



**GENERAL MONITORS**  
Protection for life.

# MODELS G20/G40

## Two and Four-Sensor Portable Gas Detectors



### Features

- Menu Driven Display
- Reversible LCD
- Sensor Life Indicator
- Interchangeable Sensors
- Long Sensor Life
- Data Logging
- Backlit LCD Display
- IP65 Enclosure Rating

### Benefits

- Easy setup and operation
- LCD text can rotate 180° for easy viewing when either holding or belt mounted
- Provides status of remaining sensor life
- Allows multiple configurations using one detector
- Lower cost of ownership
- Microsoft® Windows™ compatible software charts gas exposure levels & calibration records
- Large display simultaneously indicates gas readings of up to 4 sensors and battery status
- Electronic components are protected from damage by water

### Description

The Models G20 and G40 are two and four gas portable detectors designed to give optimum mobility and convenience by allowing the user to carry or wear the monitor without any hindrances. These products provide continuous monitoring and data logging of any combination of toxics, combustible and oxygen sensors. The detectors are intended for use by personnel entering areas where fixed gas detection is not practical or is not present.

The G20 detector can be configured for either one or two gas sensors. The G40 detector can be configured for use with one to four gas sensors. Both models have programmable alarm set points for TWA (Time Weighted Average), STEL (Short-term Exposure Limit), and two gas concentration levels per sensor. The user interface is through four keypad buttons, an LCD display, and a bank of three LEDs.

User adjustable alarm conditions are announced by a combination of the following:

- Audible alarm (90dBA)
- LCD display
- LEDs (green, yellow and red)

Recorded data can be downloaded from the G20/G40 when installed in the Battery Charger via an RS-232 connector.

### Applications

- Petrochemical and Chemical Plants
- Public Utilities
- Wastewater Treatment Plants
- Mining
- Refineries
- Pulp and Paper
- Semiconductor Manufacturing
- Pharmaceuticals
- Food and Beverage
- Construction
- Tunnels



# MODELS G20/G40

## Sensor Specifications

### Toxic and Oxygen

**Sensor Types:** Electrochemical Cell

### Combustible

**Sensor Type:** Micro-Catalytic Bead

### Typical Sensor

**Life:** Two to three years (normal service)

### Gases Detected

<b>&amp; Range:</b>	Carbon Monoxide	0-500 ppm
	Chlorine	0-10 ppm
	Chlorine Dioxide	0-3ppm
	Combustible	0-100% LEL
		0-5% v/v methane
	Hydrogen Sulfide	0-100 ppm
	Nitric Oxide	0-100 ppm
	Nitrogen Dioxide	0-20 ppm
	Oxygen	0-25% volume
	Sulfur Dioxide	0-100 ppm

### Response Time:

SO <sub>2</sub> , NO - T90	< 10 sec.
Combustible, H <sub>2</sub> S,	
CO, NO <sub>2</sub> - T90	< 30 sec.
Cl <sub>2</sub> , ClO <sub>2</sub> - T90	< 60 sec.
O <sub>2</sub> - T90	< 15 sec.

### Repeatability:

Toxic/Oxygen	+/-2% ppm or 10% of the applied gas, whichever is greater
Combustible	+/-3% to 50% LEL +/-5% 51-100%LEL

### Zero Drift:

Less than 5% per year

### Data Logging:

Stores up to 28,000 records in increments of 1-60 seconds in one second intervals

### Warranty:

Two years for electronics  
One year for sensor

### Approvals:

UL, MSHA CUL (approved to CSA performance standard C22.2 No.152), CE Marking, ATEX

## Electrical Specifications

### Classification:

Intrinsically Safe for use in:  
Class I, Div. 1 and 2,  
Groups A, B, C & D;  
Class II, Div. 1 and 2,  
Groups E, F & G;  
Class III; Class I, Zone 0 & 1,  
Group IIC hazardous areas  
EEx ia I/IIC T3

### RFI/EMI

#### Protection:

Complies with EN50081-2,  
EN50082-2

### Battery Operating Life:

10 hours typical

**Battery Pack:** Nickel Metal Hydride (Ni-MH)

## Mechanical Specifications

**Housing:** Chemical resistant, high impact plastic

**Width:** 3.5" (89mm)

**Depth:** 2.4" (61mm)

**Length:** G20: 5.4" (137mm)  
G40: 6.1" (155mm)

**Weight:** G20: 14 ounces (397 grams)  
G40: 16 ounces (454 grams)

## Environmental Specifications

### Operating Temperature

**Range:** -4°F to +122°F (-20°C to +50°C)

### Storage Temperature

**Range:** -4°F to +122°F (-20°C to +50°C)

### Operating Humidity

**Range:** 15-90%, non-condensing

### Pressure

**Range:** Atmosphere +/-10%

Rated dust tight, water resistant (IP65)

## Accessories

Electric sample pump accessory kit, manual sample pump accessory kit, basic accessory kit, calibration kits, data logging software, battery charger, external sample pump, sample probe, flow housing, hand pump, earphone, neck and wrist straps, 30' leash, 26' retractable leash, carrying case, nylon case, car adapter.

*Specifications subject to change without notice.*

*Represented by:*

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