



ToxiRAE II

Personal Gas Monitor

A full-featured instrument for the price of a disposable

The ToxiRAE II single-gas monitor continuously displays toxic gas concentrations and costs just a little more than disposable detectors. Unlike typical disposables that only display remaining life, the ToxiRAE II is a full-featured gas monitor providing continuous, digital display of the gas concentration, STEL, TWA and peak values as well as high, low, TWA and STEL alarms.

A simple-to-use one-button product, the ToxiRAE II is easy to calibrate. Use the preset alarms or modify the alarms to meet your specific requirements.

In contrast to disposables that are turned on once and remain on until their batteries expire, you decide when and where to use your ToxiRAE II, and you turn it on and off accordingly.

The ToxiRAE II does not have a pre-programmed expiration date, so you get the full life out of the battery and sensor. Its sensor and battery are easily replaced in the field. And because the cost of the ToxiRAE II is about the same as many reduced-feature disposables, you have the choice of renewing it or disposing of it and starting with a fresh, new monitor.

Key Features

- IP Rating: IP 65*
- Field-replaceable filter, battery
- Field-replaceable sensor in Europe and Asia only
- Highly resistant to EMI/RFI. Compliant with EMC Directive 89/336/EEC, +60 volts/meter
- Sensors available: H₂S, CO, O₂, NH₃, Cl₂, ClO₂, HCN, NO, NO₂, PH₃, SO₂
- Stainless-steel corrosion-resistant alligator clip



Actual Size

Applications

- Oil production
- Contractors
- Scheduled plant maintenance turnarounds
- Chemical plants
- Fire service
- Industrial safety
- Pulp & paper
- Heavy industry
- Waste-water treatment plants
- Shipyards and maritime
- Landfill operations
- Trenches, silos, railcars
- Power plants
- Steel mills

More Key Features

- Large, easy-to-read continuous display of gas concentration in ppm
- Displays STEL, TWA, peak values, and alarm minutes used
- 2-year warranty
- User-adjustable High, Low, STEL and TWA alarms
- Varying audio alarm signals for different alarm conditions
- Bright red flashing alarm
- Loud, 90 dB buzzer
- Built-in vibration alarm
- Holds Peak values
- Simple calibration
- Durable, highly impact-resistant, carbon-loaded ABS housing
- Highly resistant to RF interference
- Hands-free use: clips onto a hardhat, shirt pocket, shoulder strap, or belt

* Expected

ver4_04.07

IECEX

ATEX



Specifications*

Detector Specifications

Size	3.6" x 1.9" x 0.9" (9.3 cm x 4.9 cm x 2.2 cm)
Weight	3.6 oz (102 g) with clip
Battery	User-replaceable 2/3 AA high-capacity Lithium battery (use only RAE Systems batteries). Extra battery included for use if maximum alarm minutes are exceeded.
Operating Period	2 years typical battery life for CO/H ₂ S/O ₂ sensors or 730 minutes of alarm. All other low- or high-bias sensor-equipped models, typical 1 year or 360 minutes of alarm.
Display	Easy-to-read LCD for continuous display of concentration in ppm and text messages
Keypad	One-button operation
Direct Readout	<ul style="list-style-type: none"> Instantaneous display of toxic gas concentration in ppm (or oxygen in vol %) STEL & TWA values Peak hold Alarm minutes consumed
Alarms	<ul style="list-style-type: none"> Audible: 90dB at 10 cm Visible: Bright red/green LED bar visible from top, front, and sides Sensory: Built-in vibration alarm High: Displays "High," emits 3 beeps and flashes every 3 seconds Low: Displays "Low," 2 beeps and flash every 3 seconds STEL: Displays "STEL," 1 beep and flash every 3 seconds TWA: Displays "TWA," 1 beep and flash every 3 seconds Low battery: Displays empty battery symbol, 1 beep per minute
Calibration	Two-point field calibration; auto-zero at startup, user-initiated span/standard reference gas
Temperature	-40° to 131° F (-40° to 55° C) for O ₂ , CO, and H ₂ S. Other toxic sensors are similar; for specific temperature ranges for other sensors, please reference RAE Systems Tech Note TN-114
Humidity	0 to 95% relative humidity (non-condensing)
EMI/RFI	Highly resistant to EMI/RFI. Compliant with EMC Directive 89/336/EEC
IP Rating	IP-65: protected against dust, protected against low-pressure jets of water from all directions
Hazardous Area Approval	<ul style="list-style-type: none"> UL/cUL Classified as Intrinsically Safe for use in Class I Division 1, Groups A, B, C, D Hazardous Locations T5 rating (UL/cUL, ATEX) ATEX, II 1G, EEx ia IIB T5, or II 2G, EEx ia IIC T5 CE Mark, European Conformity IECEX Ex ia IIC T4
Attachments	Wrist strap, stainless steel alligator clip (installed), stainless steel belt clip/hardhat adapter
Warranty	2-year warranty for instruments with CO/H ₂ S/O ₂ sensors (all other sensors have 1-year warranty)

*Specifications are subject to change

Default Sensor Settings

Gas	Range (ppm)	Resolution (ppm)
Ammonia (NH ₃)	0 to 50	1
Carbon Monoxide (CO)	0 to 500	1
Carbon Monoxide (CO)	0 to 1999	10
Chlorine (Cl ₂)	0 to 10	0.1
Chlorine Dioxide (ClO ₂)	0 to 1	0.01
Hydrogen Cyanide (HCN)	0 to 100	1
Hydrogen Sulfide (H ₂ S)	0 to 100	1
Nitric Oxide (NO)	0 to 250	1
Nitrogen Dioxide (NO ₂)	0 to 20	0.1
Oxygen (O ₂)	0 to 30%	0.1%
Phosphine (PH ₃)	0 to 5	0.01
Sulfur Dioxide (SO ₂)	0 to 20	0.1

Sensors are not interchangeable.

ToxiRAE II Monitor includes:

- ToxiRAE II detector with sensor as specified
- Operation and maintenance manual
- Rugged stainless-steel alligator clip (installed)
- Stainless-steel belt clip / hardhat adapter
- Wrist strap
- Calibration gas test adapter
- High-capacity Lithium battery installed

Optional Accessories

Protective rubber





Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.