



## Portable 4 Gas Detector

CH<sub>4</sub>  
or  
HC

O<sub>2</sub>

CO

H<sub>2</sub>S

# MODEL:

# GX-Force

## This gas detector is designed to assure safety.

The GX-Force features a rugged and easy-to-hold body, a 3-year sensor warranty, and 30-hour battery life. These attributes help assure safety.

- Easy-to-grip lightweight design; Approx. 300 g
- Three-year sensor warranty
- Intrinsically safe explosion-proof construction, flame-proof enclosure
- Continuous operating time: Approx. 30 hours
- Passes 3 m drop testing
- Protection level equivalent to IP67

# GX-Force

Assured peace  
of mind

Sensor  
warranty

**3**  
years

Utilizes R Sensor for outstanding  
long-term stability.  
Three-year sensor warranty.  
Allows use with peace of mind.

Designed for  
ease of use

Continuous  
operating  
time

Approx.

**30** hours

No need for daily recharge.  
(Approx. three times longer than previous model)  
Charger connector type: USB Type-C



LED  
light

Features top-mounted LED light.  
Helps work with a peace of mind in dark locations.



Light-  
weight  
design

Functionality-oriented  
design

Approx.

**300** g

Easy-to-grip design.  
Lightweight design allows easy one-handed button operation.  
(Approx. 16 % lighter than previous model)

Outstanding  
durability



Passes **3 m**  
drop testing



Protection level  
equivalent to **IP67**



Operating temperature range  
**-40 to +60 °C**  
(temporary use environment)





## Wide range of safety functions

### Combustible gas conversion function

Eliminates the need for troublesome calculations. Allows direct readout of 27 different combustible gas types. \* Settings are retained even when power is turned on and off.

#### Combustible gases conversion list

Gas type	Conversion from CH <sub>4</sub> models	Conversion from HC models	Gas type	Conversion from CH <sub>4</sub> models	Conversion from HC models	Gas type	Conversion from CH <sub>4</sub> models	Conversion from HC models	Gas type	Conversion from CH <sub>4</sub> models	Conversion from HC models	Gas type	Conversion from CH <sub>4</sub> models	Conversion from HC models
Methane	—	×	Ethane	○	×	Cyclopentane	○	○	N-nonane	○	○	Methyl isobutyl ketone	○	○
Isobutane	○	—	Ethanol	○	○	Benzene	○	○	Ethyl acetate	○	○	Tetrahydrofuran	○	○
Hydrogen	○	○	Propylene	○	○	N-hexane	○	○	Isopropyl alcohol	○	○	Normal pentane	○	○
Methanol	○	○	Acetone	○	○	Toluene	○	○	Methyl ethyl ketone	○	○			
Acetylene	○	○	Propane	○	×	N-heptane	○	○	Methyl methacrylate	○	○			
Ethylene	○	○	Butadiene	○	○	Xylene	○	○	Dimethyl ether	○	○			

### Alarm setpoint setting function

Settings can be changed/configured on the GX-Force main unit. Supports control and management in accordance with the customer's own criteria.

### Confirmation beep function

Indicates that the product is functioning normally. The buzzer sounds at preset intervals while measurement is underway.

### Calibration notification function

Indicates the number of days until recommended regular maintenance when the power is turned on. Reminds the user to perform maintenance to ensure safe use.

## New R Sensor for outstanding long-term stability

The GX-Force incorporates/utilizes the newly developed R Sensor sensor series. The R Sensor features dramatically improved performance over conventional sensors. The sensors are covered by a three-year warranty\* for peace of mind.

\* Assumes the sensor is inspected at least once a year.



#### Combustible gas

Tough construction with excellent toxicity and impact resistance



#### O<sub>2</sub>

Electrochemical type with greatly improved basic characteristics



#### CO & H<sub>2</sub>S

2-in-1 dual construction for compact main unit



#### CO

Two-sensor configuration minimizes H<sub>2</sub> interference

## Extensive range of optional items

### The optimal combination can be selected to suit requirements.

Can be fitted in place of the tapered nozzle (option) to allow readings to be checked even from a distance.



#### For measurements inside tanks

##### Float-type gas collector

(Tube length: Approx. 8 m)  
Part No.: 4384 0430 60



#### For measurements in specific locations within reach

##### Gas sampling rod and Gas sampling tube

(Gas sampling tube length: Approx. 75 cm)  
Part No.: Gas sampling rod: 0904 0275 00  
Gas sampling tube: 0914 0100 00



#### For measurements in high locations

##### Two-stage sampling rod

Part No.: 4383 0730 80



#### AC adapter

Part No.: 2594 1342 30



#### Tapered nozzle

Part No.: 4126 4948 20



#### Hand strap

Part No.: 0888 0605 90



#### Belt clip

\* With two attachment screws  
Part No.: 4711 9954 30



#### Data logger management program

\* A separate USB cable (option) is required to use this.  
Part No.: 9812 0020 10 (IECEX/ATEX model)  
9812 0010 10 (Japan Ex model)



#### USB cable (Type-A - Type-C, 1 m)

\* Required when using the data logger management program (option)  
Part No.: 2440 2728 90

#### Protective film (set of 5)

Part No.: 4777 9296 50

## Specifications

Model	GX-Force
Sampling method	Suction type
Suction flow rate	Minimum 0.35 L/min (open flow rate)
Gas alarm pattern	Lamp flashing, continuous modulating buzzer sounding, gas concentration display flashing, vibration
Gas alarm reset operation	Self-latching
Fault alarm/self-diagnosis	System, clock, or sensor abnormality; battery voltage drop; calibration failure; pump abnormality; low flow rate
Fault alarm pattern	Lamp flashing, intermittent buzzer sounding, detail display
Fault alarm reset operation	Self-latching
Display	LCD digital (7-segment + 14-segment + icons) with backlight
Individual operations	Operational status, clock, battery level, peak reading, pump status, calibration notification
Sound pressure	Approx. 90 dB (30 cm)
Data logger function	Maximum storage capacity: 3,600 items Interval: 5 minutes (adjustable)
Communication specifications (for data logger)	USB2.0 (Connector: Type-C)
Power source	Rechargeable lithium ion battery
Continuous operating time <sup>*1</sup>	Approx. 30 hours (fully charged, 25 °C, no alarm, no lighting)
Operating ambient temperature/humidity range <sup>*2, 3</sup>	-40 to +60 °C (no sudden changes), 0 to 95 %RH (no condensation)
Explosion-proof construction	Intrinsically safe explosion-proof construction, flame-proof enclosure IECEX/China Ex (Ex da ia IIC T4 Ga) ATEX (II 1 G Ex da ia IIC T4 Ga) Japan Ex (Ex da ia IIC T4 Ga)
Certifications	CE marking, JIS T 8201, JIS T 8205, JIS T 8206 <sup>*4</sup>
Protection level	IP67 equivalent
External dimensions/weight	Approx. 64 mm (W) × 173 mm (H) × 47 mm (D) (excluding protrusions) / Approx. 300 g

\*1 Varies depending on sensor type installed. Please contact RIKEN KEIKI for more information.

\*2 In temporary ambient conditions for approximately 15 minutes. The operating temperature and humidity ranges for continuous ambient conditions are as follows:  
Temperature: -20 to +50 °C (no sudden changes) / Humidity: 10 to 90 %RH (no condensation)

\*3 The operating temperature range in which explosion-proof performance is maintained is as follows: Temperature: -20 to +60 °C (no sudden changes)

\*4 For CH<sub>4</sub> combustible gas

## Detection target gases

Detection target gas	Combustible gas (CH <sub>4</sub> or HC)	Oxygen (O <sub>2</sub> )	Carbon monoxide (CO)	Hydrogen sulfide (H <sub>2</sub> S)
Detection principle	New ceramic type (catalytic type)	Electrochemical type		
Display range	0 – 100 %LEL	0.0 – 40.0 vol%	0 – 2,000 ppm	0.0 – 200.0 ppm
Detection range	0 – 100 %LEL	0.0 – 25.0 vol%	0 – 500 ppm	0.0 – 100.0 ppm
Resolution	1 %LEL	0.1 vol%	1 ppm	0.1 ppm
Alarm setpoints (User-defined setting)	1st alarm: 10 %LEL 2nd alarm: 25 %LEL 3rd alarm: 50 %LEL OVER alarm: 100 %LEL	L alarm: 19.5 vol% LL alarm: 18.0 vol% H alarm: 23.5 vol% OVER alarm: 40.0 vol%	1st alarm: 25 ppm 2nd alarm: 50 ppm 3rd alarm: 1,200 ppm TWA alarm: 25 ppm STEL alarm: 200 ppm OVER alarm: 2,000 ppm	1st alarm: 5.0 ppm 2nd alarm: 30.0 ppm 3rd alarm: 100.0 ppm TWA alarm: 1.0 ppm STEL alarm: 5.0 ppm OVER alarm: 200.0 ppm
Response time (T90)	CH <sub>4</sub> : Within 30 seconds HC: Within 40 seconds	Within 20 seconds	Within 30 seconds	Within 30 seconds

## Type list

TYPE	Detection target gas/ Sensor	CH <sub>4</sub> or HC NCR-6309	O <sub>2</sub> ESR-X13P	H <sub>2</sub> S & CO ESR-A1DP	H <sub>2</sub> S ESR-A13i	CO ESR-A13P	Reduced H <sub>2</sub> interference CO ESR-A1CP
4-component	TYPE A	○	○	○			
3-component	TYPE B	○	○		○		
3-component	TYPE C	○	○			○	
3-component	TYPE CH	○	○				○
2-component	TYPE D	○	○				

# 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>

※ The contents described in this catalog are subject to change without notice according to the performance improvement.

## ★ Distributed by: