



# PERSONAL FOUR GAS MONITOR

**Model GX-2012**  
**Model GX-2012GT**



## APPLICATION

- Personal monitoring
- Confined spaces
- Refineries/petrochemical/wastewater treatment
- Utilities
- Chemical plants
- Hazardous material
- Water
- Fire services
- Mining

## FEATURES

- Monitors LEL, and % volume combustibles, O<sub>2</sub>, CO and H<sub>2</sub>S (GX-2012)
- Monitors ppm, LEL, and % volume combustibles, O<sub>2</sub> and CO (GX-2012GT)
- ppm leak detector, detects down to 10 ppm CH<sub>4</sub> (GX-2012GT)
- "Leak tracker" audible/visual alarm mode (GX-2012GT)
- 0 to 100% volume methane option
- Auto-ranging display of % LEL and % volume
- Barhole test mode
- Snap-logging-on demand data recording
- Pump pause on demand extends battery life
- Vibration, visual, and audible alarms
- Lithium ion or alkaline power source (interchangeable)
- Up to 600 hours of datalogging with alarm tends
- Intrinsically safe, ATEX/IECEX/CE
- High dust and water resistance design

**RIKEN KEIKI Co.,Ltd.**

# GX-2012 COMPONENT DESIGNATIONS

Built around high-quality micro-sensor technology, the GX-2012 is Riken's smallest personal 5 sensor gas monitor with a built in sample pump. Weighing only 360g, two operating modes: Normal (for confined spaces) and bar hole. The GX-2012 can monitor the standard confined space gases (LEL combustibles, Oxygen content, Carbon Monoxide, and Hydrogen Sulfide), and it can also measure 100% volume Methane and dynamically display either % LEL, or % volume with its auto-ranging. The GX-2012 can be used for gas line purge testing as well as standard safety testing.



Combustible  
(100Vol%)

Combustible  
(100%LEL)

## Alarm lamps

Three bright LED indications with powerful vibration alarm

O<sub>2</sub>

## LCD display

Large, simultaneous 4 gas display.

## Audible alarm

Loud distinct tone with two honeycomb buzzer openings. 95dB at 30cm distance

CO

## Switches

H<sub>2</sub>S

## IrDA port

## ◆ Display

### Pilot indicator

Blinking for normal operation

### Pump driving indicator

Rotating for normal operation

### Battery sign

### Digital display

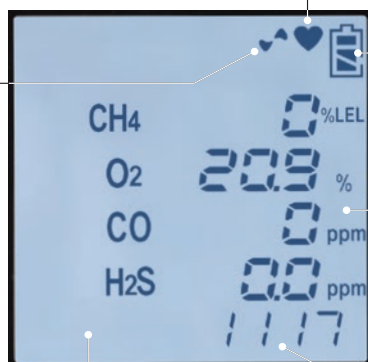
Simultaneously displays all gases

### Display space

Alarms, Operating message, Optional gas names, Bargraph

### Time

Adjustable to local time



## ◆ GX-2012 gas combination available

Five sensor	Type A	LEL / % Vol / O <sub>2</sub> / CO / H <sub>2</sub> S
Four sensor	Type B	LEL / O <sub>2</sub> / H <sub>2</sub> S / CO
Three sensor	Type C	LEL / O <sub>2</sub> / H <sub>2</sub> S
	Type D	LEL / O <sub>2</sub> / CO
Two sensor	Type E	LEL / % Vol / O <sub>2</sub>
	Type F	LEL / O <sub>2</sub>

Please specify gas combination when ordering.

# GX-2012GT COMPONENT DESIGNATIONS

Built around high-quality micro-sensor technology, the GX-2012GT is Riken's smallest personal 5 sensor monitor with a built in sample pump. Weighing only 360g, it has many features which set the GX-2012GT apart from the competition. For example, it can monitor the standard gas safety hazards for gas/pipeline operations, (LEL combustibles, Oxygen content, and Carbon Monoxide), and it also has a high-sensitivity ppm CH<sub>4</sub> leak tracker mode which reads down to 10ppm. It can also measure 100% volume Methane and dynamically display either %LEL, or % volume with its auto-ranging ability. The GX-2012GT is excellent for gas line purge testing and detection of small gas leaks.



**Combustible (100Vol%)**

**Combustible (100%LEL)**

**Combustible (5000ppm)**

**Alarm lamps**  
Three bright LED indications with powerful vibration alarm

**O<sub>2</sub>**

**Audible alarm**  
Loud distinct tone with two honeycomb buzzer openings. 95dB at 30cm distance

**LCD display**  
Large, simultaneous 3 gas display.

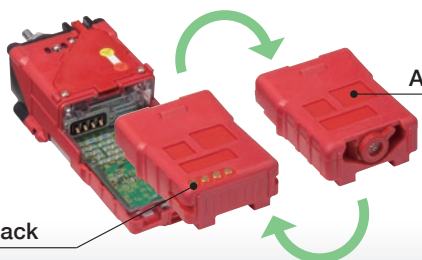
**CO**

**Switches**

**IrDA port**

## ◆ Battery packs

Quick release interchangeable battery packs.



Alkaline battery pack

Li-ion battery pack

## ◆ GX-2012GT gas combination available

Five sensor	Type A	PPM / LEL / % Vol / O <sub>2</sub> / CO
Four sensor	Type B	PPM / LEL / O <sub>2</sub> / CO
	Type C	PPM / LEL / % Vol / O <sub>2</sub>
Three sensor	Type D	PPM / LEL / O <sub>2</sub>

Please specify gas combination when ordering.

## ◆ Accessories

### Standard accessories

- Alkaline battery pack
- Rubber nozzle
- Wrist-strap
- Belt clip

### Optional accessories

#### SDM-2012 Stand Alone Calibration Station

A single module calibration station for the GX-2012 and GX-2012GT portable gas monitors that can calibrate, bump test, charge, and archive data.




**Charger BC-2012**  
AC adaptor for charger BC-2012



## ◆ Specifications


## Model GX-2012

Gas Detected	Combustible Gases (Methane as standard)	% Volume Methane	Oxygen (O <sub>2</sub> )	Hydrogen Sulfide (H <sub>2</sub> S)	Carbon Monoxide (CO)
Detection Principle	Catalytic combustion	Thermal conductivity	Galvanic cell	Electro-chemical cell	
Detection Range	0~100% LEL	0~100% Vol.	0~40% Vol.	0~30 ppm	0~500 ppm
Sampling Method	Internal sample pump, flow rate nominal 0.5 LPM, includes hydrophobic filter				
Display	Digital LCD with 7 segments, auto backlight during alarm				
Preset Alarms (User Adjustable)	1st alarm 10% LEL 2nd alarm 50% LEL Over alarm 100% LEL	No alarms for % Vol. CH <sub>4</sub>	Low alarm 19.5% High alarm 23.5% Over alarm 40.0%	1st 5 ppm 2nd 30 ppm TWA 10 ppm STEL 15 ppm Over 30 ppm	1st 25 ppm 2nd 50 ppm TWA 25 ppm STEL 200 ppm Over 500 ppm
Alarm Types	Gas alarms : 1st and 2nd, STEL, TWA (user adjustable) and OVER Trouble alarms : Sensor connection, low battery, low flow, circuit trouble and calibration error				
Alarm Methods	Gas alarms : Flashing lights, two tone buzzer, and vibration Trouble alarms : Flashing lights, trouble displayed, intermittent buzzer, and vibration				
Operating Temp. & Humidity	-20°C to +50°C (-4°F to 122°F) 0 to 95% RH, non-condensing				
Response Time	Within 30 seconds (T90)				
Continuous Operation	Alkaline battery : 15 hours Li-Ion battery : 10 hours				
Power Source	Li-Ion battery pack, or 3 "AA" Alkaline battery pack ; interchangeable				
Safety Rating	· ATEX  II 1G Ex ia IIC T4 Ga · IECEx II 1G Ex ia IIC T4 Ga · TIIS · CE				
Dimensions & Weight	Approx. 173 (H) x 71 (W) x 43 (D) mm, approx. 360g (include 3 "AA" Alkaline batteries)				
Standard accessories	· Belt Clip · Rubber nozzle · Wrist strap · Manual · Alkaline battery pack				
Optional accessories	· SDM-2012 calibration stations · Sample draw hoses · Charger · Li-Ion battery pack · Alkaline dry cell (3-AA size) · Datalogging software				

Specifications subject to change without notice.

## ◆ Specifications

## Model GX-2012GT

Gas Detected	Combustible Gases (Methane as standard)	% Volume Methane	PPM Methane	Oxygen (O <sub>2</sub> )	Carbon Monoxide (CO)
Detection Principle	Catalytic combustion	Thermal conductivity	MOS/Catalytic	Galvanic cell	
Detection Range	0~100% LEL	0~100% Vol.	0~5000 ppm	0~40% Vol.	0~500 ppm
Sampling Method	Internal sample pump, flow rate nominal 0.5 LPM, includes hydrophobic filter				
Display	Digital LCD with 7 segments, auto backlight during alarm				
Preset Alarms (User Adjustable)	1st alarm 10% LEL 2nd alarm 50% LEL Over alarm 100% LEL	No alarms for % Vol. CH <sub>4</sub>	Increasing tone/ Light pulse as concentration increases	Low alarm 19.5% High alarm 23.5% Over alarm 40.0%	1st 25 ppm 2nd 50 ppm TWA 25 ppm STEL 200 ppm Over 500 ppm
Alarm Types	Leak Tracker Mode: Escalating audible/visual alarm, changes with gas level (audible can be turned off) Gas alarms: 1st and 2nd, STEL, TWA (user adjustable) and OVER Trouble alarms: Sensor connection, low battery, low flow, circuit trouble and calibration error				
Alarm Methods	Gas alarms: Flashing lights, two tone buzzer, and vibration Trouble alarms: Flashing lights, trouble displayed, intermittent buzzer, and vibration				
Operating Temp. & Humidity	-20°C to +50°C (-4°F to 122°F) 0 to 95% RH, non-condensing				
Response Time	Within 30 seconds (T90)				
Continuous Operation	Alkaline battery : 15 hours Li-Ion battery : 10 hours				
Power Source	Li-Ion battery pack, or 3 "AA" Alkaline battery pack ; interchangeable				
Safety Rating	· ATEX  II 1G Ex ia IIC T4 Ga · IECEx II 1G Ex ia IIC T4 Ga · TIIS · CE				
Dimensions & Weight	Approx. 173 (H) x 71 (W) x 43 (D) mm, approx. 360g (include 3 "AA" Alkaline batteries)				
Standard accessories	· Belt Clip · Rubber nozzle · Wrist strap · Manual · Alkaline battery pack				
Optional accessories	· SDM-2012 calibration stations · Sample draw hoses · Charger · Li-Ion battery pack · Alkaline dry cell (3-AA size) · Datalogging software				

Specifications subject to change without notice.

★ Distributed by:

## RIKEN KEIKI Co., Ltd.

2-7-6 Azusawa, Itabashi-ku, Tokyo 174-8744, Japan

Phone : +81-3-3966-1113

Telefax : +81-3-3558-9110

E-mail : [intdept@rikenkeiki.co.jp](mailto:intdept@rikenkeiki.co.jp)

Web site : <http://www.rikenkeiki.co.jp/english>