QRAE3

Wireless 4-Gas Monitor

QRAE 3 is a wireless compact monitor for one to four gases. The QRAE 3 provides detection and monitoring of Oxygen (O_2), Combustibles, and toxic gases that include Hydrogen Sulfide (H_2S), Carbon Monoxide (CO), Sulfur Dioxide (SO_2) and Hydrogen Cyanide (HCN). QRAE 3 can deliver wireless real-time instrument readings and alarm status 24/7. This provides better incident visibility and can improve response time.
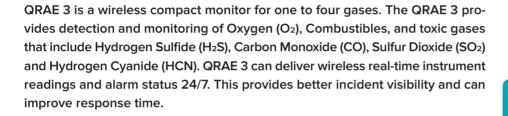
- Man Down Alarm with real-time remote wireless notification[1]
- Easy maintenance with fieldreplaceable sensors and pump
- Fully automated bump testing and calibration with AutoRAE 2
- Pumped or diffusion models available
- Large graphic display can rotate 180°

APPLICATIONS

- Confined space entry and general safety and compliance in:
- Industrial safety
- Oil and gas
- Fireground "Toxic Twins" detection
- Environmental
- Fire and Emergency response

RANGE OF GASES DETECTED

Gas Monitor	Range	Resolution
Oxygen	0 to 30%	0.1
Combustible	0 to 100 % LEL	1% LEL
Carbon Monoxide	0 to 500 ppm	1 ppm
Hydrogen Sulphide	0 to 100 ppm	0.1 ppm
Sulphur Dioxide	0 to 20 ppm	0.1 ppm
Hydrogen Cyanide	0 to 50 ppm	0.5 ppm

KEY FEATURES

- **Available in Diffusion or Pumped version**
- **IP-65/67 water- and dust-resistant case**
- **Strong, protective, concussion-proof design**
- **Real-time gas concentration readings and alarm status enabled by state-of-the-art wireless technology**
- **Unmistakable five-way local and remote wireless notification of alarm conditions**
- **Large graphical display icon-driven user interface through intuitive, simple-to-operate two-button user interface.**
- **Multi-language support: 17 languages encoded**
- **Easy access to pump, sensors, filter and battery compartment**

1 Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.
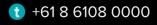
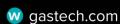2 Against factory defects.

3 Receiving >80%

SPECIFICATIONS   Specifications subject to change without notice

Size	Diffusion: 5.5" H x 3.2" W x 1.5" W (140 mm x 82 mm x 42 mm) Pumped: 5.7" H x 3.2" W x 1.7" D (145 mm x 82 mm x 42 mm)	**Datalogging**	• Continuous datalogging (3 months for 4 sensors at 1-minute intervals, 24/7) • User-configurable datalogging intervals (from 1 to 3,600 seconds)
Weight	Diffusion: 12.9 oz (365 g with Li-ion battery and clip) Pumped: 14.5 oz (410 g with Li-ion battery, clip, and external filter)	**Communication & Data Download**	• Data download and instrument set-up and upgrades on PC via Travel Charger • Wireless data and status transmission via built-in RF modem (optional)
Sensors	Up to four field-replaceable sensors: LEL: Catalytic bead for combustibles (built-in Correction Factor library) Oxygen: Liquid electrolyte O_2 Toxic: electrochemical for H_2S, CO, SO_2, HCN	**Wireless Network**	Mesh RAE Systems Dedicated Wireless Network
Battery	Rechargeable Li-ion	**Wireless Frequency**	ISM license-free bands, 868MHz or 900MHz
Running time	• 14 hours continuous non-wireless, diffusion • 11 hours continuous non- wireless, pumped • 10 hours continuous with wireless, diffusion • 8 hours continuous with wireless, pumped Note: All battery specifications at 68° F (20° C); lower temperatures and alarm conditions will affect runtime.	**Wireless Range (Typical)**	EchoView Host: LOS > 650 ft (200 m)[3], ProRAE Guardian & RAEMesh Reader: LOS > 650 ft (200 m)[3], ProRAE Guardian & RAELink3 Mesh: LOS > 30 ft (10 m)[3]
		EM Immunity	EMI and ESD test: 100MHz to 1GHz 30V/m, no alarm, Contact: ±4kV, Air: ±8kV, no alarm
Display Graphic	Monochrome graphic display (128 x 80), Display size: 1.57" W x 1.06" H (40 x 27 mm) with backlighting, Automatic or on-demand screen rotation	**IP Rating**	Pumped: IP-65, Diffusion: IP-67
		Calibration	Two-point calibration for zero and span (manual, or automatic with AutoRAE 2)
Keypad	Two-button operation	**Sampling Pump**	Built-in pump or diffusion, Can sample through tubing up to 98ft (30m)
Direct Readout	• Real-time reading of gas concentrations • Battery status • Pump status (if equipped with pump) • Wireless on/off and wireless reception quality • STEL, TWA, peak, and minimum values • Man Down and policy enforcement indicators	**Hazardous Area Approval**	US and Canada: classified for use in Class I, Division 1, Groups A, B, C and D, Europe: IECEx/ATEX (II 1G Ex ia IIC T4)
		Temperature	-4° to 122° F (-20° to 50° C) for T4 temperature code
		Humidity	0% to 95% relative humidity (non-condensing)
		Attachments	Stainless-steel alligator clip, Swivel belt clip (optional), Pouch (optional)
Alarms	• Multi-tone 95dB buzzer (at 11.8"/ 30 cm, typical), vibration alarm, and flashing red LEDs and on-screen indication of alarm conditions • Pump stall alarm (pumped version only) Alarms: latching, non latching or manual override • Additional diagnostic alarm and display message for low battery • Man Down Alarm with pre-alarm and real-time remote wireless notification	**Languages**	Arabic, Chinese, Czech, Dutch, English, French, German, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, and Swedish (language must be changed through ProRAE Studio II)
		Warranty	2-year warranty on device[2] 3-year warranty on LEL, O_2, CO, H_2S sensors[2] 1-year warranty on SO_2, HCN sensors[2]