MultiRAE
Wireless portable six-gas monitor with advanced VOC detection capability

The MultiRAE is the most advanced portable chemical detector on the market. The MultiRAE delivers the broadest PID sensor range in its class and the versatility to support 25 intelligent interchangeable sensor options (such as PID, NDIR for combustibles and CO₂, ammonia, chlorine, formaldehyde, and phosphine) to fully meet the monitoring needs in a variety of applications, including industrial hygiene, personal protection, leak detection, and HazMat response.

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

Applications
- Industrial hygiene, personal protection, and leak detection in industries such as:
  - Aviation (wingtankentry)
  - Chemical
  - Environmental
  - Oil and gas
  - Pharmaceutical
  - Shipping/marine
- HazMat response
- Clandestine drug labs
- Highly versatile and customizable
- Best PID in its class (0 to 5,000 ppm range, 0.1 ppm resolution)
- Man Down Alarm with real-time remote wireless notification
- Compliant with MIL-SPEC-810G performance standard
- Fully automatic bump testing and calibration with AutoRAE 2

FEATURES & BENEFITS

- Wireless access to real-time instrument readings and alarm status from any location
- Unmistakable five-way local and remote wireless notification of alarm conditions, including Man Down Alarm
- Intelligent sensors store calibration data, so they can be swapped in the field
- Extensive on-board gas libraries (190 VOCs and 55 combustible gases)
- Largest display in its class
- Continuous datalogging (6 months for 5 sensors, 24x7)
- Device Management with Honeywell SafetySuite
MultiRAE Specifications

**INSTRUMENT SPECIFICATIONS**

**SIZE**
7.6” H x 3.8” W x 2.6” D (193 x 96.5 x 66 mm)

**WEIGHT**
31 oz (880 g)

**SENSORS**
25 intelligent interchangeable field-replaceable sensors including PID for VOCs, electrochemical sensors for toxic gases and oxygen, combustible LEL and NDIR sensors, and CO, NDIR sensor.

**BATTERY OPTIONS, RUNTME**
- Rechargeable Li-Ion (~12-hr runtime, ~6-hr recharge time)
- Extended duration Li-Ion (~18-hr runtime, ~9-hr recharge time)

**RECHARGE TIME**
- Alkaline adapter with 4 x AA batteries (~6-hr runtime)

**DISPLAY**
- Real-time reading of gas concentrations; PID measurement and gas correction factor; Man Down Alarm on/off; visual compliance indicator, battery status, datalogging on/off, wireless on/off and reception quality.
- STEL, TWA, peak, and minimum values

**KEYPAD BUTTONS**
3 operation and programming keys (Mode, Y/+, and N/-)

**SAMPLING**
Built-in pump. Average flow rate: 250 cc/min. Auto shut-off in low-flow conditions

**CALIBRATION**
Automatic with AutoRAE 2 Test and Calibration System or manual

**ALARMS**
Wireless remote alarm notification; audible (95 dB @ 30 cm), vibration, visible (flashing bright red LED), and on-screen indication of alarm conditions.
- Man Down Alarm with pre-alarm and real-time remote wireless notification

**DATALOGGING**
Continuous datalogging (6 months for 5 sensors at 1-minute intervals, 24/7)

**COMMUNICATION AND DATA DOWNLOAD**
- Data download and instrument set-up and upgrades on PC via desktop charging and PC communication
- Man Down Alarm with pre-alarm and real-time remote wireless notification

**WIRELESS NETWORK**
ProRAE Guardian Real-Time Wireless Safety System or EchoView Host-based Closed-Loop System

**WIRELESS RANGE (TYPICAL)**
- MultiRAE to WiFi Access Point ~330 feet (100 meters)
- MultiRAE to EchoView Host, RAEMesh Reader or RAEPoint ~660 feet (200 meters)
- MultiRAE to RAELink3 [Z1] Mesh modem ~330 feet (100 meters)

**OPERATING TEMPERATURE**
- -4° to 122°F (-20° to 50°C)

**HUMIDITY**
0% to 95% relative humidity (non-condensing)

**DUST AND WATER RESISTANCE**
IP 65 ingress protection rating (dust-tight and waterproof against hosing jets coming from all directions)

**SAFETY CERTIFICATIONS**
- Class I, Division 1, Groups A, B, C, and D, T4
- ATEX: Ex ia d IIC T4 Ga
- IECEx/ANZEx: Ex ia IIC T4 Ga
- IECEx: Ex ia IIC T4 Ga

**EMC/RFI PERFORMANCE TESTS**
MIL-STD:810G and 461F compliant. LEI CSA C22.2 No. 152; ISA-12.13.01

**LANGUAGES**
Arabic, Chinese, Czech, Danish, Dutch, English, French, German, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, and Turkish

**WARRANTY**
- Four years on LEL sensors
- Three years on CO and H2S sensors
- Two years on non-consuming components and catalytic LEL sensors
- One year on all other sensors, pump, battery, and other consumable parts

**WIRELESS FREQUENCY**
- 802.11 b/g/n

**WIRELESS APPROVALS**
- 802.11 b/g/n
- Wi-Fi (IEEE 802.11)
- Bluetooth (IEEE 802.15.4)

**RADIO MODULE**
Supports Z-Wave

**ORDERING INFORMATION**
- Wireless and non-wireless configurations are available
- Refer to the Portables Pricing Guide for part numbers for monitors, accessories, sampling and calibration kits, gas, sensors, and replacement parts

**SPECTRUM**
- VOC 10.6 EV (EXT. RANGE) 0 to 5,000 ppm 0.1 ppm
- COMBUSTIBLE SENSORS
  - CARBON MONOXIDE (CO) 0 to 250 ppm 0.5 ppm
  - ETHYLENE OXIDE (ETO-A) 0 to 10 ppm 0.1 ppm
  - ETHYLENE OXIDE (ETO-B) 0 to 100 ppm 1 ppm
  - HYDROGEN SULFIDE (H2S) 0 to 500 ppm 0.1 ppm
  - PHOSPHINE (PH3) 0 to 100 ppm 0.1 ppm
  - CHLORINE (CL2) 0 to 5 ppm 0.1 ppm
  - CHLORINE DIOXIDE (CLO2) 0 to 1 ppm 0.03 ppm
  - AMMONIA (NH3) 0 to 100 ppm 1 ppm
  - CARBON MONOXIDE (CO) 0 to 250 ppm 0.5 ppm
  - ETHYLENE OXIDE (ETO-A) 0 to 100 ppm 0.5 ppm
  - ETHYLENE OXIDE (ETO-B) 0 to 100 ppm 0.1 ppm
  - HYDROGEN SULFIDE (H2S) 0 to 500 ppm 0.1 ppm
  - METHYL MERCAPTAN (CH3-SH) 0 to 10 ppm 0.1 ppm
  - NITRIC OXIDE (NO) 0 to 250 ppm 0.5 ppm
  - NITROGEN DIOXIDE (NO2) 0 to 20 ppm 0.1 ppm
  - OXYGEN (O2) 0 to 300 Vol. 0.1 Vol.
  - OXYGEN (LIR O2) 0 to 300 Vol. 0.1 Vol.
  - PHOSPHINE (PH3) 0 to 20 ppm 0.1 ppm
  - PHOSPHINE (PH3) 0 to 100 ppm 1 ppm
  - SULFUR DIOXIDE (SO2) 0 to 20 ppm 0.1 ppm

**SPECIFICATIONS**
- Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.
- RAE Systems recommends calibrating sensors on installation.
- A two-gas combination sensor is required for a 6-gas configuration.
- Specifications may be subject to change.
- Contact RAE Systems for country specific wireless approvals and certifications.

**For more information**
www.honeywelanalytics.com
www.raeystems.com

**Europe, Middle East, Africa**
Life Safety Distribution GmbH
Tel: 00800 333 222 44 (Freephone number)
Tel: +41 44 943 4380 (Alternative number)
Middle East Tel: +971 4 450 5800 (Fixed Gas Detection)
gasdetection@honeywell.com

**Americas**
Honeywell Analytics Distribution Inc.
Tel: +1 847 955 8200
Toll free: +1 800 538 0363
detectgas@honeywell.com
Honeywell RAE Systems
Phone: +1 408 952 8200
Toll Free: +1 888 723 4800

catalystgas@honeywell.com

**Asia Pacific**
Honeywell Analytics Asia Pacific
Tel: +82 (0) 2 6909 0300
India Tel: +91 124 4752700
China Tel: +86 10 5885 8788-3000
analytics.ap@honeywell.com

datasheet MultiRAE DS-1070-11 US-EN

Device Management with Honeywell SafetySuite

http://www.honeywelanalytics.com/SafetySuite