be a static IP address accessible from the public Internet by any PRG Installation properly configured to access it. If need be, we will also set other PRG options for you (including such options as PRG Access Control Access Codes).

1.2 What you can and cannot do with it. You may use your PRG CloudServer instance to connect to any PRG Installations that you choose. It is your responsibility to manage and keep secure your PRG IPAdd, as well as any optional information such as PRG Access Control Access Codes. Company will not be responsible for the security of this information. Company will make every reasonable attempt to help you configure and/or manage this information, but may, at our sole discretion, impose additional charges if repeated requests by you cause us to create new and/or altered PRG IPAdds and/or passphrases. You cannot use your PRG CloudServer service for any purpose other than to connect legitimately licensed instruments, devices, and/or computer systems through PRG Installations. No other software may be operated on or with the PRG CloudServer without prior written consent of Company.

1.3 Usage restrictions. Each PRG CloudServer Service is intended to host instruments, monitors, and devices connected through PRG Installations. Although multiple PRG Installations are supported, each PRG CloudServer will support no more than a total of five hundred (500) individual instruments, devices, and/or monitors at any one time. PRG Installations that attempt to connect more than 500 devices at once are not supported. You may connect up thirty-two (32) PRG Viewers and up to ten (10) remote PRG Installations. Please contact Company if the need arises to connect more than this number of devices or PRG Installations. All connected instruments must be properly licensed. Further, although you may connect computers, instruments, and devices owned by others to your PRG CloudServer, you may not use your PRG CloudServer to host other people's data for a fee. You may host up to the maximum amount of instruments, computers, and viewers from any sources, but you may not erect a service nor may you extract service fees in any manner whatsoever for doing so.

1.4 Support. We will maintain the operational integrity of your PRG CloudServer, and will update it from time to time so that it is running the latest version of PRG. We will not update your PRG CloudServer without notifying you first and giving you a chance to defer the update to a more convenient time.

To update and/or troubleshoot your PRG CloudServer, we may need to take your instruments off-line and attach your PRG CloudServer to our own instruments to test with. This may result in data loss and downtimes, which are unavoidable. We will make every attempt to notify you prior to these actions.

2. Changes.

2.1 To the Service Offerings. We reserve the right to modify our Service Offerings at any time. We will notify you if such modifications affect your current service agreement. If such modifications materially affect your service, you will be given the opportunity to cancel your service contract and receive a pro-rated refund.

2.2 To Pricing. Our pricing for the PRG CloudServer service is subject to change at any time.

2.3 We can move your hosting or change your IP address. Company may engage with various third-party vendors to provide basic data center hosting capability upon which your PRG CloudServer service is based. Further, Company may, from time to time, add additional vendors and/or switch vendors for this capability. Company may move your PRG CloudServer instance to or from any such vendors at will at the sole discretion of Company. If it is determined beforehand that such actions will cause service disruption, Company will make every reasonable attempt to contact you and arrange for a mutually agreeable date and time for such movement of basic service capability. You agree that it may not be possible to avoid service disruptions, and that Company may not be able to notify you in advance for this and/or any such service disruption. Further, you acknowledge that service disruptions may require you to change your PRG IPAdd or other settings in order to restore service, and that this is acceptable to you.

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3. Security and Data Privacy.

3.1 PRG CloudServer Data Security. Company will make every reasonable attempt to keep Your Content secure; however, we do not guarantee such data security. If a data breach occurs, Company will notify you as soon as practicably possible, and make every reasonable attempt to address the situation to your satisfaction. Please note temporary service interruptions may occur as a result of this activity. Company is not responsible for any data loss that occurs as a result of your use of the PRG CloudServer service. We do not guarantee your data is secure. We strongly recommend you redundantly store your PRG CloudServer data in order to safeguard it.

3.2 Data Privacy. We will make every reasonable attempt to secure your data, but we cannot guarantee its ultimate privacy. Initially, most of our hosting sites will be in the U.S., but over time this may change. Under rare conditions, however, sensitive instrument data could be at risk of exposure. We suggest you fully consider this possibility when deciding to use the PRG CloudServer service. Company is not responsible for any undesired exposure of Your Content beyond taking reasonable and customary precautions against it.

3.3 No Guarantee of Uptime. We will make every attempt to maintain 24/7/365 uptime, but cannot guarantee it. We will make all reasonable attempts to restore service as soon as possible after an outage. Note service restoration may require new IP address assignment.

3.4 No refunds for service disruptions. Except for those cases explicitly called out in this document, Company will not issue any refunds for any service disruptions. Your use of the service signifies your knowledge of and agreement with this stipulation.

4. Your Responsibilities

You are responsible for all consequences of your (or your designated employees, contractors, vendors, or associates) use of the service. Company does not monitor your use of the PRG CloudServer service for appropriateness. You accept any and all responsibility for the consequences of your use of the service, including but not limited to, adhering to any prevailing legal authorities' laws, regulations, or requirements. Further, you warrant to us that you shall not use your PRG CloudServer for any illegal, unethical, or immoral means. You further warrant that you shall not use your PRG CloudServer in association with any objectionable content or unlicensed or improperly licensed software or content. Company reserves the right to immediately terminate, without refund, your service contract if, in its sole discretion, you have violated any of these terms.

4.1 Your PRG Network. You are solely responsible for the development, content, operation, maintenance, and use of Your PRG network. For example, you are solely responsible for:

(a) the technical operation of Your PRG Network, including operating and maintaining all PRG Installations that are connected to your PRG CloudServer;

(b) compliance of Your PRG Network with any state, local, and/or country-wide laws or legal entities; and

(c) properly handling and processing notices sent to you (or any of your affiliates) by any person claiming that Your PRG Network violates any laws or regulations of any kind.

4.2 Other Security and Backup. Although RAE personnel may initially help you set up Your PRG Network, you are responsible for properly configuring and using Your PRG Network and taking your own steps to maintain appropriate security, protection and backup of Your Content, which may include the use of redundant PRG machines. Upon your written request, RAE personnel may, at Company's sole discretion, assist you in obtaining copies of Your Content from your PRG CloudServer instance.

4.3 End User Violations. You will be deemed to have taken any action that you permit, assist or facilitate any person or entity to take related to this Agreement, Your PRG Network or use of the Service Offerings. You are responsible for End Users' use of Your Content and the Service Offerings. You will ensure that all End Users comply with your obligations under this Agreement and that the terms of your agreement with each End User are consistent with this Agreement. If you become aware of any violation of your obligations under this Agreement by an End User, you will immediately terminate such End User's access to Your Content and the Service Offerings.

5. Fees and Payment

5.1. Order, payment, and setup. To use the PRG CloudServer service, you must enter into a business arrangement with Company, place an order for the PRG CloudServer term of your choice, and pay the license fee for such term in full. After we have received payment, we will contact you with your Certificate of Service, your private IP address (PRG IPAdd) and any other information you need to initiate your PRG CloudServer service.

5.2 Renewals are not automatic. PRG CloudServer service contracts are for a fixed term as specified in your Certificate of Service. Company may, at its sole discretion, offer to renew your service contract upon term expiration. Company will make every attempt to notify you prior to service contract termination of your then-available options to renew, if any, and prices that are in effect at that time.

5.3 Pricing. Pricing is subject to change upon contract renewal. Renewals to existing contracts, as well as new contracts, are not guaranteed to be available at previous pricing levels and are subject to change any time prior to the execution of such contracts.

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6. Temporary Suspension

6.1 Generally. We may suspend your right to access or use any portion or all of the Service Offerings immediately upon notice to you if we determine:

(a) your or an End User's use of the Service Offerings (i) poses a security risk to the Company, the Service Offerings, or any other PRG CloudServer customer, (ii) may adversely impact the Service Offerings or the systems or Content of any other PRG CloudServer customer, or (iii) may subject us, our affiliates, or any third party to liability;

(b) you are, or any End User is, in breach of this Agreement, including if you are delinquent on any payment obligations for more than 15 days; or

(c) you have ceased to operate in the ordinary course, made an assignment for the benefit of creditors or similar disposition of your assets, or become the subject of any bankruptcy, reorganization, liquidation, dissolution or similar proceeding.

6.2 Effect of Suspension. If we suspend your right to access or use any portion or all of the Service Offerings:

(a) you remain responsible for all fees and charges you have incurred through the date of suspension;

(b) you remain responsible for any applicable fees and charges for any Service Offerings to which you continue to have access, as well as any other obligations you have to Company;

(c) we will not erase any of Your Content as a result of your suspension, except as specified elsewhere in this Agreement; and

(d) you will not be entitled to a refund of any unused portion of your service Term.
Our right to suspend your right to access or use the Service Offerings is in addition to our right to terminate this Agreement pursuant to Section 7.2.

7. Term; Termination

7.1. Term. The term of this Agreement will commence on the Effective Date and will remain in effect until the Expiration Date as specified in your Certificate of Service, or until terminated by you or us in accordance with Section 7.2.

7.2 Termination.

7.2.1 We can cancel this service with 30 days notice. If Company determines, due to adverse business conditions, economic conditions, or other conditions, we can no longer continue offering the PRG CloudServer service, we can cancel your service at any time. If we cancel your service, we will notify you and give you at least thirty (30) days notice prior to service cancellation. We will also refund the unused portion of your contract fee based upon a simple pro-rated monthly schedule.

7.2.2 Other forms of acceptable termination are as follows:

(a) Termination for Convenience. You may terminate this Agreement for any reason by providing us notice. Note that you will not receive a refund for any unused term remaining in your service contract if you terminate for convenience.

(b) Termination for Cause.

(i) By Either Party. Either party may terminate this Agreement for cause upon 30 days advance notice to the other party if there is any material default or breach of this Agreement by the other party, unless the defaulting party has cured the material default or breach within the 30 day notice period.
(ii) By Us. We may also terminate this Agreement immediately upon notice to you (A) for cause, if any act or omission by you or any End User results in a suspension described in Section 6.1, (B) if our relationship with a third party partner who provides software or other technology we use to provide the Service Offerings expires, terminates or requires us to change the way we provide the software or other technology as part of the Services as described in Section 2.3, (C) if we believe providing the Services could create a substantial economic or technical burden or material security risk for us, (D) in order to comply with the law or requests of governmental entities, or (E) if we determine use of the Service Offerings by you or any End Users or our provision of any of the Services to you or any End Users has become impractical or unfeasible for any legal or regulatory reason.

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7.3. Effect of Termination.

(a) Generally. Upon any termination of this Agreement:

(i) all your rights under this Agreement immediately terminate;

(ii) no refunds will be given for previously paid service fees, except as specified in Sections 2.1,7.2.1, and 7.2.2(ii)(B) and 7.2.2(ii)(C).

(b) Post-Termination Assistance. Unless we terminate your use of the Service Offerings pursuant to Section 7.2.2(A), during the 30 days following termination:

(i) we will not erase any of Your Content as a result of the termination;

(ii) you may retrieve Your Content from the Services only if you have paid any charges for any post-termination use of the Service Offerings and all other amounts due; and

(iii) we will provide you with the same post-termination data retrieval assistance that we generally make available to all customers.

Any additional post-termination assistance from us is subject to mutual agreement by you and us.

8. Proprietary Rights

8.1 Your Content. As between you and us, you or your licensors own all right, title, and interest in and to Your Content. Except as provided in this Section 8, we obtain no rights under this Agreement from you or your licensors to Your Content, including any related intellectual property rights. You consent to our use of Your Content to provide the Service Offerings to you. We may disclose Your Content to provide the Service Offerings to you or any End Users or to comply with any request of a governmental or regulatory body (including subpoenas or court orders).

8.2 Adequate Rights. You represent and warrant to us that: (a) you or your licensors own all right, title, and interest in and to Your Content; (b) you have all rights in Your Content necessary to grant the rights contemplated by this Agreement.

8.3 Service Offerings License. As between you and us, we or our affiliates or licensors own and reserve all right, title, and interest in and to the Service Offerings. We grant you a limited, revocable, non-exclusive, non-sub-licensable, non-transferrable license to access and use your PRG CloudServer solely in accordance with this Agreement during the term of this agreement. Except as provided in this Section 8.3, you obtain no rights under this Agreement from us or our licensors to the Service Offerings, including any related intellectual property rights.

8.4 License Restrictions. Neither you nor any End User may use the Service Offerings in any manner or for any purpose other than as expressly permitted by this Agreement. Neither you nor any End User may, or may attempt to, (a) modify, alter, tamper with, repair, or otherwise create derivative works of any software included in the Service Offerings (except to the extent software included in the Service Offerings are provided to you under a separate license that expressly permits the creation of derivative works), (b) reverse engineer, disassemble, or decompile the Service Offerings or apply any other process or procedure to derive the source code of any software included in the Service Offerings, or (c) access or use the Service Offerings in a way intended to avoid incurring fees or exceeding usage limits or quotas. All licenses granted to you in this Agreement are conditional on your continued compliance this Agreement, and will immediately and automatically terminate if you do not comply with any term or condition of this Agreement. During and after the Term, you will not assert, nor will you authorize, assist, or encourage any third party to assert, against us or any of our affiliates, customers, vendors, business partners, or licensors, any patent infringement or other intellectual property infringement claim regarding any Service Offerings you have used. You may only use the PRG CloudServer and/or ProRAE Guardian Marks in accordance with the Trademark Use Guidelines.

8.5 Suggestions. If you provide any Suggestions to us or our affiliates, we will own all right, title, and interest in and to the Suggestions, even if you have designated the Suggestions as confidential. We and our affiliates will be entitled to use the Suggestions without restriction. You hereby irrevocably assign to us all right, title, and interest in and to the Suggestions and agree to provide us any assistance we may require to document, perfect, and maintain our rights in the Suggestions.

9. Indemnification.

9.1 General. You will defend, indemnify, and hold harmless us, our affiliates and licensors, and each of their respective employees, officers, directors, and representatives from and against any claims, damages, losses, liabilities, costs, and expenses (including reasonable attorneys' fees) arising out of or relating to any third party claim concerning: (a) your or any End Users' use of the Service Offerings (including use by your employees and personnel); (b) breach of this Agreement or violation of applicable law by you or any End User; (c) Your Content or the combination of Your Content with other applications, content or processes, including any claim involving alleged infringement or misappropriation of third-party rights by Your Content or by the use, development, design, production, advertising or marketing of Your Content; or (d) a dispute between you and any End User. If we or our affiliates are obligated to respond to a third party subpoena or other compulsory legal order or process described above, you will also reimburse us for reasonable attorneys' fees, as well as our employees' and contractors' time and materials spent responding to the third party subpoena or other compulsory legal order or process at our then-current hourly rates.

9.2 Process. We will promptly notify you of any claim subject to Section 9.1, but our failure to promptly notify you will only affect your obligations under Section 9.1 to the extent that our failure prejudices your ability to defend the claim. You may: (a) use counsel of your own choosing (subject to our written consent) to defend against any claim; and (b) settle the claim as you deem appropriate, provided that you obtain our prior written consent before entering into any settlement. We may also assume control of the defense and settlement of the claim at any time.

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10. Disclaimers.
THE SERVICE OFFERINGS ARE PROVIDED "AS IS." WE AND OUR AFFILIATES AND LICENSORS MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE REGARDING THE SERVICE OFFERINGS OR THE THIRD PARTY CONTENT, INCLUDING ANY WARRANTY THAT THE SERVICE OFFERINGS OR THIRD PARTY CONTENT WILL BE UNINTERRUPTED, ERROR FREE OR FREE OF HARMFUL COMPONENTS, OR THAT ANY CONTENT, INCLUDING YOUR CONTENT OR THE THIRD PARTY CONTENT, WILL BE SECURE OR NOT OTHERWISE LOST OR DAMAGED. EXCEPT TO THE EXTENT PROHIBITED BY LAW, WE AND OUR AFFILIATES AND LICENSORS DISCLAIM ALL WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR QUIET ENJOYMENT, AND ANY WARRANTIES ARISING OUT OF ANY COURSE OF DEALING OR USAGE OF TRADE.

11. Limitations of Liability.
WE AND OUR AFFILIATES OR LICENSORS WILL NOT BE LIABLE TO YOU FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, GOODWILL, USE, OR DATA), EVEN IF A PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. FURTHER, NEITHER WE NOR ANY OF OUR AFFILIATES OR LICENSORS WILL BE RESPONSIBLE FOR ANY COMPENSATION, REIMBURSEMENT, OR DAMAGES ARISING IN CONNECTION WITH: (A) YOUR INABILITY TO USE THE SERVICES, INCLUDING AS A RESULT OF ANY (I) TERMINATION OR SUSPENSION OF THIS AGREEMENT OR YOUR USE OF OR ACCESS TO THE SERVICE OFFERINGS, (II) OUR DISCONTINUATION OF ANY OR ALL OF THE SERVICE OFFERINGS, OR, (III) WITHOUT LIMITING ANY OBLIGATIONS UNDER THIS AGREEMENT, ANY UNANTICIPATED OR UNSCHEDULED DOWNTIME OF ALL OR A PORTION OF THE SERVICES FOR ANY REASON, INCLUDING AS A RESULT OF POWER OUTAGES, SYSTEM FAILURES OR OTHER INTERRUPTIONS; (B) THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; (C) ANY INVESTMENTS, EXPENDITURES, OR COMMITMENTS BY YOU IN CONNECTION WITH THIS AGREEMENT OR YOUR USE OF OR ACCESS TO THE SERVICE OFFERINGS; OR (D) ANY UNAUTHORIZED ACCESS TO, ALTERATION OF, OR THE DELETION, DESTRUCTION, DAMAGE, LOSS OR FAILURE TO STORE ANY OF YOUR CONTENT OR OTHER DATA. IN ANY CASE, OUR AND OUR AFFILIATES' AND LICENSORS' AGGREGATE LIABILITY UNDER THIS AGREEMENT WILL BE LIMITED TO THE AMOUNT YOU ACTUALLY PAY US UNDER THIS AGREEMENT FOR THE SERVICE THAT GAVE RISE TO THE CLAIM DURING THE 12 MONTHS PRECEDING THE CLAIM.

12. Modifications to the Agreement.
We may modify this Agreement (including any Policies) at any time by posting a revised version on the RAESYSTEMS.COM Site or by otherwise notifying you in accordance with Section 13.8. The modified terms will become effective upon posting or, if we notify you by email, as stated in the email message. By continuing to use the Service Offerings after the effective date of any modifications to this Agreement, you agree to be bound by the modified terms. It is your responsibility to check the RAESYSTEMS.COM Site regularly for modifications to this Agreement. We last modified this Agreement on the date listed at the beginning of this Agreement.

13. Miscellaneous.

13.1 Confidentiality and Publicity. You will not disclose RAE Confidential Information during the Term or at any time during the 5 year period following the end of the Term. You will not issue any press release or make any other public communication with respect to this Agreement or your use of the Service Offerings. You will not misrepresent or embellish the relationship between us and you (including by expressing or implying that we support, sponsor, endorse, or contribute to you or your business endeavors), or express or imply any relationship or affiliation between us and you or any other person or entity except as expressly permitted by this Agreement.

13.2 Force Majeure. We and our affiliates will not be liable for any delay or failure to perform any obligation under this Agreement where the delay or failure results from any cause beyond our reasonable control, including acts of God, labor disputes or other industrial disturbances, systemic electrical, telecommunications, or other utility failures, earthquake, storms or other elements of nature, blockages, embargoes, riots, acts or orders of government, acts of terrorism, or war.

13.3 Independent Contractors; Non-Exclusive Rights. We and you are independent contractors, and neither party, nor any of their respective affiliates, is an agent of the other for any purpose or has the authority to bind the other. Both parties reserve the right (a) to develop or have developed for it products, services, concepts, systems, or techniques that are similar to or compete with the products, services, concepts, systems, or techniques developed or contemplated by the other party and (b) to assist third party developers or systems integrators who may offer products or services which compete with the other party's products or services.

13.4 No Third Party Beneficiaries. This Agreement does not create any third party beneficiary rights in any individual or entity that is not a party to this Agreement.

13.5 NO RIGHT TO RELY. No oral or written information or advice given by Company, its dealers, distributors, agents, or employees will create a warranty or in any way increase the scope of Company's obligations under this agreement, and you may not rely on any such information or advice.

13.6 U.S. Government Rights. The Service Offerings are provided to the U.S. Government as "commercial items," "commercial computer software," "commercial computer software documentation," and "technical data" with the same rights and restrictions generally applicable to the Service Offerings. If you are using the Service Offerings on behalf of the U.S. Government and these terms fail to meet the U.S. Government's needs or are inconsistent in any respect with federal law, you will immediately discontinue your use of the Service Offerings. The terms "commercial item" "commercial computer software," "commercial computer software documentation," and "technical data" are defined in the Federal Acquisition Regulation and the Defense Federal Acquisition Regulation Supplement.

13.7 Import and Export Compliance. In connection with this Agreement, each party will comply with all applicable import, re-import, export, and re-export control and regulations, including the Export Administration Regulations, the International Traffic in Arms Regulations, and country-specific economic sanctions programs implemented by the Office of Foreign Assets Control. For clarity, you are solely responsible for compliance related to the manner in which you choose to use the Service Offerings, including your transfer and processing of Your Content, the provision of Your Content to End Users, and the region in which any of the foregoing occur.

13.8 Notice.
(a) To You. We may provide any notice to you under this Agreement by: (i) posting a notice on the RAESYSTEMS.COM Site; or (ii) sending a message to the email address then associated with your account. Notices we provide by posting on the RAESYSTEMS.COM Site will be effective upon posting and notices we provide by email will be effective when we send the email. It is your responsibility to keep your email address current. You will be deemed to have received any email sent to the email address then associated with your account when we send the email, whether or not you actually receive the email. (b) To Us. To give us notice under this Agreement, you must contact RAE SYSTEMS by personal delivery, overnight courier or registered or certified mail to RAE Systems Inc., 3775 North First Street, San Jose, CA 95134. We may update the address or other means for notices to us by posting a notice on the RAESYSTEMS.COM Site. All notices to us must be clearly marked "URGENT" and sent to the attention of the RAE Legal Dept. Notices provided to us by personal delivery will be effective immediately. Notices provided to us by overnight courier will be effective one business day after they are sent. Notices provided to us by registered or certified mail will be effective three business days after they are sent. (c) Language. All communications and notices to be made or given pursuant to this Agreement must be in the English language.

13.9 Assignment. You will not assign this Agreement, or delegate or sublicense any of your rights under this Agreement, without our prior written consent. Subject to the foregoing, this Agreement will be binding upon, and inure to the benefit of the parties and their respective successors and assigns.

13.10 No Waivers. The failure by us to enforce any provision of this Agreement will not constitute a present or future waiver of such provision **nor limit our right to enforce such provision at a later time. All waivers by us must be in writing to be effective.**

13.11 Severability. If any portion of this Agreement is held to be invalid or unenforceable, the remaining portions of this Agreement will remain in full force and effect. Any invalid or unenforceable portions will be interpreted to effect and intent of the original portion. If such construction is not possible, the invalid or unenforceable portion will be severed from this Agreement but the rest of the Agreement will remain in full force and effect.

13.12 Governing Law; Venue. The laws of the State of California govern this Agreement and any dispute of any sort that might arise between you and us. We may seek injunctive or other relief in any state, federal, or national court of competent jurisdiction for any actual or alleged infringement of our, our affiliates, or any third party's intellectual property or other proprietary rights.

13.13 Entire Agreement. This Agreement is the entire agreement between you and us regarding the subject matter of this Agreement. This Agreement supersedes all prior or contemporaneous representations, understandings, agreements, or communications between you and us, whether written or verbal, regarding the subject matter of this Agreement. Notwithstanding any other agreement between you and us, the security and data privacy provisions in Section 3 of this Agreement contain our and our affiliates' entire obligation regarding the security, privacy and confidentiality of Your Content. We will not be bound by, and specifically object to, any term, condition or other provision which is different from or in addition to the provisions of this Agreement (whether or not it would materially alter this Agreement) and which is submitted by you in any order, receipt, acceptance, confirmation, correspondence or other document. If the terms of this document are inconsistent with the terms contained in any Policy, the terms contained in this document will control.

14. Definitions.
"PRG" means ProRAE Guardian.

"PRG CloudServer" means ProRAE Guardian CloudServer, and represents the instantiation of one copy of ProRAE Guardian running on a computer which is on the public Internet with a Static IP address.

"Your PRG Network" means the combination of your PRG CloudServer instance and all the other PRG machines, devices, instruments, and monitors that are connected to it at any time.

"Expiration Date" means the date the Term of your PRG CloudServer service agreement expires. This date will be specified in your Certificate of Service.

"PRG Installation" means a computer running ProRAE Guardian software with or without attached instruments.

"Your Content" means Content you or any End User cause to be transferred to, created on, or otherwise manifested on your PRG CloudServer by you or by your legitimate use of your PRG CloudServer, including but not limited to, any instrument readings, DataLogs, or Event Logs.

"API" means an application program interface.

"RAE Confidential Information" means all nonpublic information disclosed by us, our affiliates, business partners or our or their respective employees, contractors or agents that is designated as confidential or that, given the nature of the information or circumstances surrounding its disclosure, reasonably should be understood to be confidential. RAE Confidential Information includes: (a) nonpublic information relating to our or our affiliates or business partners' technology, customers, business plans, promotional and marketing activities, finances and other business affairs; (b) third-party information that we are obligated to keep confidential; and (c) the nature, content and existence of any discussions or negotiations between you and us or our affiliates. RAE Confidential Information does not include any information that: (i) is or becomes publicly available without breach of this Agreement; (ii) can be shown by documentation to have been known to you at the time of your receipt from us; (iii) is received from a third party who did not acquire or disclose the same by a wrongful or tortuous act; or (iv) can be shown by documentation to have been independently developed by you without reference to the RAE Confidential Information.

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"PRG CloudServer Marks" means any trademarks, service marks, service or trade names, logos, and other designations of PRG CloudServer, PRG, ProRAE Guardian, and its affiliates that we may make available to you in connection with this Agreement.

"PRG CloudServer Content" means Content we or any of our affiliates make available in connection with the Services or on the RAESYSTEMS.COM Site to allow access to and use of the Services, including your PRG CloudServer instance.

"RAECENTER.COM Site" means http://www.raecenter.com and any successor or related site designated by us.

"RAESYSTEMS.COM Site" means http://www.raesystems.com and any successor or related site designated by us.

"Content" means data, text, audio, video, images or other content.

"Documentation" means the developer guides, getting started guides, user guides, quick reference guides, and other technical and operations manuals and specifications for the Services.

"End User" means any individual or entity that directly or indirectly through another user: (a) accesses or uses Your PRG Network and/or Your Content; or (b) otherwise accesses or uses the Service Offerings under your account.

"Privacy Policy" means the privacy policy currently referenced on the RAESYSTEMS.COM site, as it may be updated by us from time to time.

"Service" means each of the services made available by us or our affiliates, including but not limited to the PRG CloudServer service.

"Service Offerings" means the PRG CloudServer service (including associated APIs, if any), the PRG CloudServer Content, the PRG CloudServer Marks, the RAESYSTEMS.COM Site, the RAECENTER.COM Site, and any other product or service provided by us under this Agreement. Service Offerings do not include Third Party Content.

"Service Terms" means the rights and restrictions for the PRG CloudServer service, and specified in this document.

"Suggestions" means all suggested improvements to the Service Offerings that you provide to us.

"Term" means the term of this Agreement, beginning on the Effective Date, and ending on the Expiration Date as specified on the Certificate of Service.

"Certificate of Service" means the document you receive upon commencement of the Service detailing your Service Terms, the Term, and any other information pertinent to the PRG CloudServer service.

"Third Party Content" means Content made available to you by any third party on the PRG CloudServer Site or in conjunction with the Services.

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RAE Systems by Honeywell USA Contact Directory

Department	Online Contact	Phone/Fax
RAE Systems **Corporate Office**	**www.raesystems.com** **www.honeywellanalytics.com**	**T: 1.877.723.2878**
Inside Sales • Stock item availability • Quotes • Shipping status • Order status	**orders.gasdetection@honeywell.com**	**T: 1.888.723.4800** **(option 1, option 1)**
Service Department • Technical support • Application questions	**RAE-callcenter@honeywell.com**	**T: 1.888.723.4800** **(option 1, option 2)**
• Return Authorization for service or warranty repair • Status on monitor in for service	**RAE-RMA.US@honeywell.com**	**T: 1.888.723.4800** **(option 1, option 3)**
Training	**DL-CA3UTraining@Honeywell.com**	**www.hautraining.com**