Honeywell

RAE ®
SYSTEMS

ToxiRAE Pro

Personal Wireless Monitor for Toxic Gases
and Oxygen

The ToxiRAE Pro is the world's first wireless personal monitor for toxic gases and oxygen[1]. The ToxiRAE Pro can detect a broad range of gases—from carbon monoxide, hydrogen sulfide, and oxygen to ammonia, chlorine, and formaldehyde[2]. The ToxiRAE Pro provides safety professionals wireless remote access to real-time instrument readings and alarm status for better visibility and faster incident response. The ToxiRAE Pro's intelligent interchangeable sensors store calibration data, which allows users to monitor for one gas one day and another gas the next, by simply swapping the sensors in the ToxiRAE Pro[3].

• Wireless elevates safety to the next level

• Over 20 intelligent interchangeable sensor options to cover a wide variety of gases

• Man Down Alarm with real-time remote wireless notification

• Easy to maintain with replaceable sensor, filter, and Li-ion battery

• Fully-automatic bump testing and calibration with AutoRAE 2[2]

Applications

• Agriculture

• Chemical

• Fire service / HazMat

• Food and beverage

• Oil and gas

• Pharmaceutical

• Pulp and paper

• Steel manufacturing

• Water and wastewater industries

Optional Accessories

• AutoRAE 2 Automatic Test and Calibration System

• Multi-unit charging station for up to five monitors

ToxiRAE Pro Comes With:

• ToxiRAE Pro monitor with sensor as specified, alligator clip, protective rubber boot, and rechargeable battery installed

• Charging and PC communication cradle

• PC communication cable

• AC adapter (100 to 240 V, 50/60 Hz AC to 12 V DC)

• Calibration adapters

• Quick Start Guide

• CD with documentation

• Calibration card, quality certificate, and warranty/registration card

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

• Intelligent sensors store calibration data, so they can be swapped in the field

• Most electrochemical sensors are shared with MultiRAE family instruments

• Largest display in its class

• Continuous datalogging

• Easy to use

• Reliable, rugged, and intrinsically safe

• Device Management with Honeywell SafetySuite

ToxiRAE Pro Specifications

INSTRUMENT SPECIFICATIONS	
SIZE	4.6" H x 2.4" W x 1.2" D (118 x 60 x 30 mm)
WEIGHT	7.76 oz. (220 g)
SENSORS	Over 20 intelligent interchangeable field-replaceable electrochemical sensors
BATTERY	Rechargeable Li-ion battery - Operating time: > 30 hours (normal operation, non-wireless) - Recharge time: < 4 hours through charging cradle
DISPLAY	Graphical LCD display with white LED backlighting (activated when monitor is in alarm or with a button press)
DISPLAY READOUT	- Real-time reading of gas concentrations in parts per million (ppm) or mg/m^3; battery status; data logging on/off; wireless on/off and reception quality - STEL, TWA, and peak values
KEYPAD	2 buttons for operation and programming
SAMPLING	Diffusion
CALIBRATION	Automatic with AutoRAE 2 Test and Calibration System[2] or manual
ALARM MODES	- Wireless remote alarm notification; audible (95 dB @ 30 cm), vibration, visible alarm (flashing bright red LEDs), and on-screen indication of alarm conditions. - Man Down Alarm with pre-alarm and real-time remote wireless notification
DATALOGGING	Continuous datalogging with a three-month capacity (at one-minute intervals) - User-configurable datalogging interval (from 1 to 3,600 seconds)
COMMUNICATION AND DATA DOWNLOAD	- Data download and instrument set-up on PC via charging and PC comm. cradle - Data download via AutoRAE 2 Automatic Test and Calibration System - Wireless data and status transmission[1] via built-in RF modem (optional)
WIRELESS NETWORK	ProRAE Guardian Real-Time Wireless Safety System or Closed Loop Network with the EchoView Host
WIRELESS RANGE (TYPICAL)	ToxiRAE Pro to Mesh Router, EchoView Host, or Mesh Reader[2] ~ 660 feet (200 meters) ToxiRAE Pro to RAELink3 Mesh or RAELink3 Z1 Mesh modems ~ 330 feet (100 meters)
OPERATING TEMPERATURE	-4° to 131°F (-20° to 55°C)
HUMIDITY	0% to 95% relative humidity (non-condensing)
DUST AND WATER RESISTANCE	IP-65 rating for dust and water ingress protection (validated by an independent test laboratory)
SAFETY CERTIFICATIONS	CSA: ⓢ Class I, Division 1, Groups A, B, C and D. T-code T4 Class I, Zone 0 A/Exia IIC T4 ATEX: CE ⟨Ex⟩, II 1G, Ex ia IIC Ga T4 IECEx: Ex ia IIC Ga T4 China Ex: Ex ia IIC T4
EMC/RFI	EMC directive: 2004/108/EC
WARRANTY	- Four years on O$_2$ sensor - Three years on H$_2$S and CO sensors - Two years on non-consumable components - One year on all other sensors, battery, and other consumable parts
WIRELESS FREQUENCY	ISM license-free band. IEEE 802.15.4 Sub 1GHz
WIRELESS APPROVALS	FCC Part 15, CE R&TTE, Others[4]
RADIO MODULE	Supports RM900

SENSOR SPECIFICATIONS	RANGE	RESOLUTION
AMMONIA (NH$_3$)	0 to 100 ppm	1 ppm
CARBON MONOXIDE (CO) CARBON MONOXIDE (CO), EXT. RANGE CARBON MONOXIDE (CO), H$_2$-COMP.	0 to 500 ppm 0 to 2,000 ppm 0 to 2,000 ppm	1 ppm 10 ppm 10 ppm
CHLORINE (Cl$_2$)	0 to 50 ppm	0.1 ppm
CHLORINE DIOXIDE (ClO$_2$)	0 to 1 ppm	0.03 ppm
ETHYLENE OXIDE (ETO-A) ETHYLENE OXIDE (ETO-B) ETHYLENE OXIDE (ETO-C), EXT. RANGE	0 to 100 ppm 0 to 10 ppm 0 to 500 ppm	1 ppm 0.1 ppm 10 ppm
FORMALDEHYDE (HCHO)	0 to 10 ppm	0.05 ppm
HYDROGEN (H$_2$)	0 to 1,000 ppm	10ppm
HYDROGEN CYANIDE (HCN)	0 to 50 ppm	0.5 ppm
HYDROGEN SULFIDE (H$_2$S) HYDROGEN SULFIDE (H$_2$S), EXT. RANGE	0 to 100 ppm 0 to 1,000 ppm	0.1 ppm 1 ppm
METHYL MERCAPTAN (CH$_3$-SH)	0 to 10 ppm	0.1 ppm
NITRIC OXIDE (NO)	0 to 250 ppm	0.5 ppm
NITROGEN DIOXIDE (NO$_2$)	0 to 20 ppm	0.1 ppm
OXYGEN (O$_2$)	0 to 30% Vol.	0.1% Vol.
PHOSPHINE (PH$_3$)	0 to 20 ppm	0.1 ppm
SULFUR DIOXIDE (SO$_2$)	0 to 20 ppm	0.1 ppm

1 Wireless units have a functioning RF modem and are ready for wireless deployments; non-wireless units cannot be upgraded to wireless. Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission.

2 Contact Honeywell RAE Systems for availability.

3 Honeywell RAE Systems recommends calibrating sensors on installation.

4 Contact Honeywell RAE Systems for country-specific wireless approvals and certificates. Specifications are subject to change.

Ordering Information
(Model: PGM-1860)

• Wireless or non-wireless versions are available[1]
• Refer to the Portables Pricing Guide for part numbers for monitors, accessories, maintenance kits, gas, sensors, and replacement parts

For more information
www.honeywellanalytics.com. www.raesystems.com

Device Management with
Honeywell SafetySuite

honeywellanalytics.com/SafetySuite

Honeywell