## Model GX-2009 PERSONAL FOUR GAS MONITOR

## Description

MATHESON is proud to offer the smallest and lightest 4-gas monitor in the world, the GX-2009. Weighing only 4.6 ounces, it fits in the palm of your hand (2.75" H x 2.95" L x .98" D). The GX-2009 simultaneously monitors and displays combustibles, Oxygen, Carbon Monoxide, and Hydrogen Sulfide. The GX-2009 represents the latest evolution of gas detection technology. Advancements include 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 waterproof 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 a standard feature.

Other standard features are a vibratory alarm, autocalibration, calibration 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 Ni-MH 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, and will store up to 8 alarm trend sessions where readings are recorded 30 minutes before and after an alarm event. The data logging has a 3,600 data point capacity with a log time range of 10 to 300 hours based on programmable interval times. The datalogging software will also store up to 100 calibration records and is Windows XP and Vista compatible. The GX-2009 is also functional with the Data Cal 2000 instrument maintenance system and the SM-2009U single calibration station.

The GX-2009 is designed around MATHESON'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 MATHESON sensors and instruments the most reliable and long lasting monitoring devices in the industry.



## **Applications**

- Personal monitoring
- Confined spaces
- Refineries/petrochemical
- Utilities
- Hazardous material
- Water/wastewater
- Fire services
- Construction

## **Features**

- Simultaneous detection of 4 gases
- LEL, O<sub>2</sub>, H<sub>2</sub>S & 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
- Vibratory alarm
- IP-67 Waterproof/dustproof design
- Calibration lock out or reminder controls
- Large capacity datalogging standard
  - 8 alarm trends
  - Log time range of 10 to 300 hours
  - 100 calibration records
- 20 hours of operation (Ni-MH batteries)
- Large LCD display screen
- Automatic backlighting at alarm
- Impact resistant over-mold body, RFI shielded body
- STEL and TWA readouts
- Intrinsically safe, IECEx / ATEX approved (CSA, C/US pending)
- 2 year warranty





Gas Detected	Combustible Gases (Methane as standard)	Oxygen (O <sub>2</sub> )	Hydrogen Sulfide (H₂S)	Carbon Monoxide (CO)	
<b>Detection Principle</b>	Catalytic combustion	Galvanic cell	Electrochemical cell		
Detection Range (Increments)	0 – 100% LEL (1% LEL)	0 – 40.0% Vol (0.1% Vol)	0 – 100.0 ppm (0.5 ppm)	0 – 500 ppm (1 ppm)	
Sampling Method	Diffusion sampling, hand aspira	tor or motorized pump optional	1		
Display	Digital LCD displays all four gases simultaneously, with auto backlight				
Preset Alarms (User Adjustable)	1st alarm 10% LEL 2nd alarm 50%LEL Over alarm 100% LEL	Low alarm 19.5% High alarm 23.5% Over alarm 40.0%	1st alarm 10 ppm 2nd alarm 30 ppm TWA alarm 10 ppm STEL alarm 15 ppm 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 Trouble alarm: Sensor disconnection, wire disconnection, low battery, circuit error, calibration range error				
Display of Alarm	Gas alarm: Flashing LEDs, intermittent buzzer (95 db @ 30 cm), flashing gas value, vibratory Trouble alarm: Flashing LEDs, intermittent buzzer (95 db @ 30 cm), display of error message				
Operating Temp. & Humidity	-4°F to 122°F (-20°C to 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 minute charge)				
Power Source	Direct charging Ni-MH batteries				
Safety Design / Approvals	IECEx zone 0 Ex ia IIC T4; ATEX II 1G Ex ia IIC T4: (CSA classified, "C/US", as intrinsically safe. Class I, Division 1, Groups A, B, C, D pending)				
Dimension & 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	RFI shielded high impact over molded rubber. Dist and waterproof with IP-67 approval				
Controls	Two glow in the dark buttons: POWER / MODE, AIR				
Datalogging	Standard with all instruments. Stores 8 alarm trend events: 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				
Standard Accessories	Alligator clip Ni-MH batteries Charging station with 115/220 VAC power supply*				
Warranty	Two years material and workmanship				

Ordering Information						
Model No.	Description	Optional Accessories				
GX-2009-21-RC	GX-2009, 2 gas, LEL / CO with alligator clip and 115 / 220 VAC charger	Model No.	Description			
GX-2009-22-RC	GX-2009, 2 gas, LEL / O <sub>2</sub> with alligator clip and	49-2171RK	Charging station with 12 VDC adapter and vehicle adaptor plug			
	115 / 220 VAC charger	81-1166RK	RP-6 pump with 4" rubber nipple, 10' hose and probe			
GX-2009-31-RC	GX-2009, 3 gas, LEL / $O_2$ / CO with alligator clip and 115 / 220 VAC charger	81-1160RK	Hand aspirated sampler, with 10' hose and probe			
GX-2009-32-RC	GX-2009, 3 gas, LEL / $O_2$ / $H_2S$ with alligator clip and 115 / 220 VAC charger	GX-2009 Re	placement Sensors			
GX-2009-41-RC	GX-2009, 4 gas, LEL / $O_2$ / $H_2$ S / CO with alligator clip, 115 / 220 VAC charger	Model No.	Description			
GX-2009-41-NC	GX-2009, 4 gas, LEL / O <sub>2</sub> / H <sub>2</sub> S / CO with alligator clip,	ES-1821	Sensor, Carbon Monoxide			
	no charger*	ES-1827i	Sensor, Hydrogen Sulfide			
	-	NC-6264A	Sensor, LEL			
		OS-BM2	Sensor, Oxygen			



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