

About us

REEICO is a technology-based company renowned in the MENA region's Oil and Gas industry for our expertise in advanced sensor technologies and instrumentation. Our offerings include a wide range of vibration monitoring sensors such as Eddy current and piezo sensors, gas detection sensors utilizing semiconductor and electrochemical technologies, as well as pressure, temperature, and level transmitters and transducers, valve positioners, among others. Initially focused on manufacturing upstream products and services, we have expanded our capabilities to deliver world-class sensors and instrumentation for both upstream and downstream applications.

At REEICO, we are committed to delivering reliability and confidence to our customers across various industries. While we may not have been the first, but our goal is to keep continuity on the way to become the best in terms of reliability.

Portable Gas Detector



Reeico Portable Gas Detector

REEICO, utilizing cutting-edge technology and extensive expertise in safety and industrial monitoring equipment, offers advanced solutions to ensure workplace health and safety. The PGR 200 and PGR 300 portable gas detectors represent the latest generation of the company's products, designed to meet the diverse needs of various industries with their flexible and precise capabilities.

These devices are equipped with high-performance sensors and intelligent gas detection systems, enabling simultaneous detection of multiple toxic, flammable gases, and oxygen. With their robust, explosion-proof, dust-proof, and waterproof design, they ensure reliable and continuous operation in harsh and hazardous environments.

Featuring high-quality displays and audio, visual, and vibration alarms, these detectors provide users with the confidence and awareness needed to take timely preventive measures in any situation. The company is dedicated to delivering high-quality products that meet global standards, playing a vital role in enhancing safety and improving industrial performance.



■ PGR 100
Portable Single Gas Detector



■ PGR 200
Portable Gas Detector



■ PGR 300 Portable
Gas Detector with an imported
high-performance diaphragm pump

PGR 100 Portable Gas Detector

PGR100 Portable Single-Gas Detector

The PGR100 is a compact, high-performance single-gas detector developed by REEICO for rapid and reliable monitoring of flammable or toxic gases in industrial and hazardous environments. Equipped with a high-sensitivity sensor and a 1.54-inch HD TFT color display, it provides clear real-time readings and visual trends at a glance.

The instrument incorporates audible, visual, and vibration alarms to ensure immediate warning when gas levels exceed preset thresholds. Built with an explosion-proof enclosure (Exd-bibIIC T4Gb) and IP66 ingress protection, the PGR100 offers stable performance, long battery life, and durability suitable for Zone1 and Zone2 operations in a wide range of applications such as petrochemical, metallurgy, municipal, and confined-space safety monitoring.

Key Features

- **Single-Gas Detection:** Detects flammable or toxic gases with freely switchable display units (%LEL, ppm, %Vol, mg/m³, Kppm)
- **Flexible Configuration:** Adjustable measuring range and alarm thresholds.
- **Human-Machine Interface:** 1.54-inch HD TFT LCD display with English menu, showing real-time concentration values, status, and trend curve.
- **Multi-Alarm Design:** Triple alarm by sound, light, and vibration; 70–115dB at 1m.
- **Large-Capacity Data Logging:** Records up to 500 alarm events and 1000 power-on/off records; data exportable via Type-C USB in CSV format.
- **Fast Response:** ≤30s (flammable) / ≤60s (toxic).
- **Long Battery Life:** 3.7V, 960mAh, explosion-proof Lithium battery, ≥120 hours standby.
- **Rugged & Compact Design:** TPE+PS enclosure, 170g, 98×60×45mm, handheld use.
- **High Protection & Safety:** Explosion-proof rating Exd-bibIIC T4Gb, protection level IP66, suitable for Zone1/Zone2 hazardous areas.
- **Reliable Performance:** Operating temperature -25°C to +55°C; humidity ≤95%RH (non-condensing).

Portable Gas Detector Technical Specifications

Model	PGR 100
Detectable Gases	Combustible Gases Toxic Gases Oxygen
Detection Principle	Catalytic Combustion (CC) Electrochemical (EC) Infrared (IR) Photoionization (PID)
Installation Method	Portable
Sampling Method	Diffusive
Alarm	Sound, Light, Vibration
Display	TFT LCD display
Battery	3.7V explosion-proof lithium
Power Consumption	<8mW
Material	TPE+PS
Dimensions	98×60×45mm (Length×Width×Thickness)
Weight	170g
Operating Temperature	-20°C~+60°C
Working Pressure and Humidity	90-110Kpa, ≤95%RH, non-condensing
Explosion-Proof Rating	Ex db ib IIC T4 Gb
Protection level	IP66
Lifespan	≥2 years (flammable), ≥1 year (toxic)

PGR 200 Portable Gas Detector

PGR 200 Portable Gas Detector

The PGR 200 is a versatile, portable gas detector that can be configured as a single-gas, dual-gas, triple-gas, or quad-gas detector, providing a comprehensive solution for detecting a variety of toxic, flammable, explosive, and oxygen gases in the air. Its compact, lightweight design is ideal for use in harsh industrial environments, where reliable detection and quick response are crucial.

The device features a high-definition LCD display and multiple alarm prompts through sound, light, and vibration, ensuring that operators can take timely preventive measures. With a large data storage capacity and robust housing that is explosion-proof, dust-proof, and waterproof, the PGR 200 is an efficient and reliable choice for continuous gas monitoring.

Key Features

- Equipped with high-performance, high-precision imported sensors, ensuring high detection sensitivity and accuracy.
- Flexible configuration allows for a single-gas, dual-gas, triple-gas, or quad-gas setup according to requirements.
- Compact, lightweight, and durable design.
- Large LCD screen for clear display of gas levels and alarm information.
- Multi-functional alarm notifications: sound, light, and vibration.
- Large-capacity data storage with up to 260,000 entries.
- Corrosion-resistant plastic housing that is explosion-proof, dust-proof, and waterproof.
- Standard USB Type C interface for charging and data transmission.
- Long-lasting rechargeable lithium battery.
- No calibration required, ensuring low maintenance costs.

Portable Gas Detector Technical Specifications

Model	PGR 200
Detectable Gases	Combustible Gases Toxic Gases Oxygen
Detection Principle	Catalytic Combustion (CC) Semiconductor (SC) Electrochemical (EC) Infrared (IR) Photoionization (PID)
Installation Method	Portable
Sampling Method	Diffusive (Optional external handheld pump)
Alarm	Sound, Light, Vibration
Display	Large screen LCD screen
Battery	3.7V Lithium-ion rechargeable
Power Consumption	<1.2W
Material	Corrosion-resistant plastic casing
Dimensions	138×70×32mm (Length×Width ×Thickness)
Weight	280g
Operating Temperature	-20°C~+60°C
Working Pressure and Humidity	90-110Kpa, 0 - 95% RH
Explosion-Proof Rating	Ex ib d II C T3 Gb
Protection level	IP65
Lifespan	2 years

PGR 300 Portable Gas Detector

PGR 300 Portable Pump-Suction Gas Detector

(with high-performance diaphragm pump)

The PGR 300 is an advanced portable pump-suction gas detector designed for detecting a wide range of toxic, flammable, explosive, and oxygen gases.

It features a built-in high-performance diaphragm pump for sensitive detection, fast response, and quick recovery. Compatible with catalytic combustion, electrochemical, infrared, laser, and photoionization sensors, the PGR 300 provides flexible configuration options, allowing it to function as a single-gas, dual-gas, triple-gas, or quad-gas detector. The high-definition color TFT LCD display and comprehensive alarm prompts through sound, light, and vibration make it an ideal choice for use in harsh working environments, ensuring that operators are promptly alerted to take preventive measures.

Key Features

- Compatible with multiple sensor types and measurement principles, including catalytic combustion, electrochemical, infrared, laser, and photoionization.
- Flexible configuration options as a single-gas, two-in-one, three-in-one, or four-in-one detector.
- Intelligent self-check of sensors, pump, and alarm system upon power-up.
- Automatic software compensation for zero-point drift.
- High-definition color TFT LCD display for real-time gas concentration, trend curves, and alarm information.
- Multi-functional alarm notifications: sound, light, and vibration.
- Large capacity data storage of up to 260,000 entries.
- Durable, corrosion-resistant plastic casing that is explosion-proof, dust-proof, and water-proof.
- Standard Type C USB charging and data transfer interface.
- Long-lasting rechargeable lithium battery.
- No calibration required, ensuring low maintenance costs.

Portable Gas Detector Technical Specifications

Model	PGR 300
Detectable Gases	Combustible Gases Toxic Gases Oxygen
Detection Principle	Catalytic Combustion (CC) Semiconductor (SC) Electrochemical (EC) Infrared (IR) Photoionization (PID)
Installation Method	Portable
Sampling Method	Built-in micro-pump
Alarm	Sound, Light, Vibration
Display	TFT LCD display
Battery	3.7V Lithium-ion rechargeable
Power Consumption	<1.8W
Material	Corrosion-resistant plastic casing
Dimensions	170×73×61 mm (Length×Width ×Thickness)
Weight	280g
Operating Temperature	-40°C~+70°C
Working Pressure and Humidity	90-110Kpa, 0 - 95% RH
Explosion-Proof Rating	Ex ib d II C T3 Gb
Protection level	IP65
Lifespan	2 years

Gas Detection	Normal Range	Accuracy	Minimum Reading	Response Time (PGR200)	Response Time (PGR300)	Sensor Type
Oxygen	0~30%VOL	±3F.S	0.1%VOL	≤15S	≤10S	Electrochemical
Combustible Gas (EX)	0~100%LEL	±3F.S	1%LEL	≤10S	≤10S	Catalytic
Combustible Gas (EX)	0~100%LEL	±3F.S	1%LEL	≤10S	≤10S	Infrared
Carbon Monoxide (CO)	0~1000ppm	±3F.S	1ppm	≤25S	≤15S	Electrochemical
Hydrogen Sulfide (H2S)	0~100ppm	±3F.S	0.1ppm	≤30S	≤15S	Electrochemical
Sulfide Dioxide (SO2)	0~100ppm	±3F.S	0.1ppm	≤30S	≤15S	Electrochemical
Nitric Oxide (NO)	0~250ppm	±3F.S	1ppm	≤30S	≤15S	Electrochemical
Nitrogen Dioxide (NO2)	0~20ppm	±3F.S	0.1ppm	≤60S	≤30S	Electrochemical
Chlorine Gas (CL2)	0~20ppm	±3F.S	0.1ppm	≤30S	≤30S	Electrochemical
Ammonia (NH3)	0~100ppm	±3F.S	0.1ppm	≤50S	≤30S	Electrochemical
Hydrogen(H2)	0~1000ppm	±3F.S	1ppm	≤60S	≤30S	Electrochemical
Hydrogen Cyanide (HCN)	0~0ppm	±3F.S	0.1ppm	≤100S	≤60S	Electrochemical
hydrochloric Acid (HCL)	0~20ppm	±3F.S	0.1ppm	≤60S	≤50S	Electrochemical
Phosphine (PH3)	0~20ppm	±3F.S	0.1ppm	≤25S	≤20S	Electrochemical
Ozone (O3)	0~20ppm	±3F.S	0.01ppm	≤30S	≤15S	Electrochemical
Chlorine Dioxide (CLO2)	0~20ppm	±3F.S	0.1ppm	≤30S	≤15S	Electrochemical
Formaldehyde (HCHO)	0~20ppm	±3F.S	0.01ppm	≤30S	≤15S	Electrochemical
Silane (SiH4)	0~50ppm	±3F.S	0.1ppm	≤60S	≤30S	Electrochemical
Hydrofluoric Acid (HF)	0~10ppm	±3F.S	0.01ppm	≤60S	≤30S	Electrochemical
Fluorine (F2)	0~1ppm	±3F.S	0.01ppm	≤60S	≤30S	Electrochemical
Phosgene (COCL2)	0~1ppm	±3F.S	0.01ppm	≤60S	≤30S	Electrochemical
VOC , Benzene , Xylene	0~10ppm 0~100ppm 0~2000ppm	±3F.S ±3F.S ±3F.S	0.01ppm 0.1ppm 1ppm	≤30S ≤30S ≤30S	≤30S ≤30S ≤30S	Photoionization Detector (PID)
Carbon Dioxide (CO2)	0~5000ppm 0~100%VOL	±3F.S ±3F.S	10ppm 0.1%VOL	≤50S ≤50S	≤20S ≤20S	Infrared

Sensor Specifications

Portable Gas Detector Coding

Order Code	PGR -	□	□	□□ □□ □□ □□
Product type	Diffusive type	1		
	Diffusive type	2		
	Pump suction type	3		
Number of gases detected	One gas	1		
	Two-in-one	2		
	Three-in-one	3		
	Four-in-one	4		
Gas type detected	FLA (Combustible gas)			01
	CO			02
	H2S			03
	O2			04
	NH3			05
	CL2			06
	H2			07
	CO2			08
	C6H6			09
	NO2			10
	NO			11
	SO2			12
	PH3			13
	O3			14
	HCL			15
	HCN			16
	ETO			17
	HF			18
	AsH3			19
	HBr			20

For example, the standard four-in-one (FLA, CO, H2S, O2) diffusive portable gas detector code is: 2401020304

For a single hydrogen sulfide diffusive portable gas detector, the code is: 2103000000