

Marine **Gas Detection Solutions**



Crude Oil Carriers
LNG / LPG / CNG
Bulk Carriers
Chemical Tankers
Cruise Ships
Iron Ore / DRI
Coal Carriers
Barges
Container Ships

WORLDWIDE SERVICE

- Personal and portable gas monitors designed for marine use
- Drop ship worldwide
- Same day shipments
- Calibration gas same day shipment

SOLAS XI-1/7 compliant products Certified instruments:

- ATEX, MED, CSA, ABS, IECEx

Gas Detection For Life

Gas Monitoring Solutions for Marine Applications



Crude Oil Carriers

Model	Features	Cargo Testing					Confined Space Monitoring					Calibration Station	
		Inert Monitoring	High Range H2S	100% Volume HC	40m Sample Range	30m Sample Range	4 Gas LEL/ O2/CO/H2S	PID Capability	PPM Hydrocarbon	40m Sample Range	30m Sample Range		Wearable
GX-3R							•					•	•
GX-2012						•	•				•	•	•
GX-8000						•	•				•		
RX-8000	•			•		•							
RX-8500/8700	•	•		•		•							
EAGLE 2	•	•			•	•	•	•	•	•	•		•
GX-6000	•					•	•	•	•		•	•	•



LNG / LPG

Model	Features	Confined Space Monitoring					Calibration Station
		4 Gas LEL/ O2/CO/H2S	PID Capability	PPM Hydrocarbon	40m Sample Range	30m Sample Range	
GX-3R		•				•	•
GX-2012		•				•	•
GX-8000		•				•	
RX-8000						•	
RX-8500/8700							
EAGLE 2	•	•	•	•	•	•	•
GX-6000	•	•	•	•	•	•	•



Bulk Carriers

Model	Features	Cargo Testing					Confined Space Monitoring					Calibration Station	
		Inert Monitoring	High Range H2S	100% Volume HC	40m Sample Range	30m Sample Range	4 Gas LEL/ O2/CO/H2S	PID Capability	PPM Hydrocarbon	40m Sample Range	30m Sample Range		Wearable
GX-3R							•					•	•
GX-2012						•	•				•	•	•
GX-8000						•	•				•		
RX-8000	•			•		•							
RX-8500/8700	•	•		•		•							
EAGLE 2	•	•			•	•	•	•	•	•	•		•
GX-6000	•				•	•	•	•	•		•	•	•



Chemical Tanker

Model	Features	Cargo Testing			Confined Space Monitoring						Calibration Station
		Inert Monitoring	100% Volume HC	40m Sample Range	30m Sample Range	4 Gas LEL/ O2/CO/H2S	PID Capability	PPM Hydrocarbon	40m Sample Range	30m Sample Range	
GX-3R					•					•	•
GX-2012					•					•	•
GX-8000					•					•	
RX-8000	•	•			•						
RX-8500/8700	•	•			•						
EAGLE 2	•		•		•	•	•	•	•		•
GX-6000	•				•	•	•	•	•	•	•

* Complete fixed systems offerings are available from RKK Japan and RKK Korea

Personal & Portable Gas Monitors

GX-3R

Smallest 4 gas personal monitor

- Simultaneous detection of 4 gases
° LEL, O₂, H₂S & CO
- Dual audible alarm ports (95 db @ 30 cm)
- 3 visual alarm LED's
- Vibration alarm
- Optional motorized or hand pump

Certifications

IECEX | ATEX | MED | c CSA us | IP-67

GX-1212

4 gas personal monitor with 30m sample range

- 3 Operating modes: Normal, leak check, & bar hole
- Monitor ppm % LEL, and % volume methane, O₂, CO and H₂S
- 0 to 100% volume methane option
- Auto-ranging display of % LEL and % volume
- Alkaline or Li-Ion battery packs

Certifications

IECEX | ATEX | CSA | CE | IP-67

Calibration Station

SDM-3R

- Simultaneously bump / calibrate, charge, and collect data up to 10 instruments
- Stand-alone station (no PC Required)
- On board calibration certificates
- Multiple modules connected to a PC (10 max)
- 2 Gas inlets

Calibration Station

SDM-2012

- Simultaneously bump / calibrate, charge, and collect data up to 10 instruments
- Stand-alone station or PC connect
- Charging (Li-Ion Battery Pack)
- On board calibration certificates
- Multiple modules connected to a PC (10 max)
- 2 Gas inlets

GX-8000

4 Gas: LEL, %Vol HC / O₂ / H₂S / CO

- Real-time detection 4 channels
 - 100% LEL / VOL CH₄ / H₂ / iC₄H₁₀
 - 40% O₂ / 100ppm H₂S / 50ppm CO
- Optional combustible gases
 - Acetylene — Hexane
 - Methylalcohol — Toluene
 - Mek

Certifications

ATEX | IECEX | MED | IP-67

RX-8000

2 Gas: LEL, %Vol HC or CH₄ IR / O₂

- Real-time detection for combustibles
100% LEL / 100% Vol. O₂
- Large simultaneous display with auto backlighting
- 3 Bright LED alarm windows
- Lithium ion rechargeable battery pack

Certifications

ATEX | IECEX | MED | IP-67

RX-8500

4 Gas: LEL, %Vol CH₄ IR / O₂ / CO / CO₂

- Dual range detection of CH₄ in %Vol. and %LEL
- Accurately monitor inert locations for CH₄
- Detects O₂, CO, and CO₂

Certifications

ATEX | IECEX | MED | IP-67

RX-8700

3 Gas: LEL, %Vol HC IR / O₂ / H₂S Low & High Range

- Dual range detection of %Vol. and %LEL for HC
- Accurately monitor inert locations for HC
- Dual Range H₂S 0-100 & 0-1000 ppm

Certifications

ATEX | IECEX | MED | IP-67

Eagle 2

6 Gas portable monitor with 40m sample range

- Monitor HC gas from inerted tanks
- HC ranges include 100% LEL and 30% volume
- Auto-ranging display between % volume and % LEL HC or CH₄
- PID sensor for VOC testing
- Alkaline or NiMH batteries

Certifications

CSA | CE | ABS

Calibration Station

SDM-E2

- Simultaneously bump / calibrate, charge, and collect data up to 10 instruments
- Stand-alone station or PC connect
- Charging (NiMH batteries)
- 2 Calibration gas ports

GX-6000

6 Gas portable with PID, IR & super toxics

- 5 Operating modes
- 2 Interchangeable smart sensor slots
- Library of over 600 VOC's
- PID library of over 600 VOC's
- Alkaline or Li-Ion battery packs
- 30m sample range without PID

Certifications

IECEX | ATEX | (CSA) pending | CE | IP-67

Calibration Station

SDM-6000

- Simultaneously bump / calibrate, charge, and collect data up to 10 instruments
- Touch screen control display
- On board calibration certificates
- One power source for multiple units
- 3 Gas inlets with 6 gas option

Personal

Portables

Global Partners in Marine Monitors



USA	Japan	Singapore	South Korea	RK Germany
510-441-5656 www.rkiinstruments.com	81-3-3966-1113 www.rikenkeiki.co.jp	65 6275 3398 www.rkinstruments.com.sg	82-51-712-9900 www.rikenkeiki.co.kr/en/	49 (0) 6196 7777681 www.rikenkeikigmbh.com



ISO 9001 95QR-007
ISO14001 97ER-005



* Check RKI website for complete listing of agents.

SOLAS XI-1/7 COMPLIANT GAS MONITORS

New SOLAS XI-1/7 Regulation Defines Atmospheric Test Instruments for Confined Spaces Pre-entry Measurement

Many vessels are constructed with enclosed spaces (also known as confined spaces) which can pose hazards to personnel required to enter these spaces to perform work: Toxic gases, lack of oxygen and risk of explosion from flammable or combustible gases and vapors. Some examples of this type of space include, but are not limited to, cargo and ballast tanks, hulls, and holds. These risks can be mitigated by conducting pre-entry tests with appropriate multi-gas detector.

Pre-entry measurement: Requirements for a portable multi-gas detector

SOLAS XI-1/7 defines the requirements for gas detectors to be used for this testing:

- Explosion protection: The device must meet be certified to relevant explosion protection standards. There are several standards that exist around the world, including ATEX, IECeX, CSA, etc.

- Durability: A robust housing protects against impact, and intrusion of particulates or water (IP rating).
- Pre-entry sampling: the gas detector must have a means of sampling from the confined space prior to entry, by inserting a hose or probe and observing test results in a safe area before entering.
- Calibration and testing: All gas detectors require periodic testing to ensure reliability. Proper calibration equipment must be provided, and records of testing maintained on board the vessel.
- Electromagnetic compatibility: The gas detector must not be adversely affected by other electronic devices or equipment in the area, nor can they cause interference with said equipment.

World Leader In Gas Detection & Sensor Technology