RAEGuard
Energy Storage Gas Detector

Accurate & Reliable | Flexible & Convenient

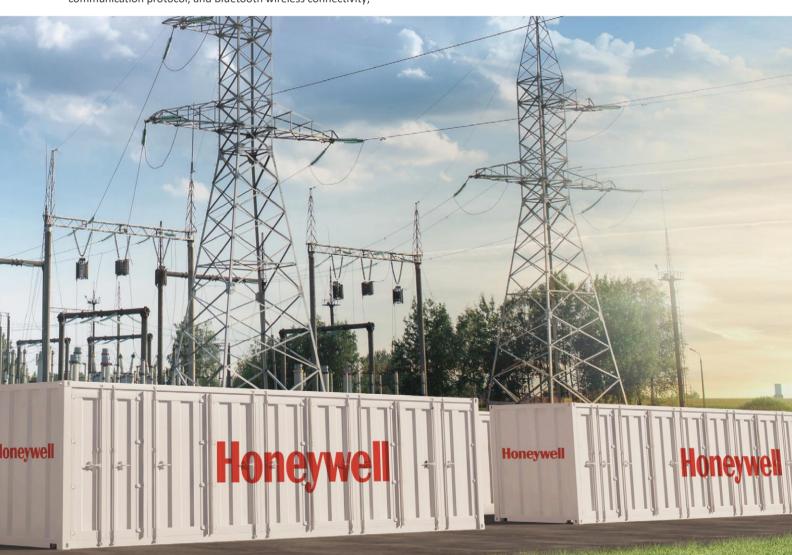## RAEGUARD Energy Storage Gas Detector

The RAEGuard Energy Storage Gas Detector (RG ESGD) is a fixed gas leak detector designed to meet the needs of gas leak detection in Battery Energy Storage Systems. Backed by over 50 years of expertise in gas detection, Honeywell delivers a flexible, reliable, fully certified, and user-friendly solution for energy storage customers.

Key Features

- **Accurate and Reliable Detection with Professional Industrial-Grade Sensors**
  Developed using extensive sensor expertise by dedicated R&D teams and rigorously validated through multiple design and testing iterations;

- **Designed for Harsh Energy Storage Environments**
  Features an IP65-rated enclosure, wide operating temperature range (-30°C to 60°C), and altitude capability up to 4000 meters;

- **Flexible Gas Detection Options and Comprehensive Output Configurations**
  Detects H_2 and CO with a standard RS-485 interface, Modbus RTU communication protocol, and Bluetooth wireless connectivity;

- **Extended Service Life with Minimal Maintenance**
  Includes a two-year warranty and a robust 10-year housing lifespan;

- **Compact Master-Slave Design for Space-Saving and Easy Installation**
  Space-saving design allows for side or top mounting without removing the cover;

- **Bluetooth and App Integration for Intelligent and Efficient Control**
  Provides real-time data monitoring and supports automated report generation.

Technical Specifications

Detector Parameters	Main Unit (H$_2$)	Slave Unit (CO)	Slave Unit (H$_2$)
Mechanical			
Dimensions	110mm x 110mm x 50 mm	Diameter: 60mm; Height: 50mm	Diameter: 60mm; Height: 45mm
Weight	350g	60g	60g
Housing Material	PC (Carbon Black)	PC (Carbon Black)	PC (Carbon Black)
Ingress Protection	IP65	IP65	IP65
Expected Lifespan	10 years (Sensor lifespan: 5 years)	10 years (Sensor lifespan: 5 years)	10 years (Sensor lifespan: 5 years)
Detectable Gases			
H$_2$	0 ~ 100% LEL (LEL = 4% v/v) Alarm threshold: 10% LEL (adjustable)	NA	0 ~ 100% LEL (LEL = 4% v/v) Alarm threshold: 10% LEL (adjustable)
CO	NA	50 ~ 1000ppm (Default: 300ppm) Alarm threshold: 30ppm (adjustable)	NA
Power Supply			
Nominal DC Input Voltage	24VDC (12 ~ 27VDC)	NA	NA
Outputs			
Relay Output	2 x Relays 1*5A@24VDC, 1*1A@24VDC	NA	NA
Digital Output	Modbus RTU	NA	NA
Max. Power			
With Gas Sensor Version	2.3W	0.6W	1.5W
No Gas Sensor Version	1W	NA	NA
Min. Power			
	1.51W	0.1 W	0.92W
Wiring			
Type	M16 Pluggable Circular Connector Plug Wire Gauge: 18 ~ 24 AWG	M16 Pluggable Circular Connector Plug Wire Gauge: 18 ~ 24 AWG	M16 Pluggable Circular Connector Plug Wire Gauge: 18 ~ 24 AWG
User Interface			
LED Indicators	Normal: Green flashing; Warning: Green and yellow alternately flashing; Fault: Yellow flashing; Suppression: Yellow solid; Alarm: Red flashing; Overrange Alarm: Red flashing rapidly; Bluetooth Pairing: Blue flashing; Bluetooth Connected: Blue solid; Initialization (Startup): Red, yellow, and green flashing in sequence, then yellow solid for approximately 1 minute;	Normal: Green flashing; Warning: Green and yellow alternately flashing; Fault: Yellow flashing; Suppression: Yellow solid; Alarm: Red flashing; Overrange Alarm: Red flashing rapidly; Initialization (Startup): Red, yellow, and green flashing in sequence, then yellow solid for approximately 1 minute;	Normal: Green flashing; Warning: Green and yellow alternately flashing; Fault: Yellow flashing; Suppression: Yellow solid; Alarm: Red flashing; Overrange Alarm: Red flashing rapidly; Initialization (Startup): Red, yellow, and green flashing in sequence, then yellow solid for approximately 1 minute;
Wireless Connectivity	Bluetooth Low Energy (BLE) 5.0 Remote configuration and maintenance within 10 meters (dependent on mobile device) via mobile APP	NA	NA
Environmental			
Operating Temperature	-30 ~ +60° C	-20 ~ +50° C	-30 ~ +60° C
Storage Temperature	0 ~ 30° C	0 ~ 30° C	0 ~ 30° C
Operating Humidity	15 ~ 90% RH	15 ~ 90% RH	15 ~ 90% RH
Operating Air Pressure	70~100 kpa	70~100 kpa	70~100 kpa

Technical Specifications

Detector Parameters	Main Unit (H$_2$)	Slave Unit (CO)	Slave Unit (H$_2$)
Certifications			
Electrical Safety	EN/IEC61010-1 UL/CSA61010-1	EN/IEC61010-1 UL/CSA61010-1	EN/IEC61010-1 UL/CSA61010-1
EMC	EN 50270	EN 50270	EN 50270
Wireless Certification	RED, FCC, SIG	NA	NA
Others	*UL2075	*UL2075	*UL2075
Standard Accessories			
Quick Start Guide	●	NA	NA
Calibration Cap	●	●	●
Mounting Screws	●	●	●
Slave Unit L-Bracket	NA	●	●
Optional Accessories			
4-Pin Male M16 Pluggable Circular Connector Plug	○ Angle connector	○ Angle connector	○ Angle connector
8-Pin Male M16 Pluggable Circular Connector Plug	○ Angle connector	NA	NA
Mounting Adapter Plate	○	○	○
External Junction Box	○	○	○

* Please consult with a Honeywell sales representative

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