# Rental Multi-Gas Monitor with PID

# <u>geotech</u>

# RAE MultiRAE IR

The MultiRAE IR Multi-Gas Monitor with PID allows you to detect a variety of toxic and combustible gases, oxygen and VOCs.

#### **FEATURES**

- Measure 0-20,000 ppm with CO<sub>2</sub> sensor!
- Plug-in interchangeable toxic gas sensors Carbon monoxide, hydrogen sulfide, sulfur dioxide, nitric oxide, nitrogen dioxide, chlorine, hydrogen cyanide, ammonia, phosphine, ethylene oxide
- Strong, built-in sample draw pump with pump stall feature Built-in pump eliminates need to charge and connect separate pump module
- Rugged, compact design
- **Programmable alarm thresholds** Activates both audible alarm and flashing LED visual display when alarm threshold levels are exceeded
- Audible and visual alarm with flashing LED Varying tones for different alarm conditions and an optional remote vibration alarm for noisy areas
- Large, bright back light display Alarm, dim light, or manually activated with up to 5 gases and their concentrations displayed
- 20,000 point data logging storage capacity for optional data download to PC
- Smart battery charger Unit is always ready to go
- Field replaceable battery 10 hours of continuous monitoring with li-ion rechargeable battery and alkaline battery adapter included
- Ask about Rental Units Call Today! LEL, O<sub>2</sub> and other sensors available.



#### WHAT'S INCLUDED

#### MultiRAE IR Multi-Gas Monitor with PID includes:

- Rubber boot with belt clip
- Water trap filter
- Calibration adapter
- · Charger (if applicable)
- Alkaline battery adapter
- Quick reference guide and operation/maintenance manual

#### Confined space kit includes:

- 34 liter cylinder mixed calibration gas (50% LEL, 25 ppm hydrogen sulfide, 50 ppm carbon monoxide)
- Calibration regulator
- Spare water trap filters
- 15 feet (5m) of Tygon<sup>®</sup> tubing (and hand pump for diffusion model)
- Tool kit and hard transport case

### **CALL GEOTECH TODAY (800) 833-7958**

Geotech Environmental Equipment, Inc. 2650 East 40th Avenue • Denver, Colorado 80205 (303) 320-4764 • (800) 833-7958 • FAX (303) 322-7242 email: sales@geotechenv.com website: www.geotechenv.com

# **Rental** Multi-Gas Monitor with PID

## **RAE MultiRAE IR**

#### **SPECIFICATIONS**

GENERAL Size Weight Detector	4.65" L x 3.0" W x 1.9" H (1.8 x 7.6 x 4.8cm) 16 oz. with batteries (454g) Protected catalytic bead for combustible gases, interchangeable electrochemical sensor for oxygen and toxic gases, photoionization detector for VOCs; 10.6 eV lamp standard, 11.7 eV lamp optional	<b>Alarm</b> High Low STEL & TWA	90 dB buzzer and flashing red LED to indicate exceeded preset limits 3 beeps and flashes per second 2 beeps and flashes per second 1 beep and flash per second alarms latching with manual override or automatic reset, additional diagnostic alarm and display message for low battery and pump stall
Operating Hours	10 hours continuous, unit will run and charge simultaneously pack or 4 AA alkaline battery adapter, field replaceable	Direct Readout	Instantaneous (up to 5) values: oxygen as percentage of air by volume, combustible gas as
<b>Battery Charging</b>	10 hours through built-in or external charger		percentage of lower explosion limit (LEL), toxic gases and VOCs as parts per million by volume.
Display	2 line, 16 digit LCD with LED back light automatically in dim light or alarm		High and low values for all gases, STEL and TWA values of toxic gases and VOCs, battery and shut
Key Pads	1 operation key and 2 programming keys		down voltage, date, time, elapsed time, temp., and
Attachment	Wrist strap and rubber armor case		LEL/VOC scale (using correction factors)
Datalogging	20,000 points (64 hours, 5 channels, at one minute intervals, download to PC with serial number of unit, user ID and site number, and	Intrinsic Safety	UL, cUL Class 1, Div. I, Group A, B, C, D EEx ia IIC T4 (not classified intrinsically safe with CO <sub>2</sub> sensor)
	calibration date)	Calibration	Two point field calibration for zero and span gas
Datalog Interval	1-3, 600 seconds	Temperature	-4° to 113°F (-20° to 45°C)
Sampling Pump	Internal pump, flow rate 150 ml./min.	Humidity	0% to 95% relative humidity (non-condensing)

GAS MONITOR	Range	Resolution	Response Time (T90)		Range	Resolution	Response Time (T90)
Oxygen	0-30%	0.1%	30 seconds	Nitric Oxide	0-250 ppm	1 ppm	20 seconds
Combustible Gas	0-100% LEL	1%	10 seconds	Nitrogen Dioxide	0-20 ppm	0.1 ppm	25 seconds
VOCs	0-200 ppm 200-2000 ppm	0.1ppm 1 ppm	20 seconds 20 seconds	Chlorine Hydrogen Cyanide	0-10 ppm 0-100 ppm	0.1 ppm 1 ppm	60 seconds 60 seconds
Carbon Monoxide Hydrogen Sulfide Sulfur Dioxide	0-500 ppm 0-100 ppm 0-20 ppm	1 ppm 1 ppm 0.1 ppm	20 seconds 40 seconds 20 seconds	Ammonia Phosphine Carbon Dioxide	0-50 ppm 0-5 ppm 0-20,000 ppm	1 ppm 0.1 ppm 10 ppm	150 seconds 60 seconds 60 seconds

**ALARM SETTING** 

Separate Alarm Limit For: Deficiency and enrichment of oxygen concentration, low and high combustible gas concentration, TWA, STEL, low and high for toxic gases and VOCs

		MultiRAE Factory Preset Alarm Settings*			Calibration*	
Gas	Symbol	STEL	TWA	Low	High	<b>Gas Concentration</b>
Oxygen	O <sub>2</sub>	-	-	19.5%	23.5%	20.9%
Combustible Gas	-	-	-	10%	20%	50% LEL
VOCs	-	50	25	50	100	100 ppm isobutylene
Carbon Monoxide	CO	100	35	35	200	50 ppm
Hydrogen Sulfide	H <sub>2</sub> S	15	10	10	20	10 ppm
Sulfur Dioxide	SO <sub>2</sub>	5	2	2	10	5 ppm
Nitric Oxide	NO	25	25	25	50	25 ppm
Nitrogen Dioxide	NO <sub>2</sub>	1	1	1	10	5 ppm
Chlorine	Cl <sub>2</sub>	1	0.5	0.5	5	10 ppm
Hydrogen Cyanide	HCN	4.7	4.7	4.7	50	10 ppm
Ammonia	$NH_3$	35	25	25	50	50 ppm
Phosphine	PH <sub>3</sub>	1	0.3	1	2	5 ppm

\*User programmable

#### **CALL GEOTECH TODAY (800) 833-7958**

Geotech Environmental Equipment, Inc. 2650 East 40th Avenue • Denver, Colorado 80205 (303) 320-4764 • (800) 833-7958 • FAX (303) 322-7242 email: sales@geotechenv.com website: www.geotechenv.com