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. Sensors 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

- Large, easy-to-read continuous display of gas concentration in ppm
- Displays STEL, TWA, Peak values, and alarm minutes used
- Sensors available: H_2S, CO, O_2, NH_3, Cl_2, ClO_2, HCN, NO, NO_2, PH_3, SO_2

Cost effective
- Field-replaceable battery and sensor
- 2-year warranty

You are in control
- You turn it on and off
- 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

Actual Size

Designed for tough environments
- Durable, highly impact-resistant, carbon-loaded ABS housing
- Highly resistant to RF interference
- IP-55 rated weather resistant
- Stainless-steel corrosion-resistant attachments

Hands-free use
- Small enough to be clipped onto a hardhat, shirt pocket, shoulder strap, or belt

Applications
- Refineries
- 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

ATEX   c(UL)us CLASSIFIED   CE   ISO 9001 CERTIFIED

RAE SYSTEMS

*Specifications**

Default Sensor Settings

Gas	Range (ppm)	Resolution (ppm)
Ammonia (NH_3)	0-50	1
Carbon Monoxide (CO)	0-500	1
Carbon Monoxide (CO)	0-1999	10
Chlorine (Cl_2)	0-10	0.1
Chlorine Dioxide (ClO_2)	0-1	0.01
Hydrogen Cyanide (HCN)	0-100	1
Hydrogen Sulfide (H_2S)	0-100	1
Nitric Oxide (NO)	0-250	1
Nitrogen Dioxide (NO_2)	0-20	0.1
Oxygen (O_2)	0-30%	0.1%
Phosphine (PH_3)	0-5	0.01
Sulfur Dioxide (SO_2)	0-20	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

Accessories

• Protective rubber boot

Detector Specifications

Size	3.6" (9.3 cm) x 1.9" (4.9 cm) x 0.9" (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)
Operating Period	Typical battery life is 2 years or 730 minutes of alarm for CO and H_2S sensors One year typical life or 360 minutes of alarm for all other sensors
Display	Easy-to-read LCD for continuous display of concentration in ppm and text messages
Keypad	One-button operation
Direct Readout	• Instantaneous display of toxic gas concentration in ppm (or oxygen in vol %) • STEL & TWA values • Peak hold • Alarm minutes consumed
Alarms	• Audible: 90dB at 10 cm • Visual: 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	-4° to 114°F (-20° to 45°C) for O_2, CO, and H_2S. Other toxic sensors are similar; for specific temperature ranges for other sensors, please reference RAE Systems Tech Note 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-55: protected against dust, protected against low-pressure jets of water from all directions
Hazardous Area Approval	UL/cUL Classified as Intrinsically Safe for use in Class 1, Division 1, Groups A, B, C, D, Hazardous Locations T6 rating, ATEX, II 1G, EEx ia IIB T6, II 2G, EEx ia IIC T6, CE Mark, European Conformity (Conformite Europene)
Attachments	Wrist strap, stainless steel alligator clip (installed), stainless steel belt clip/hardhat adapter
Warranty	2 years for instrument and CO, O_2 and H_2S sensors 1 year for instrument, battery and all other sensors

*Ongoing projects to enhance our products mean that these specifications are subject to change.

D I S T R I B U T E D   B Y :

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