

# GX-2009

## Portable multi gas-detector

Riken Keiki GX-2009 personal multi gas-detector is the most compact and lightest 4-gas detector in the world. With its handy size (H 70 x W 75 x D 25 mm) and weight (130g) it's a perfect-sized personal protection detector.

### Product description

The GX-2009 simultaneously monitors and displays combustibles, oxygen, carbon monoxide, and hydrogen sulfide. The instrument features dual audible alarm ports and alarm LEDs on three sides, alarm conditions are then obvious from multiple perspectives especially in high noise environments. Other features include a water-resistant and dust-proof design with IP 67 rating, an impact-resistant rubber over-mold body that is RFI-resistant, and a large-capacity data logging system included as standard. Other standard features are vibration alarm, auto-calibration, calibration and bump test lock out or reminder control, STEL / TWA readings, peak hold, auto backlighting of alarm on a large LCD display. All of these controls and features are operated through two simple glove-friendly buttons.

The NiMH battery operates for 20 hours and charges in 3 hours. A huge-capacity data logging function is a standard feature on all GX-2009 instruments. The data logging software will store up to 100 calibration records and is compliant with Windows XP, 7, 8, and 10. The GX-2009 is also compatible with the SDM-2009 single calibration station and the Data Cal 2000 instrument maintenance system. The GX-2009 is designed around RKI's compact and proven sensors, utilizing catalytic combustion, electrochemical and galvanic sensor technologies. Each miniaturized sensor is manufactured with the same high-quality control that has made RKI sensors and instruments the most reliable and long-lasting monitoring devices in the industry.



### Features

- ✓ Simultaneous four-gas monitoring and display of combustible gases, O<sub>2</sub>, CO, and H<sub>2</sub>S
- ✓ Backlit LCD (liquid crystal display) for complete and readable information at a glance
- ✓ Distinctive audible/vibrating alarms for dangerous gas conditions and audible alarms for unit malfunction
- ✓ Microprocessor control for reliability, ease of use, and advanced capabilities
- ✓ Datalogging including interval trend data and alarm trend data
- ✓ STEL/TWA and over range alarm display
- ✓ Peak hold readouts
- ✓ Built-in time function
- ✓ RF shielded high-impact plastic case of very compact size and light weight
- ✓ Rotatable Alligator clip for hands-free gas monitoring (belt clip optional)
- ✓ ATEX M1 EX ia Ma
- ✓ ATEX 1 G Ex ia C T4 Ga
- ✓ IECEx Zone 0 EX ia C T4 Ga
- ✓ CSA classified for Class I, Division I, Groups A, B, C, and D hazardous atmospheres

# Technical specifications

Model	GX-2009			
Gas Detected	All combustible cases	Oxygen (O <sub>2</sub> )	Hydrogen sulfide (H <sub>2</sub> S)	Carbon monoxide (CO)
Detection Principle	Catalytic combustion	Galvanic cell	Electro-chemical cell	
Detection Range (Increments)	0 - 100%LEL (1%LEL)	0 - 40%VOL (0.1%VOL)	0 - 100.0ppm (0.5ppm)	0 - 500ppm (1ppm)
Sampling Method	Diffusion			
Display	Simultaneous display. Digital LCD with segments, auto backlight at alarm display.			
Alarm Sounds	95dB at 30cm			
Preset Alarms (User adjustable )	1st alarm 10%LEL 2nd alarm 50%LEL Over alarm 100%LEL	Low alarm 19.5%Vol High alarm 23.5%Vol Over alarm 40.0%Vol	1st alarm 10.0ppm 2nd alarm 30.0ppm TWA alarm 10.0ppm STEL alarm 15.0ppm Over alarm 100.0ppm	1st alarm 25.0ppm 2nd alarm 50.0ppm TWA alarm 25.0ppm STEL alarm 200.0ppm Over alarm 500.0ppm
Type of Alarms	Gas alarms: 2 preset alarms, STEL, TWA, overscale alarm Trouble alarms: Sensor disconnection, low battery, circuit error, calibration range error			
Display of Alarms	Gas alarms: Flashing LEDs, intermittent buzzer, flashing gas value, vibration Trouble alarms: Flashing LEDs, intermittent buzzer, display of error message			
Functions	Manual backlight LCD (Automatic at alarm) Data logging (40hours) STEL, TWA Peak hold Alarm trend Direct charging Continuous display of current time Autocalibration.			
Output Signal Type	IrDA for Data logger			
Operating Temp. & humidity	-20°C to +50 °C (-4 to 122°F), 0 to 95% RH, non-condensing			
Response Time	Within 30 seconds (T90)			
Continuous Operation	Up to 20 hours after full charge (up to 14 hours after 90 min charge)			
Power Source	Direct charging Ni-MH battery pack (can be fast charged in just 180 min)			
Case Material	Rubber coated polycarbonate			
Ingress Proof Rating	IP67			
Safety design/ Approvals	ATEX II 1g Ex ia IIC T4 IECEX Zone 0 Ex IIC T4 CSA Intrinsically safe, class I, Division I, Groups A, B, C, D CE TIIS Ex ia IIC T4 MED			
Dimensions & Weight	Approx. 70(H) x 75(L) x 25(D) mm, (2.76"H x 2.95"L x 1.00"D) Approx 130g (4.6 ounces)			
Controls	Two buttons: POWER / MODE, AIR			
Standard Accessories	Wrist strap, Alligator clip, Battery charger			
Optional Accessories	Hand-aspirated sampling kit, Sample-draw pump model RP-2009, Data logger management program, Extension connector for chargers, Standalone calibration station SDM-2009			

# The Bruusgaard System



TBS is a unique turnkey portable gas detection solution, giving you increased safety and substantial cost savings through standardised instruments, routines, training and procurement.

## Logistic Support

At any given time we know the status of all vessels and sites covered by The Bruusgaard System. We consolidate all shipments and make sure you have everything you need on board until next scheduled delivery. This results in fewer shipments and substantial savings!

- Year round follow up of instruments, spares and consumables
- Handling of all shipments & logistics
- Annual reports per vessel including budgeting



## Safety

QA – strict routines and logging

- Crew are able to use instruments and follow routines correctly
- Instruments are in proper working condition at all times
- Instruments are calibrated at correct intervals
- Sensors and other items are replaced at correct intervals
- Usage of instruments is logged, including abnormal observations
- Traceability – instrument history and usage
- Routines and procedures can merge into the overall QA-system

Effective and proven training is an integrated part of The Bruusgaard System.

## Instruments

All the equipment used for gas detection and calibration is placed in a custom-made wall cabinet. Including Log & Instruction Manual, which are crucial to maintaining the safety integrity.

- Standardised vessel specific gas detector solutions
- Total solutions including all equipment and routines necessary for efficient and safe use, storage and maintenance

## Cost Savings

Some of our customers have been able to go from 8 to 10 suppliers down to 1 – translating into cost savings of up to 40-50%. For one vessel, this could be thousands of dollars annually, and for a whole fleet, the cost savings can be dramatic. This is achieved through:

- One contact for worldwide supply of spares & gases
- All service and calibration can be done on site.
- Reductions of instrument types from 10-12 to 2-3

Reduced maintenance costs through:

- On board calibration
- Fewer instruments on board
- No need for spares on board
- One PO per year
- Increased safety
- Less use of administrative time