

REEICO

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 200**
Portable Gas Detector

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



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.



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 waterproof.
- 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

Technical Specifications		
Model	PGR 200	PGR 300
Detectable Gases	Combustible Gases Toxic Gases Oxygen	Combustible Gases Toxic Gases Oxygen
Detection Principle	Catalytic Combustion (CC) Semiconductor (SC) Electrochemical (EC) Infrared (IR) Photoionization (PID)	Catalytic Combustion (CC) Semiconductor (SC) Electrochemical (EC) Infrared (IR) Photoionization (PID)
Installation Method	Portable	Portable
Sampling Method	Diffusive (Optional external handheld pump)	Built-in micro-pump
Alarm	Sound, Light Vibration	Sound, Light Vibration
Display	Large screen LCD screen	TFT LCD display
Battery	3.7V Lithium-ion rechargeable	3.7V Lithium-ion rechargeable
Power Consumption	<1.2W	<1.8W
Material	Corrosion-resistant plastic casing	Corrosion-resistant plastic casing
Dimensions	138×70×32mm (Length ×Width ×Thickness)	170× 73 ×61 mm (Length×Width×Thickness)
Weight	280g	280g
Operating Temperature	-20℃~+60℃	-40℃~+70℃
Working Pressure and Humidity	90-110Kpa,0 - 95% RH	90-110Kpa,0- 95% RH
Explosion-Proof Rating	Ex ib d II C T3 Gb	Ex ib d II C T4 Gb
Protection level	IP65	IP65
Lifespan	2 years	2 years

Sensor Specifications

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 (H ₂ S)	0~100ppm	≤±3F.S	0.1ppm	≤30S	≤15S	Electrochemical
Sulfide Dioxide (SO ₂)	0~100ppm	≤±3F.S	0.1ppm	≤30S	≤15S	Electrochemical
Nitric Oxide (NO)	0~250ppm	≤±3F.S	1ppm	≤30S	≤15S	Electrochemical
Nitrogen Dioxide (NO ₂)	0~20ppm	≤±3F.S	0.1ppm	≤60S	≤30S	Electrochemical
Chlorine Gas (CL ₂)	0~20ppm	≤±3F.S	0.1ppm	≤30S	≤30S	Electrochemical
Ammonia (NH ₃)	0~100ppm	≤±3F.S	0.1ppm	≤50S	≤30S	Electrochemical
Hydrogen(H ₂)	0~1000ppm	≤±3F.S	1ppm	≤60S	≤30S	Electrochemical
Hydrogen Cyanide (HCN)	0~50ppm	≤±3F.S	0.1ppm	≤100S	≤60S	Electrochemical
hydrochloric Acid (HCL)	0~20ppm	≤±3F.S	0.1ppm	≤60S	≤50S	Electrochemical
Phosphine (PH ₃)	0~20ppm	≤±3F.S	0.1ppm	≤25S	≤20S	Electrochemical
Ozone (O ₃)	0~20ppm	≤±3F.S	0.01ppm	≤30S	≤15S	Electrochemical
Chlorine Dioxide (CLO ₂)	0~20ppm	≤±3F.S	0.1ppm	≤30S	≤15S	Electrochemical
Formaldehyde (HCHO)	0~20ppm	≤±3F.S	0.01ppm	≤30S	≤15S	Electrochemical
Silane (SiH ₄)	0~50ppm	≤±3F.S	0.1ppm	≤60S	≤30S	Electrochemical
Hydrofluoric Acid (HF)	0~10ppm	≤±3F.S	0.01ppm	≤60S	≤30S	Electrochemical
Fluorine (F ₂)	0~1ppm	≤±3F.S	0.01ppm	≤60S	≤30S	Electrochemical
Phosgene (COCL ₂)	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 (CO ₂)	0~5000ppm 0~100%VOL	≤±3F.S ≤±3F.S	10ppm 0.1%VOL	≤50S ≤50S	≤20S ≤20S	Infrared

Portable Gas Detector Coding

Order Code	PGR -	□	□	□□	□□	□□	□□
Product type	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

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.

