

## MSHA PERSONAL FOUR GAS MONITOR

#### **Gas Detection For Life**

# **MSHA GX-2009**





#### World's Smallest and Lightest 4 Gas Monitor

#### **Features**

- Simultaneous detection of 4 gases
   CH4, O2, H2S & CO
- Smallest/Lightest 4 gas monitor on the market ° 2.7" H x 3" W x 1" D, 4.6 oz.
- · Dual audible alarm ports (95 db @ 30 cm)
- · 3 visual alarm LED's
- · Vibration alarm
- · IP-67 Water resistant/dustproof design
- · Calibration and bump test lock out or reminder controls
- · Large capacity data logging standard
  - 8 alarm trends
  - ° Log time range of 10 to 300 hours
  - 100 calibration records stored
- · 20 hours of operation (NiMH batteries)
- · Large LCD display screen
- · Automatic backlighting at alarm
- · Impact resistant rubber over-mold body
- · Intrinsically safe, MSHA classified
- · 2 year warranty

## **Applications**

- Mining
- Underground construction
- Tunneling
- Any application where an MSHA approved gas monitor is required

RKI is proud to offer the smallest and lightest 4-gas monitor with an MSHA rating, the MSHA GX-2009. MSHA (Mine Safety and Health Administration) certification allows this version of the GX-2009 to be used in underground mines, tunnels and excavations under MSHA jurisdiction. Weighing only 4.6 ounces, it fits in the palm of your hand.

The MSHA GX-2009 simultaneously monitors and displays % volume combustibles, oxygen, carbon monoxide, and hydrogen sulfide. Equipped with dual audible alarm ports and alarm LED's on 3 sides of the instrument, so that alarm conditions are obvious from multiple perspectives especially in high noise environments. Other features include a water resistant and dustproof 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 at alarm on a large LCD display, and it even tells the time! All of these controls and features are operated through 2 simple glow-in-the dark, glove friendly buttons. The NiMH battery set will operate for 20 hours and will fully charge 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 Windows 8, 7, XP and Vista compatible. To simplify maintenance and record keeping, the MSHA GX-2009 has the SDM-2009 single calibration station available. The SDM-2009 calibration station can operate as a stand-alone system or connect to a computer along with up to 10 other SDM-2009 units.

# **MSHA GX-2009**

|   |  |   | Т   |  |
|---|--|---|---|--|
| Gas Detected  | Combustible Gases (Methane as standard)  | Oxygen (O2)   | Hydrogen Sulfide (H2S)  | Carbon Monoxide (CO)   |
| Sensor  | Catalytic combustion   | Galvanic cell   | Electrochemical cell  |  |
| Selisoi   | NC-6264B   | OS-BM2  | ES-1827i  | ES-1821  |
| Detection Range (Increments)  | 0 ~ 5% vol<br>(0.1% vol)   | 0 ~ 40.0% vol<br>(0.1% vol)                             | 0 ~ 100.0 ppm (0.5 ppm)   | 0 ~ 500 ppm (1 ppm)  |
| Accuracy Statement  | ± 5% of reading or ±<br>0.1% vol (whichever<br>is greater)   | ± 0.5% O2   | ± 5% of reading or ± 2 ppm<br>H2S (whichever is greater)  | ± 5% of reading or ± 5 ppm CO (whichever is greater)   |
| Sampling Method   | Diffusion sampling standard / hand aspirator or motorized pump optional  |   |   |  |
| Display   | Digital LCD displays all four gases simultaneously, with auto backlight  |   |   |  |
| Preset Alarms<br>(User Adjustable)<br>Overscale alarm<br>(Non-adjustable) | 1st alarm 0.5% vol<br>2nd alarm 2.5% vol<br>Over alarm 5% vol  | Low alarm 19.5%<br>High alarm 23.5%<br>Over alarm 40.0% | 1st alarm 10 ppm<br>2nd alarm 30 ppm<br>TWA alarm 10 ppm<br>STEL alarm 15 ppm<br>Over alarm 100 ppm | 1st alarm       25 ppm         2nd alarm       50 ppm         TWA alarm       25 ppm         STEL alarm       200 ppm         Over alarm       500 ppm |
| Types of Alarms   | Gas Alarm: 2 Increasing alarms, STEL, TWA, overscale alarm. O2 decreasing/increasing.  Trouble alarm: Sensor disconnection, low battery, circuit error, calibration range error  |   |   |  |
| Display of Alarm  | Gas Alarm: Flashing LEDs, intermittent buzzer (95 db @ 30 cm), flashing gas value, vibration Flashing LEDs, intermittent buzzer (95 db @ 30 cm), display of error message  |   |   |  |
| Operating Temp. & Humidity  | -4°F to 122°F (-20°C ~ +50°C), 0 to 95% RH, non-condensing (splash resistant)  |   |   |  |
| Response Time   | Within 30 seconds (T90)  |   |   |  |
| Continuous Operation  | 20 hours after a 3 hour full charge (14 hours after 90 min charge)   |   |   |  |
| Power Source  | Direct charging NiMH batteries, set of 2   |   |   |  |
| Safety Design /<br>Approvals  | MSHA classified  |   |   |  |
| Size & Weight   | 2.7" H x 3" W x 1" D (Approx. 70 H x 75 W x 25 D mm), 4.6 ounces (approx. 130 g)   |   |   |  |
| Case Material   | High impact over molded rubber. Dust and water resistant with IP-67 approval.  |   |   |  |
| Controls  | Two glow in the dark buttons: POWER / MODE, AIR  |   |   |  |
| Datalogging   | Standard with all instruments. Stores 8 alarm trend sessions where readings are recorded 30 minutes before and after an alarm event. 3,600 data point capacity with a log time range of 10 to 300 hours (based on programmable interval times); and stores up to 100 calibration records.  |   |   |  |
| Required Accessories  | Battery charger  |   |   |  |
| Standard Accessories  | Alligator clip   |   |   | 49-1609RK<br>170RK)49-2170RK-01  |
| Optional Accessories  | Belt Clip Padded carrying case for GX-2009 and accessories Charging station, 115/220 VAC powered for 2, 3, 4, or 5 instruments Charging station with 12 VDC power supply and vehicle adapter plug 12 VDC adapter with vehicle plug (does not include charger base). Hand aspirated sample draw with 10' hose and probe (up to 40' hose available) USB to IrDA downloading cable. SDM-2009 single calibration station |   |   |  |
| Configurations  | • 4 gas, CH4 / O2 / H2S / C0   | O • 3 gas, CH4 / O2<br>• 3 gas, CH4 / O2                |   | / O2 • 1 gas, CH4  |
| Warranty  | Two years material and workmanship   |   |   |  |

Specifications subject to change without notice.



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### **Authorized Distributor:**

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