

# **GX 8000**

### Portable Multi Gas Monitor

The GX-8000 sets new industry standard for rugged, reliable portable gas detection. The GX-8000 is designed to monitor  $O_2$ , combustible gases, and toxic gases (CO and  $H_2$ S) in air and inerted atmospheres. The instrument is waterproof and has a strong built-in pump. Very easy to operate, maintain and calibrate. Available with alkaline or rechargeable batteries. All models below except GX-8000  $O_2$  are available as n-Butane or methane calibrated.

## Product description

The GX-8000 is the latest sample-drawing gas detector from Riken Keiki and consolidates several of the older classic models, such as the GX-111, NP-237H, GX-7, GX-85N, OX-62B, OX-1, OX-415, OX-226, GP-226, etc... into one unified and improved specification. Its versatile design makes it simple to configure for 1-5 gases and the sensor compartment makes servicing sensors and filters quick and simple. Designed to international standards, CE marked and certified to ATEX / IECEx / MED (Wheelmark) approval, it is perfectly suited to challenging industrial and marine applications.

The compact, lightweight design makes it comfortable to carry using the neck / shoulder strap, and the optional waist strap allows for hands-free use. The unit is easy to operate single-handedly and the powerful built-in pump has a fast 750ml / minute suction rate. A 30m length hose takes only (approx.) 30 seconds to sample a potentially hazardous or toxic gas.



#### **Features**

- Real-time, simultaneous detection of up to 5 ranges: Combustibles 100%VOL / 100%LEL, O<sub>2</sub>, H<sub>2</sub>S & CO
- Large display with auto backlighting
- Strong sample drawing capability (0.75L/min)
- Loud 95dB alarm buzzer
- 3 bright LED alarm windows
- ✓ Intrinsically Safe ATEX Exia II CT4 & MED approved
- ✓ IP67 water and dust resistant
- Lithium-ion rechargeable battery
- Compact, lightweight, ergonomic design
- Optional waist strap for hands-free operation
- Data logging as standard

### **Applications**

- Oil Tanker / Gas Carrier
- Chemical Tanker / Bulk Carrier
- Gas Plant / Gas Supplier Services
- Confined Space
- Industry
- Refineries / Petrochemical / Chemical Plants
- ✓ Water / Wastewater Treatment
- ✓ Power Plants / Fuel Cell Facilities

# Technical specifications

GX-8000 Type	GX-8000 Gases	Combustibles (CH <sub>4</sub> , i-C <sub>4</sub> H <sub>10</sub> , H <sub>2</sub> , etc) * 0-100% VOL	GX-8000 (CH <sub>4</sub> , i-C <sub>4</sub> H <sub>10</sub> , H <sub>2</sub> , etc) * 0- 0-100% LEL	Oxygen (0 <sub>2</sub> ) 0-40% VOL	Hydrogen Sulfide (H <sub>2</sub> S) 0-100ppm	Carbon Monoxide (CO) 0-500ppm	Consolidates and Improves on the Classic Models
Type A	4 Gases (5 Ranges)	•	•	•	•	•	NP-237H, GX-111
Туре В	4 Gases		•	•	•	•	GX-111
Type C	3 Gases		•	•	•		GX-7, GX-85N (With gas tube)
Type D	3 Gases		•	•		•	GX-7, GX-85N (With gas tube)
Type E	2 Gases (3 Ranges)	•	•	•			NP-237H
Type F	2 Gases		•	•			GX-7, GX-85N
Type LEL	1 Gas		•				GP-226
Type 02	1 Gas			•			OX-226, OX-415, OX-1, OX-62B

- \* Please specify gas combinations when ordering.
- Combustible gases:

**Standard:** Hydrocarbons (HC) Iso-butane i-C<sub>4</sub>H<sub>10</sub> / Methane CH<sub>4</sub> / Hydrogen (H<sub>2</sub>) (specify when ordering) **Options:** Toluene, n-Hexane, Methyl alcohol, Acetylene, MEK (factory set)

Target Gas Type	Combustibles (CH <sub>4</sub> , i-C <sub>4</sub> H <sub>10</sub> , H <sub>2</sub> , others)		Oxygen (O <sub>2</sub> )	Hydrogen Sulfide (H <sub>2</sub> S)	Carbon Monoxide (CO)				
Detection principle	Thermal Conductivity	Catalytic Combustion	Galvanic cell	Electrochemical	Electrochemical				
Detection range (increments)	0-100 vol% (1%vol)	0-100 LEL% (1%LEL)	0-40.0%vol (0.1%)	0-100.0ppm (0.5ppm)	0-500ppm (1ppm)				
Gas alarm	N/A	1st: 10%LEL 2nd: 50%LEL	1st: 19.5% 2nd: 23.5%	1st: 10.0ppm 2nd: 30.0ppm TWA: 10.0ppm STEL: 15.0ppm	1st: 25ppm 2nd: 50ppm TWA: 25ppm STEL: 200ppm				
Types of alarm	Gas alarm: Latching, 2 alarms Failure alarm: Flow failure, Sensor failure, Battery failure, Circuit failure, Calibration failure								
Display of alarm	<b>LED:</b> Flashing LEDs, <b>Buzzer</b> : Buzzer sounds alternates between a low and high pitch, <b>Visual display</b> : Indication value flashes. Alarm message displays and flashes.								
Alarm sound	More than 95dB (A) at 30cm								
Display	Digital LCD with auto backlight, Digital display (7 segments) and digital bar graph (25 segments), (50 segments with single gas versions GX-8000 Type LEL & Type 02)								
Sampling method	Sample Draw, Minimum 0.75L/min								
Power source	Lithium-ion battery as standard (fully charged in 3 hours) Optional 3pcs AA alkaline battery pack also available (Alkaline battery pack standard with single gas versions: GX-8000 Type O2 / GX-8000 Type LEL Lithium-ion battery optional)								
Sampling method	Sample Draw, Minimum 0.75L/min								
Continuous operation	Lithium-ion battery: more than 12 hours (GX-8000 Type O2, more than 20 hours)  AA alkaline battery pack: more than 6 hours (GX-8000 Type O2, more than 12 hours)								
Operating temp & humidity	-20~+50°C, -4-+122°F below 95%&RH (Non-condensing)								
Dimensions & Weight	Approx. $154(W) \times 81(H) \times 127(D)$ mm, Approx. $1.1kg$ with Lithium ion battery (Alkaline battery $0.9kg$ ) Approx. $0.1"(W) \times 3.1"(H) \times 4.9"(D)$ , Approx. $0.1kg$ with Lithium ion battery (Alkaline battery $0.9kg$ )								
Ingress proof rating	IP67								
Explosion proof	Intrinsically safe Exia II CT4								
Approvals	IECEx, ATEX, MED (Wheel Mark), CE, TIIS, HK								
Additional features	Activity indicator (pilot indicator and pump driving indicator), Pump stop function, Bump test function, IrDA communication, Data logge Password protection (GX-8000 single gas versions Type LEL & Type O2 with confidence beep and LED flash (once every minute)								



# 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.



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