



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, O₂, CO and H₂S (GX-2012)
- Monitors ppm, LEL, and % volume combustibles, O₂ and CO (GX-2012GT)
- ppm leak detector, detects down to 10 ppm CH₄ (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

O₂

LCD display

Large, simultaneous 4 gas display.

Audible alarm

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

CO

Switches

H₂S

IrDA port

◆ Display

Pilot indicator

Blinking for normal operation

Pump driving indicator

Rotating for normal operation

Battery sign

Digital display

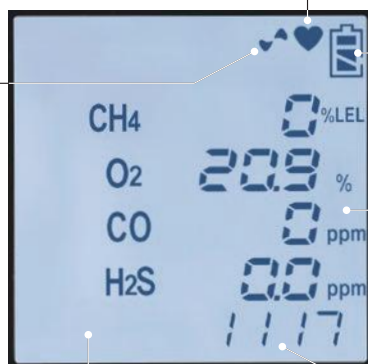
Simultaneously displays all gases

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 ₂ / CO / H ₂ S |
| Four sensor | Type B | LEL / O ₂ / H ₂ S / CO |
| Three sensor | Type C | LEL / O ₂ / H ₂ S |
| | Type D | LEL / O ₂ / CO |
| Two sensor | Type E | LEL / % Vol / O ₂ |
| | Type F | LEL / O ₂ |

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 with 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 CH₄ 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

O₂

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 ₂ / CO |
| Four sensor | Type B | PPM / LEL / O ₂ / CO |
| | Type C | PPM / LEL / % Vol / O ₂ |
| Three sensor | Type D | PPM / LEL / O ₂ |

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 ₂) | Hydrogen Sulfide (H ₂ 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 ₄ | 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

| | | | | | |
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| Gas Detected | Combustible Gases (Methane as standard) | % Volume Methane | PPM Methane | Oxygen (O ₂) | 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 ₄ | 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) | | | | |
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