

QRAE II

Multi-gas Detector Diffusion or Pump for O₂, Combustibles, H₂S or CO



Pump or diffusion models available

Cradle enables communications with PC and can charge both the monitor and a spare battery at the same time

Rugged housing

Large graphic display can be flipped 180° with a push of a button for convenient viewing from belt or hand

Rechargeable Lithium-ion battery pack provides up to 14 hours of continuous operation



SPE O₂™ sensor designed to meet RoHS directive

The QRAE II is a full-featured, compact, one- to four-sensor gas detector for oxygen, combustibles, hydrogen sulfide or carbon monoxide. Key features include easy-to-change battery pack, a water-resistant case and a new state-of-the-art O₂ sensor.

Key Features

- Patented SPE O₂™ Oxygen sensor unique features:
 - Lead-free design that complies with RoHS directive
 - Extended life compared to lead-type electrochemical oxygen sensors, resulting in low cost of ownership
 - Leak-free design, minimizing downtime
- Best EMI/RFI immunity technology for products in its class, minimizing electromagnetic and radio interference
- Easy access to pump, sensors, filter and battery compartment without exposing electronic components to potential damage
- IP-65 water- and dust-resistant case
- Strong, protective, concussion-proof design



Both diffusion and pump models are compatible with the AutoRAE Lite, Automated Test and Calibration Station.



QRAE II Pump being used for a confined space entry

Additional Advantages

- Plug-in sensors: oxygen, combustibles, hydrogen sulfide or carbon monoxide
- Intuitive simple-to-operate two-button user interface
- Display can be flipped 180° with the push of a button for easy viewing from belt or hand
- Multi-language support
- One-button calibration with auto-zero capability
- Loud 95dB (typical) audible alarm
- Bright, red flashing visible alarm
- Vibration alarm
- Interchangeable drop-in Lithium-ion or alkaline battery packs



IECEx

ATEX



CE



QRAE II

Specifications

Detector Specifications*

Size	Diffusion: 5" L x 2.8" W x 1.5" H (12.5cm x 7.2cm x 3.8cm) Pump: 5" L x 2.8" W x 2" H (12.5cm x 7.2cm x 5.0cm)
Weight	Diffusion: 9 oz (250 g) Pump: 12 oz (350 g)
Sensors	<ul style="list-style-type: none"> Catalytic bead for combustibles Oxygen: SPE O₂[™] (non-consumable Solid Polymer Electrolyte technology) Toxic: electrochemical for H₂S or CO
Battery	Interchangeable Lithium-ion or alkaline battery packs
Operating Period	Diffusion: Up to 14 hours continuous operation with Lithium-ion battery, up to 10 hours with alkaline battery (typical, without alarm) Pump: Up to 10 hours with Lithium-ion battery, up to 8 hours with alkaline battery
Display Graphic	4 lines, with LED automatic back light in dim light or alarm condition
Keypad	Two-button operation
Direct Readout	<ul style="list-style-type: none"> Instant reading from up to four sensors Oxygen as percentage by volume Combustible gas as percentage of lower explosive limit (LEL), scalable using correction factors Toxic gases in parts per million High and low values for all gases Battery and shutdown voltage Date, time, elapsed time, temperature
Alarms	<ul style="list-style-type: none"> 95dB buzzer (at 30 cm, typical), vibration alarm, and flashing red LED High: 3 beeps, vibration and flashes per second Low: 2 beeps, vibration and flashes per second STEL and TWA: 1 beep, vibration and flash per second Alarms: latching with manual override or automatic reset Additional diagnostic alarm and display message for low battery Pump stall alarm (QRAE II Pump only)
EMI/RFI	Highly resistant to EMI/RFI. Compliant with EMC directive 2004/108/EC additional +60 volts/meter
IP Rating	IP-65
Datalogging	Standard 12 days at one-minute intervals
Calibration	Two-point calibration for zero and span (manual, or automatic with the AutoRAE Lite)
Sampling Pump	Optional, internal pump 300 cc/min
Hazardous Area Approval	<ul style="list-style-type: none"> US and Canada: C₁us Cl, D1, Groups A, B, C, D, T4 Europe: ATEX II 2G EEx ia d IIc T4 IECEX: Ex ia d II C T4
Temperature	-4° to 113° F (-20° to 50° C) for T4 temperature code
Humidity	0% to 95% relative humidity (non-condensing)
Attachments	Stainless-steel alligator clip
Warranty	Full 2-year warranty, including all sensors

*Specifications are subject to change

Default Sensor Specifications*

Gas Monitor	Range	Resolution
Oxygen	0 to 30.0%	0.1%
Combustible	0 to 100% LEL	1% LEL
Carbon Monoxide	0 to 1000 ppm	1 ppm
Hydrogen Sulfide	0 to 100 ppm	0.1 ppm

*Consult RAE Systems for custom configurations

QRAE II Ordering Options

QRAE II Monitor Includes:

- Monitor as specified
- Sensors as specified
- Calibration adapter and internal filters (diffusion only)
- Quick reference guide
- User manual and ProRAE Studio Software Package for Windows® 2000, NT and XP on CD-ROM
- Alkaline adapter
- Water trap filter (pump only)
- Rechargeable versions additionally offer:
 - Charging/download cradle with computer interface cable
 - Universal adapter
 - Lithium-ion battery pack

Confined Space Entry Kit for Pump and Diffusion Models (CSK1) (CSK2)

- Hard transport case with pre-cut foam
- 6' (2 m) Tygon® tubing
- 10" (25cm) stiff aluminum sample probe with replaceable filter
- Constant-flow hand pump
- Tool Kit
- Three water trap filters
- CSK2 versions additionally offer:
 - Four-gas mix in a 34L cylinder (50% LEL, 18% O₂, 10 ppm H₂S, 50 ppm CO)
 - Calibration regulator and tubing

www.raesystems.com

0200 Q 1 } a a } a Q & A U A O I C A J I A O T I C A E D A I H F E

RAE Systems Inc.
 3775 North First Street
 San Jose, CA 95134 USA
 raesales@raesystems.com
 USA/Canada 1-877-723-2878
 Europe/Russia +45 8652 5155
 Middle East/Australia +971 4 3639 427
 China +86 10 58858788
 Asia +852 2669 0828

