

Model GX-2003

CONFINED SPACE / BAR HOLE / LEAK DETECTOR

Description

Built around high-quality micro-sensor technology, the GX-2003 is MATHESON's smallest personal 5-in-1 gas monitor with a built in sample pump. Weighing only 11 ounces, it has many features which set the GX-2003 apart from the competition. For example, it can monitor the standard confined space gases (LEL combustibles, Oxygen deficiency, Carbon Monoxide, and Hydrogen Sulfide), and it can also measure 100% volume Methane and dynamically display either % LEL, or % volume with its auto-ranging ability.

The GX-2003's large LCD display shows all gas readings, battery level, current time, and will automatically backlight in alarm conditions. This unit also has a special bar hole mode to facilitate locating underground gas leaks. A high sensitivity leak check mode is also included, and provides ppm level detection of gas leaks. A special variable frequency alarm helps to pinpoint the leak without looking at the instrument display. Other standard mode alarm types include vibratory, visual, and audible alarms that can be set to latching or non-latching. Controlled by a microprocessor, the GX-2003 continuously checks itself for sensor connections, low battery, circuit trouble, low flow, and calibration errors. The GX-2003 can interchangeably operate on either a Ni-MH battery pack or 3 AA alkaline batteries. The batteries are simple to replace requiring no tools to access the battery compartment. The Ni-MH battery pack can receive a charge directly within the instrument or separately, allowing the unit to remain in service.



Calibration intervals and reminders are user adjustable and can be set to either go into alarm or to lock the user out of normal measurement mode once a calibration period has expired. Calibrations can be performed automatically or individually in single calibration mode. The GX-2003 is also compatible with the economical SM-2003 single channel calibration station.

Applications

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



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Features

- Three operating modes: Normal, Bar Hole, and Leak Check
- Monitors LEL, and % volume Methane, Oxygen, Carbon Monoxide, and Hydrogen Sulfide
- Bar Hole mode tests for peak Methane and Oxygen levels
- Leak detect mode offers high sensitivity tests for ppm level natural gas leaks
- 0 to 100% volume methane
- Auto-ranging display of % volume and % LEL
- Internal sample drawing pump with up to 40 foot range
- Vibratory, visual, and audible alarms
- Automatic backlight during alarms
- Calibration reminder with lock out option
- Ni-MH or alkaline power source (interchangeable)
- Quick charge (complete charge in 90 minutes)
- Glove friendly glow in the dark buttons
- Alarm latching or non-latching
- High impact protective rubber boot
- Up to 600 hours of datalogging with alarm trends
- Autocalibration or single calibration
- TWA and STEL readings with lunch-break mode
- Intrinsically safe, CSA, C/US classified
- 2 year warranty



Gas Detected	Combustible Gases (Methane as standard)	% Vol Methane (CH ₄)	Oxygen (O ₂)	Hydrogen Sulfide (H ₂ S)	Carbon Monoxide (CO)
Detection Principle	Catalytic combustion	Thermal conductivity	Galvanic cell	Electrochemical cell	
Detection Range	0 – 100% LEL	0 – 100% Vol	0 – 40% Vol	0 – 100 ppm	0 – 500 ppm
Sampling Method	Internal sample pump, flow rate nominal 0.5 LPM, includes hydrophobic filter				
Display	Digital LCD with 7 segments, auto backlight during alarm				
Preset Alarms (User Adjustable)	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 10ppm 2nd 30ppm TWA 10ppm STEL 15ppm Over 100ppm	1st 25 ppm 2nd 50 ppm TWA 25 ppm STEL 200 ppm Over 500 ppm
Alarms Types	Gas alarms: 1st and 2nd (user adjustable), STEL, TWA and OVER Trouble alarms: Sensor connection, low battery, low flow, circuit trouble and calibration error				
Alarm Methods	Gas alarms: Flashing lights, two tone buzzer, and vibratory Trouble alarms: Flashing lights, trouble displayed, intermittent buzzer, and vibratory				
Operating Temp. & Humidity	-20°C to 50°C (-4°F to 122°F) 0 to 85% RH, non-condensing				
Response Time	Within 30 seconds (T90)				
Continuous Operation	Alkaline battery: 14 hours Ni-MH battery: 16 hours				
Power Source	Ni-MH battery pack, direct or separate charge, or 3 "AA" Alkaline dry cell batteries; interchangeable				
Safety Rating	CSA classified, "C/US", as intrinsically safe. Class I, Division 1, Groups A, B, C, D				
Dimension & Weight	Approx. 5.6" H x 2.5" W x 1.5" D (approx. 171 H x 65 W x 39 D mm), 11 ounces (approx. 310 g)				
Case Material	Dust & splash resistant. RFI shielded high impact plastic with protective rubber boot				
Controls	Five buttons: POWER / ENTER, DISPLAY, AIR, RESET, SHIFT (glow in the dark)				
Standard Accessories	• Wrist strap • 10" Probe	• 10' Hose • Rubber boot	• Manual • Quick reference card	• Training CD	
Additional Standard Accessories for Leak Check / Bar Hole Versions	• 3' Hose • 30" Bar Hole probe				
Configurations	2, 3, 4, or 5 sensor units Ni-MH or alkaline battery options				
Warranty	Two years material and workmanship				

Ordering Information

Model No.	Description
GX-2003-21-RC	GX-2003, 2 gas, LEL / O ₂ with Ni-MH battery pack and 115/220 VAC charger
GX-2003-21	GX-2003, 2 gas, LEL / O ₂ with alkaline batteries
GX-2003-22-RC	GX-2003, 2 gas, O ₂ / CO with Ni-MH battery pack and 115/220 VAC charger
GX-2003-22	GX-2003, 2 gas, O ₂ / CO with alkaline batteries
GX-2003-31-RC	GX-2003, 3 gas, LEL / O ₂ / CO with Ni-MH battery pack and 115/220 VAC charger
GX-2003-31	GX-2003, 3 gas, LEL / O ₂ / CO with alkaline batteries
GX-2003-32-RC	GX-2003, 3 gas, LEL / % Vol CH ₄ / O ₂ with Ni-MH battery pack and 115/220 VAC charger
GX-2003-32	GX-2003, 3 gas, LEL / % Vol CH ₄ / O ₂ with alkaline batteries
GX-2003-33-RC	GX-2003, 3 gas, LEL / O ₂ / H ₂ S with Ni-MH battery pack and 115/220 VAC charger
GX-2003-33	GX-2003, 3 gas, LEL / O ₂ / H ₂ S with alkaline batteries
GX-2003-32-RCBH	GX-2003, 3 gas, LEL / % Vol CH ₄ / O ₂ , Ni-MH battery pack and 115/220 VAC charger, BH version*
GX-2003-32-BH	GX-2003, 3 gas, LEL / % Vol CH ₄ / O ₂ , alkaline batteries, BH version*
GX-2003-41-RC	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / H ₂ S, Ni-MH battery pack and 115/220 VAC charger
GX-2003-41	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / H ₂ S with alkaline batteries
GX-2003-41-RCBH	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / H ₂ S, Ni-MH battery pack and 115/220 VAC charger, BH version*
GX-2003-41-BH	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / H ₂ S, with alkaline batteries BH version*
GX-2003-42-RC	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / CO, Ni-MH battery pack and 115/220 VAC charger
GX-2003-42	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / CO, with alkaline batteries
GX-2003-42-RCBH	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / CO, with Ni-MH battery pack and 115/220 VAC charger BH version*
GX-2003-42-BH	GX-2003, 4 gas, LEL / % Vol CH ₄ / O ₂ / CO, with alkaline batteries BH version*
GX-2003-43-RC	GX-2003, 4 gas, LEL / O ₂ / CO / H ₂ S with Ni-MH battery pack and 115/220 VAC charger
GX-2003-43	GX-2003, 4 gas, LEL / O ₂ / CO / H ₂ S with alkaline batteries
GX-2003-51-RC	GX-2003, 5 gas, % Vol CH ₄ / LEL / O ₂ / CO / H ₂ S with Ni-MH battery pack and 115/220 VAC charger
GX-2003-51	GX-2003, 5 gas, % Vol CH ₄ / LEL / O ₂ / CO / H ₂ S with alkaline batteries
GX-2003-51-RCBH	GX-2003, 5 gas, % Vol CH ₄ / LEL / O ₂ / CO / H ₂ S with Ni-MH battery pack and 115/220 VAC charger, BH version*
GX-2003-51-BH	GX-2003, 5 gas, % Vol CH ₄ / LEL / O ₂ / CO / H ₂ S with alkaline batteries, BH version*

*Bar Hole versions include bar hole probe and 2 foot hose

Optional Accessories

Model No.	Description
82-5010RK-SER	Data log package, with IR Data Acquisition serial cable & software
82-5010RK-USB	Data log package, with IR Data Acquisition USB cable & software
80-0009RK-10	Hose, 10', polyurethane
80-0009RK-15	Hose, 15', polyurethane
80-0009RK-20	Hose, 20', polyurethane
80-0009RK-25	Hose, 25', polyurethane
80-0009RK-30	Hose, 30', polyurethane
80-0009RK-40	Hose, 40', polyurethane
81-DC2000	Data Cal 2000 docking station, includes station, power cord, serial cable, and PC software CD, PC not included
81-DM2003	DM2003 docking module
81-SM2003U	Single point calibration station
49-2167RK	Charging station, 115/220 VAC
49-1606RK	Battery pack, Ni-MH

Ordering Information

GX-2003 Replacement Sensors

Model No.	Description
ES-1821	Sensor, Carbon Monoxide
ES-1827	Sensor, Hydrogen Sulfide
NC-6264A	Sensor, LEL
NC-6264ALB	Sensor, LEL Bar Hole PPM mode
OS-BM2	Sensor, Oxygen
TE-7561	Sensor, TC, % Vol

