



## **AreaRAE Plus**

Multiple gas threats. One easy-to-use transportable area detector.

# AreaRAE Plus

Visibility on more threats than ever – all in one flexible area detector with remote monitoring

AreaRAE Plus is a wireless, transportable area monitor that can simultaneously detect toxic and combustible gases, volatile organic chemicals, and meteorological factors that affect the speed and direction of the gas.

Whether you need to protect your community by monitoring a fence line, protect your employees during a maintenance turnaround, or protect your fire and hazmat team during emergency response, the AreaRAE Plus alerts you to threats with local audible and visual alarms. Plus, it works with Honeywell's remote monitoring software to give you a real-time view of threat readings from a safe location.

AreaRAE Plus delivers flexibility for your changing requirements:

- **Up to six 4R+ sensors for toxic and combustible gas.**

Choose from a mix of up to 20 sensors based on your needs and switch them out whenever your needs change.

- **7R+ photoionization detector.**

Monitor VOCs in parts per million, with built-in compensation for temperature and humidity.

- **Optional meteorological sensor for tracking toxic plumes.**

Honeywell's compact RAEMet sensor sits at the top of the AreaRAE Plus and measures wind speed, wind direction, temperature and humidity. This information is then modeled in Honeywell's real time monitoring software which integrates the ALOHA hazard monitoring program.



## Applications

- Industrial emergency response teams
- Maintenance turnarounds / Shutdowns
- Fence line monitoring
- Clearing a confined space for entry
- Wastewater pipeline rehabilitation
- Site remediation
- Fumigation, excavation and other environmental liabilities

## Ease & Flexibility

- Available in Rapid Deployment Kit for quick threat assessment
- User-friendly interface; turn it on and go
- Flexible power options for short and long-term deployments
- Easy to hear and see, with 108-decibel alarm
- Easy USB connection to configuration software
- Built-in Mesh modem for short range communication with RAE Systems wireless portable detectors.

## Remote Visibility on Threats

- Delivers real-time readings to Honeywell's remote monitoring software, so you can instantly determine the location and severity of a threat
- Map-based display is accessible from any computer with an internet connection – or from our laptop as a turnkey host
- Enables coordination and data sharing in joint operations

## Specifications

DIMENSIONS	314 x 306 x 166 mm (with rubber boot) 12.36" x 12.04" x 6.53" (with rubber boot)
WEIGHT	6.3 kg (13.88 lb) full option configuration 6.5 kg (14.33 lb) full option configuration (+RAEMet)
GAS SENSORS SLOTS	up to 7; see Sensor list
ADDITIONAL SENSOR	RAEMet (Wind Speed, Wind Direction, Temperature & Humidity)
GPS	Standard equipment in every unit
BATTERY	Rechargeable 7.2 V / 10 Ah Li-ion battery pack with built-in charger
OPERATING HOURS	~16 hours with wireless connectivity on Li-ion battery pack Specification at room temperature (20°C)
POWER INPUT	12VDC ±2A
DISPLAY	Large 240 x 320 pixel LCD backlit display 64 x 85 mm / 2.5" x 3.33"
KEYPADS	3 operation and programming keys
ALARMS	Multi-tone 108dB buzzer @ 3.3 ft / 1 m, Bright LED 360 degree view and on-screen indication of alarm conditions Additional diagnostic alarm and display message for low battery Wireless connectivity alarm
DATA LOGGING	Continuous data logging (90 days for 7 gas sensors, 1 Gamma sensor, 1 RAEMet (wind speed & direction, temp and RH), and GPS at 1 min intervals, 24/7)
DATA STORAGE	24M bytes (memory full action: stop when full or Wrap around)
DATA INTERVAL	User-configurable from 1 to 3,600 sec
WIRELESS <sup>1</sup>	Standard Bluetooth Low Energy module (BT4.0) and GPS Primary radio module: - Long range ISM License Free 900MHz or 2.4GHz radio - IEEE 802.11 b/g Wi-Fi Secondary radio module: Short range IEEE 802.15.4 900MHz or 868MHz Mesh Radio Wireless range <sup>2</sup> : Up to 2 miles (3 km) for ISM 900 MHz; Up to 1.2 miles (2 km) for ISM 2.4GHz; Up to 330 ft (100m) for Wi-Fi; Up to 650 ft (200m) for Mesh secondary radio; Up to 15 ft (5m) for BLE. Wireless Approval: FCC Part 15, CE R&TTE, Others <sup>4</sup>
COMMUNICATION	Communicates to ProRAE Studio II via USB cable to PC; Wireless data and alarm status transmission via Wi-Fi or ISM modem; Act as gateway to connect up to 8 remote instruments (using secondary radio module)
SAFETY CERTIFICATION	Class 1, Division 2 Groups A, B, C, D
SAMPLING PUMP	Built-in pump, typical flow rate 450 cc/min
TEMPERATURE	-20 °C to +50 °C / (-4 °F to +122 °F)
HUMIDITY	0% to 95% relative humidity (non-condensing)
INGRESS PROTECTION (IP)	IP 65
PERFORMANCE TESTS	MIL-STD-810G and 461F LEL CSA C2.2No. 152, ISA-12.13.01
WARRANTY <sup>2</sup>	Two years on non-consumable components and catalytic LEL, CO, H <sub>2</sub> S, and O <sub>2</sub> sensors Six months for 9.8 eV lamp PID sensor One year on all other sensors, battery, and other consumable parts Two years for 10.6eV 7R+ PID Lamp

RAEMet SPECIFICATIONS (Optional)	
WIND SPEED	Range: 0 to 20 m/s (0 to 44 mph) Start Speed: 0.1 m/s (0.22 mph)
WIND DIRECTION	Range: 360° (No dead band)
TEMPERATURE	-20 °C to 60 °C (-4 °F to 140 °F) Resolution 0.1 °C (1.8 °F)
HUMIDITY	10 to 95% RH Resolution 1% RH
COMPASS	Resolution 1°
POWER	Power supplied by the AreaRAE Plus

<sup>1</sup>Additional equipment and/or software licenses may be required to enable remote wireless monitoring and alarm transmission

<sup>2</sup>Against factory defects

<sup>3</sup>Receiving > 80%

<sup>4</sup>Contact RAE Systems for country specific wireless approvals and certificates

Specifications are subject to change

## Supported Sensors

SENSOR	RANGE	RESOLUTION
<b>PID SENSORS</b>		
7R+, 10.6 eV ppm	0 to 2,000 ppm	0.1 ppm
4R+, 9.8 eV	0 to 5,000 ppm	0.1 ppm
<b>COMBUSTIBLE SENSOR</b>		
CATALYTIC BEAD SENSOR	0 to 100% LEL	1% LEL
<b>ELECTROCHEMICAL SENSORS</b>		
AMMONIA (NH <sub>3</sub> )	0 to 100 ppm	1 ppm
CARBON MONOXIDE (CO)	0 to 500 ppm	1 ppm
CARBON MONOXIDE EXT. (CO HR)	0 to 2,000 ppm	10 ppm
CARBON MONOXIDE H <sub>2</sub> Comp (CO H <sub>2</sub> Comp)	0 to 2,000 ppm	10 ppm
CHLORINE (Cl <sub>2</sub> )	0 to 50 ppm	0.1 ppm
CHLORINE DIOXIDE (ClO <sub>2</sub> )	0 to 1 ppm	0.03 ppm
ETHYLENE OXIDE (ETO-A)	0 to 100 ppm	0.5 ppm
ETHYLENE OXIDE (ETO-B)	0 to 10 ppm	0.1 ppm
ETHYLENE OXIDE (ETO-C)	0 to 500 ppm	10 ppm
HYDROGEN (H <sub>2</sub> )	0 to 2,000 ppm	10 ppm
HYDROGEN CHLORIDE (HCl)*	0 to 30 ppm	1 ppm
HYDROGEN CYANIDE (HCN)	0 to 50 ppm	0.5 ppm
HYDROGEN FLUORIDE (HF)*	0.5 to 10 ppm	0.1 ppm
HYDROGEN SULFIDE (H <sub>2</sub> S)	0 to 100 ppm	0.1 ppm
HYDROGEN SULFIDE EXT. (H <sub>2</sub> S HR)	0 to 1,000 ppm	1 ppm
OXYGEN (O <sub>2</sub> )	0 to 30 %	0.10 %
SULFUR DIOXIDE (SO <sub>2</sub> )	0 to 20 ppm	0.1 ppm
NITRIC OXIDE (NO)	0 to 250 ppm	0.5 ppm
NITROGEN DIOXIDE (NO <sub>2</sub> )	0 to 20 ppm	0.1 ppm
PHOSPHINE (PH <sub>3</sub> )	0 to 20 ppm	0.1 ppm

\*Contact Honeywell for availability

# Honeywell Analytics Gas Detection

Honeywell Analytics is able to provide gas detection solutions to meet the requirements of all applications and industries.

Contact us in the following ways:

## HEADQUARTERS

### Europe, Middle East, Africa

Life Safety Distribution GmbH  
Javastrasse 2  
8604 Hegnau  
Switzerland  
Tel: +41 (0)44 943 4300  
Fax: +41 (0)44 943 4398  
gasdetection@honeywell.com  
Customer Service:  
Tel: 00800 333 222 44 (Freephone number)  
Tel: +41 44 943 4380 (Alternative number)  
Fax: 00800 333 222 55  
Middle East Tel: +971 4 450 5800 (Fixed Gas  
Detection)  
Middle East Tel: +971 4 450 5852 (Portable Gas  
Detection)

### Americas

RAE Systems by Honeywell  
3775 North First Street  
San Jose, CA 95134  
USA  
Tel: +1 877 723 2878

Honeywell Analytics Distribution Inc.  
405 Barclay Blvd.  
Lincolnshire, IL 60069  
USA  
Tel: +1 847 955 8200  
Toll free: +1 800 538 0363  
Fax: +1 847 955 8210  
detectgas@honeywell.com

### Asia Pacific

Honeywell Industrial Safety  
7F SangAm IT Tower,  
434, Worldcupbuk-ro, Mapo-gu,  
Seoul 03922  
Korea  
Tel: +82 (0) 2 6909 0300  
Fax: +82 (0) 2 2025 0328  
India Tel: +91 124 4752700  
China Tel: +86 10 5885 8788 3000  
analytics.ap@honeywell.com

[www.honeywellanalytics.com](http://www.honeywellanalytics.com)  
[www.raesystems.com](http://www.raesystems.com)

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