

# NATURAL GAS DETECTOR

Confined Space Monitor

Leak Investigation

Line Purge Testing

Bar Hole Sampling



4 GX-2003  
INSTRUMENTS  
1 MONITOR



INSTRUMENTS



## CONFINED SPACE ENTRY

- Monitor LEL, O<sub>2</sub>, CO, and H<sub>2</sub>S
- Smallest 5 sensor sample draw instrument
- Internal sample pump
  - ◊ Pull samples up to 40'
  - ◊ Maintain steady sample flow to sensors
- Vibration, audible, and visual alarms
  - ◊ 3 Ways to communicate with workers
  - ◊ Includes audible alarm silence

## LEAK INVESTIGATION

- Provides low ppm detection of combustible gas
- Compact size
  - ◊ Ideal for appliance leak checks
- Leak check blink rate
  - ◊ LED's and alarm tones increase in frequency as gas concentration increases
  - ◊ Easier to find leak sources
- Audible alarm silence
  - ◊ Perform leak investigations without alarming residents



## LINE PURGE TESTING

- Thermal conductivity sensor
  - ◊ 0 to 100% volume Methane range
- Autoranging
  - ◊ Automatically ranges from % LEL to % Vol
  - ◊ Displays appropriate unit of measure
- Oxygen sensor
  - ◊ Linear response down to 0.0% oxygen



## BAR HOLE SAMPLING

- Samples on demand
  - ◊ Take samples when you're ready
  - ◊ Fixed time sampling periods
  - ◊ Displays peak reading after sampling
  - ◊ Locate leaks quicker, more accurately
- Bar hole probe
  - ◊ Prevents underground fluids and obstructions from entering sample system.



# GX-2003



**Confined Space Mode**



**PPM Leak Check Mode**



**Bar Hole Mode**

Feature		Benefit
3 operating modes: Normal, bar hole, and leak check	→	3 functions, 1 monitor. Reduce the number of instruments your service specialists must carry.
Smallest 5 sensor sample draw instrument	→	Convenient in tight spaces. Ideal for appliance leak checks. Comfortably fits on belts.
Leak check mode	→	Provides low ppm detection of combustible gases for leak investigations.
Leak check blink rate	→	The blink rate of the LED's and alarm tones increases in frequency as the concentration of the sample increases, making it easier to find the source of a leak.
Audible alarm silence	→	Service specialist can perform leak investigations without alarming residents with the audible alarm in the off mode. The reading and bar graph are displayed as well as flashing LED's.
Bar hole mode	→	Locates underground leaks quicker and more accurately by using fixed time sampling periods and storing the peak methane reading and minimum oxygen levels. The sample system shuts off and purges automatically at the end of each sample.
Auto ranging with combustible gas	→	Leak surveys are simplified with no set up or special modes to enter. Automatically ranges % LEL to % volume based on the sample. Displays appropriate unit of measure. Minimizes operator training and eliminates special range setup.
Interchangeable Ni-MH or alkaline power	→	Avoid instrument down time with the flexibility of interchangeable alkaline or Ni-MH batteries. Ni-MH fully recharges in 90 minutes.
Internal sample drawing pump	→	Maintains a steady sample flow to the sensors and provides up to a 40' range.
Low flow alarm	→	Immediate warning when the flow of the sampling system is obstructed.
Vibration, audible, and visual alarms	→	3 ways to communicate with the service specialist.
Calibration reminder / lock out	→	Prevent instruments that are out of calibration from going into the field with the calibration reminder or lock out.
Quick start up	→	Reduce man-hours of service specialists. No longer have to wait 3 to 4 minutes for each instrument to start up.
Protective rubber boot	→	Protects the instrument in high impact situations.
Datalogging	→	Stores up to 600 hours of data for service and liability record keeping.
Data Cal 2000	→	Automate the service and records for one or for an entire fleet of instruments.
Low cost of ownership	→	With the lowest sensor replacement cost, the cost of ownership is the best value of any instrument available.



# Specifications

High impact protective rubber boot

Internal pump with 40' range



3 Operation Modes

Auto-ranging display of % volume and % LEL

Bright visual alarm light bar

Battery level and time indicator

- Monitors:
- Combustibles
  - O<sub>2</sub>
  - H<sub>2</sub>S
  - CO

Glove friendly glow in the dark buttons

Audible, and vibration alarms

Interchangeable Ni-MH or alkaline power source



US

Gas Detected	Combustible Gases (Methane as standard)	% Volume Methane	Oxygen (O <sub>2</sub> )	Hydrogen Sulfide (H <sub>2</sub> S)	Carbon Monoxide (CO)
<b>Detection Principle</b>	Catalytic combustion	Thermal conductivity	Galvanic cell	Electrochemical cell	
<b>Detection Range</b>	0 ~ 100% LEL	0 ~ 100% Vol.	0 ~ 40% Vol.	0 ~ 100 ppm	0 ~ 500 ppm
<b>Sampling Method</b>	Internal sample pump, flow rate nominal 0.5 LPM, includes hydrophobic filter				
<b>Display</b>	Digital LCD with 7 segments, auto backlight during alarm, adjustable backlight time				
<b>Preset Alarms (User Adjustable)</b>	1st alarm 10% LEL 2nd alarm 50% LEL Over alarm 100% LEL	N/A	Low alarm 19.5% High alarm 23.5% Over alarm 40.0%	1st 10 ppm 2nd 30 ppm TWA 10 ppm STEL 15 ppm Over 100 ppm	1st 25 ppm 2nd 50 ppm TWA 25 ppm STEL 200 ppm Over 500 ppm
<b>Alarms Types</b>	Gas alarms: 1st and 2nd (user adjustable), STEL, TWA and OVER Trouble alarms: Sensor connection, low battery, low flow, circuit trouble and calibration error				
<b>Alarm Methods</b>	Gas alarms: Flashing lights, two tone buzzer, and vibration Trouble alarms: Flashing lights, trouble displayed, intermittent buzzer, and vibration				
<b>Response Time</b>	Within 30 seconds (T90)				
<b>Continuous Operation</b>	Alkaline battery: 14 hours		Ni-MH battery: 16 hours		
<b>Power Source</b>	Ni-MH battery pack, direct or separate charge, or 3 "AA" Alkaline dry cell batteries; interchangeable				
<b>Dimension &amp; Weight</b>	Approx. 171 (H) x 65 (W) x 39 (D) mm (5.6" H x 2.5" W x 1.5" D), approx. 310 g (11 ounces)				
<b>Warranty</b>	Two years material and workmanship				

# Ordering Info & Accessories

Part Number	Description
72-0253RKCLB	GX-2003, 3 sensor, LEL / % Vol (CH4) / O2 with Ni-MH battery pack and 115 VAC charger, LB version
72-0253RKALB	GX-2003, 3 sensor, LEL / % Vol (CH4) / O2, with Ni-MH battery pack and 12 VDC charger, LB version
72-0252RKLB	GX-2003, 3 sensor, LEL / % Vol (CH4) / O2 with alkaline batteries, LB version
72-0253RKLB	GX-2003, 3 sensor, LEL / % Vol (CH4) / O2, with Ni-MH battery pack, LB version
72-0273RKCLB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / CO,with Ni-MH battery pack and 115 VAC charger, LB version
72-0273RKALB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / CO,with Ni-MH battery pack and 12 VDC charger, LB version
72-0272RKLB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / CO,with alkaline batteries, LB version
72-0273RKLB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / CO,with Ni-MH battery pack, LB version
72-0275RKCLB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / H2S with Ni-MH battery and 115 VAC charger, LB version
72-0275RKALB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / H2S with Ni-MH battery and 12 VDC charger, LB version
72-0274RKLB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / H2S with alkaline batteries, LB version
72-0275RKLB	GX-2003, 4 sensor, LEL / % Vol (CH4) / O2 / H2S with Ni-MH battery, LB version
72-0280RKLB	GX-2003, 5 sensor, LEL / % Vol (CH4) / O2 / CO / H2S with alkaline, LB version
72-0281RKCLB	GX-2003, 5 sensor, LEL / % Vol (CH4) / O2 / CO / H2S with Ni-MH battery and 115 VAC charger, LB version
72-0281RKALB	GX-2003, 5 sensor, LEL / % Vol (CH4) / O2 / CO / H2S with Ni-MH battery and 12 VDC charger, LB version
72-0281RKLB	GX-2003, 5 sensor, LEL / % Vol (CH4) / O2 / CO / H2S with Ni-MH battery, LB version



Calibration Kits

Flexible Power Source

100-240 VAC and VDC Battery Chargers

Bar Hole Probe

Carrying Case



Calibration Station



Training CD  
(ships with every order)

Instrument Management System

## Who Is RKI Instruments?

A world leader in gas detection AND sensor technology for over 70 years.

### ***At The Heart Of Every Gas Detector Is The Sensor***

We don't just buy our sensors, we design, build, age, and test them. For over 70 years we have been at the forefront of sensor technology, developing advanced detection techniques to provide solutions for specific applications. As a result we provide reliable, rugged gas detection equipment.

### ***Product Development***

Through ingenuity and years of industry experience, we have developed a unique line of gas detection instruments and accessories. The GX-2003 was designed specifically for the Natural Gas Utility Industry and built around our own high quality, long lasting sensors.

### ***Support***

The average RKI employee has over 12 years of gas detection experience. When you call RKI for support you will speak to a person with an expertise in gas detection equipment. We maintain a large inventory of product and can ship most orders within 24 hours. RKI also provides support through a network of authorized safety equipment distributors, technical sales representatives, and service centers.

### ***Training***

Our products ship with an operator's manual as well as an interactive computer-based training CD. The interactive training material is also available from our web site. On site training and factory classes are also available.



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