



Among the world's smallest and lightest portable gas monitor

Model GW-3

Safety at your side

Now evolved into
a wearable device

that weighs just **45g**



1

Small, portable design for wear directly

- At a mere 45 g, this small, portable design lets you to wear the device on your wrist, arm, or anywhere else — for example, on a helmet band.
- In addition to buzzers and lamps, alarms are indicated by vibrations. Wear the device on your wrist or arm for immediate vibration alerts in the presence of danger, even in loud environments.



Attached to wrist
(wristwatch type)
*Attached to watch band

Worn on arm (band type)
* Attached to arm band

Mounted to helmet band
* Attached to belt clip

2

Incorporates durable new R sensor with advanced functions

- The sensor's superior durability and performance are backed by a three-year warranty (one year sensor warranty for GW-3 (O2)).
- Usable across a wide range of temperatures (-20 °C to +60 °C).
- We offer a lineup of carbon monoxide sensors almost entirely resistant to hydrogen interference. They're ideal for use in environments like steel facilities where hydrogen is present.
- We're the first Japanese manufacturer to offer a lineup of dual carbon monoxide and oxygen sensors, bringing two-channel detection to the market in a compact and portable form factor.

3

A safe design you can use anywhere

- Protection level: Equivalent to IP66/68 (2 m, 1 h); designed to resist dust and water for confident use outdoors.
- Intrinsically safe explosion-proof design (ATEX/IECEX/INMETRO Japan Ex) to allow use in hazardous locations.

O₂

Model GW-3 (OX)

Detection target gas: Oxygen
(electrochemical type)

O₂(G)

Model GW-3 (O2)

Detection target gas: Oxygen
(galvanic cell type)

H₂S

Model GW-3 (HS)

Detection target gas: Hydrogen sulfide

CO

Model GW-3 (CO)

Detection target gas: Carbon monoxide

CO(-H₂)

Model GW-3 (C-)

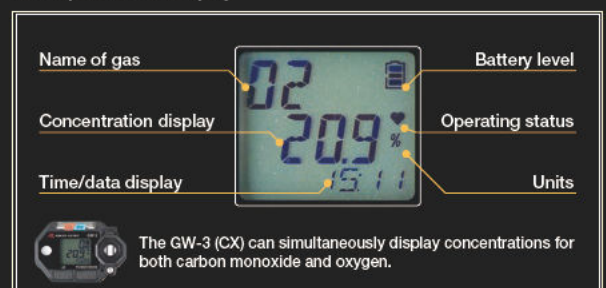
Detection target gas: Carbon monoxide
(reduced hydrogen interference)

CO O₂

Model GW-3 (CX)

Detection target gas: Carbon monoxide
and oxygen

Description of the display



RIKEN KEIKI CO., LTD.

Common specifications

Sampling method	Diffusion type
Alarm	Gas alarms: Three-step alarms, STEL alarm, TWA alarm, OVER alarm Fault alarms: Sensor connection/disconnection, low battery level, calibration failure, clock abnormality, system abnormality
Alarm reset type	Self-latching or auto-reset (*1)
Alarm action	Flashing lamp, intermittent audible buzzer, flashing gas concentration readout, vibration
Buzzer volume	80 dB or louder (at 30 cm)
Power source*2	CR2450 coin-type lithium battery
Explosion-proof construction	Intrinsically safe explosion-proof construction ATEX: II1G Ex Ia IIC T4 Ga/IECEX: Ex Ia IIC T4 Ga/INMETRO: Ex Ia IIC T4 Ga/Japan Ex: Ex Ia IIC T4 Ga
Certifications	ATEX, IECEX, INMETRO, Japan Ex, CE Marking
Protection level	Equivalent to IP66/68 (2 m, 1 h)
External dimensions/weight	Approx. 63 mm (W) × 42 mm (H) × 22 mm (D) (excluding projections)/approx. 45 g
Functions	Data logger, vibration, STEL alarm, TWA alarm, quick calibration, peak value display, temperature display

Individual model specifications

Model	GW-3 (O2)	GW-3 (OX)	GW-3 (HS)	GW-3 (CO)	GW-3 (C-)	GW-3 (CX)	
Detection target gas	Oxygen	Oxygen	Hydrogen sulfide	Carbon monoxide	Carbon monoxide (Reduced hydrogen interference)	Carbon monoxide	Oxygen
Detection principle	Galvanic cell type	Electrochemical type					
Detection range (Indication range)	0.0 to 25.0 % (0.0 to 40.0 %)	0.0 to 25.0 % (0.0 to 40.0 %)	0.0 to 100.0 ppm (0.0 to 200.0 ppm)	0 to 500 ppm (0 to 2000 ppm)	0 to 500 ppm (0 to 2000 ppm)	0 to 500 ppm (0 to 2000 ppm)	0.0 to 25.0 % (0.0 to 40.0 %)
Resolution	0.1 %	0.1 %	0.1 ppm (0.0 to 30.0 ppm) 1.0 ppm (30.0 to 200.0 ppm)	1 ppm (0 to 300 ppm) 10 ppm (300 to 2000 ppm)	1 ppm (0 to 300 ppm) 10 ppm (300 to 2000 ppm)	1 ppm (0 to 300 ppm) 10 ppm (300 to 2000 ppm)	0.1 %
Alarm setpoints	L 18.0 % LL 18.0 % H 25.0 %	L 18.0 % LL 18.0 % H 25.0 %	1st 5.0 ppm 2nd 30.0 ppm 3rd 100.0 ppm TWA 1 ppm STEL 5 ppm	1st 25 ppm 2nd 50 ppm 3rd 1200 ppm TWA 25 ppm STEL 200 ppm	1st 25 ppm 2nd 50 ppm 3rd 1200 ppm TWA 25 ppm STEL 200 ppm	1st 25 ppm 2nd 50 ppm 3rd 1200 ppm TWA 25 ppm STEL 200 ppm	L 18.0 % LL 18.0 % H 25.0 %
response time T90*3	within 20 seconds (Typical: 9 seconds)	within 30 seconds (Typical: 8 seconds)	within 30 seconds (Typical: 18 seconds)	within 30 seconds (Typical: 6 seconds)	within 30 seconds (Typical: 17 seconds)	within 30 seconds (Typical: 7 seconds)	within 30 seconds (Typical: 15 seconds)
Operating temperature range	-20 °C to +50 °C (no sudden changes)	-20 °C to +60 °C (no sudden changes)*4					
Operating humidity range	10 to 90 % RH (no condensation)	0 to 95 % RH (no condensation)*5					
Continuous operating time	Approx. 4,000 hours	Approx. 2,000 hours	Approx. 4,000 hours	Approx. 4,000 hours	Approx. 2,500 hours	Approx. 2,000 hours	

*1. Standard setting: Self-latching

*2. Use dry-cell batteries listed on the Certificate to meet the explosion-proof performance.

*3. Typical indicates an average value.

*4. Temporary ambient conditions for approx. 15 minutes. The continuous operating ambient temperature ranges are as follows: temperature: -20 °C to +50 °C (no sudden changes)

*5. Temporary ambient conditions for approx. 15 minutes. The continuous operating ambient humidity ranges are as follows: humidity: 10 to 90 % RH (no condensation)

Accessories

- ◆ CR2450 coin type lithium ion battery (x1)
- ◆ Alligator clip (x1)

Optional accessories

- ◆ Wristwatch belt
- ◆ Belt clip
- ◆ Alligator clip
- ◆ Heat-resistant case*6
- ◆ Dust filter
- ◆ Filters
- ◆ Calibration cap
- ◆ Leather case
- ◆ Arm band
- ◆ Data logger management program

*6. This cover is non-explosion proof.

Names of parts



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