



# Gas Sensor Transmitter/Monitor GDX-350

**NEW  
EXPANDED SENSOR  
OPTIONS**

## Features & Benefits:

- Pre-calibrated Smart Sensor capability with 'plug-n-play' convenience minimizes maintenance and downtime
- Non-Dispersive Infrared (NDIR), Catalytic Bead and Electrochemical sensor options available
- Can be placed directly in hazardous environments where leaks occur for quick detection and rapid response
- Graphic LCD for real-time monitoring of concentrations
- 4-20 mA, optional Modbus RTU® and wireless interface
- Easily update alarm set points, configurations or maintenance modes using the LCD display
- 30-minute onboard data trend



## Standalone Operation in Harsh Environments

Bacharach's new state-of-the-art GDX-350 transmitters, with Smart Sensor technology, provide accurate and continuous detection of toxic, combustible and asphyxiate gases. The full-featured design of the GDX-350 includes a large LCD display, a 4-20 mA interface, programmable alarms, optional relays and a Modbus interface. Exclusive pre-calibrated replacement sensor technology makes occasional maintenance practically effortless. Rugged construction, intrinsic safety capability (in two-wire mode with barrier) and an explosion-proof housing allow the GDX-350 to operate directly in hazardous-rated areas of many industrial environments, delivering reliable, superior-sensing performance to protect human life, equipment and property.

With its large LCD display, the GDX-350 shows gas concentrations, engineering units and bar graphs along with the most recent 30 minutes of trend data. Utilizing the on-board magnetic keypad, users can also navigate through the display to change alarm set points, instrument configurations, or enter into maintenance mode for non-intrusive sensor calibration. For security, menu options also enable the selection of an authorization code to lock critical parameters. Accompanying the LCD display are standard LED alarm indicators that show when low and high alarm conditions are met. An optional relay board is available to provide three 5-amp relays that can be used to drive audible/visual alarms, or activate exhaust fans.

## GD<sub>X</sub>-350 Product Specifications

Gas Type	Measuring Range	Display Increments	Sensor Type	Default Span Point	Default Low Alarm	Default High Alarm	Response Time (T90)
Ammonia (NH <sub>3</sub> )	0 - 500 ppm	1 ppm	Electrochemical	25 ppm	25 ppm	50 ppm	< 75 s
Carbon Dioxide (CO <sub>2</sub> )	0 - 5% vol	0.1%	Infrared (NDIR)	2.5%	1.5%	2.5%	< 50 s
Carbon Monoxide (CO)	0 - 1,000 ppm	1 ppm	Electrochemical	100 ppm	35 ppm	70 ppm	< 50 s
Hydrogen (H <sub>2</sub> )	0 - 1,000 ppm	1 ppm	Electrochemical	100 ppm	50 ppm	100 ppm	< 180 s
Hydrogen Sulfide (H <sub>2</sub> S)	0 - 500 ppm	1 ppm	Electrochemical	25 ppm	10 ppm	20 ppm	< 75 s
Hydrocarbon (CH <sub>4</sub> )	0 - 100% LEL	1%	Infrared (NDIR)	25% LEL	10% LEL	20% LEL	< 60 s
Methane (CH <sub>4</sub> )	0 - 100% LEL	1%	Catalytic Bead	25% LEL	10% LEL	20% LEL	< 45 s
Nitrogen Dioxide (NO <sub>2</sub> )	0 - 99.9 ppm	0.1 ppm	Infrared (NDIR)	5.0 ppm	1.0 ppm	2.0 ppm	< 75 s
Oxygen (O <sub>2</sub> )	0 - 25%	0.1%	Electrochemical	20.9%	19.5%	18.5%	< 30 s
Phosphine (PH <sub>3</sub> )	0 - 5 ppm	0.01 ppm	Electrochemical	1.00 ppm	0.30 ppm	0.60 ppm	< 60 s
Propane (C <sub>3</sub> H <sub>8</sub> )	0 - 100% LEL	1%	Infrared (NDIR)	25% LEL	10% LEL	20% LEL	< 60 s
Sulfur Dioxide (SO <sub>2</sub> )	0 - 99.9 ppm	0.1 ppm	Electrochemical	5.0 ppm	2.0 ppm	4.0 ppm	< 45 s

<b>Dimensions:</b>	8.0" x 5.5" x 4.61" (20.32 cm x 13.97 cm x 11.71 cm)
<b>Housing:</b>	Durable Aluminum Enclosure - Suitable for Class 1, Div. 1 & 2, Groups B, C, D
<b>Front Panel:</b>	5 Indicator Lights: Alarm 1, Alarm 2, Fail, In Calibration, and RS-485
<b>User Interface:</b>	64 x 128 Pixel LCD Graphic Display for Gas Readings, 30 Minute Trend, Bar Graphing, Engineering Units and Backlight
<b>Operating Temperature Range:</b>	-40°F to 140°F (-40°C to 60°C)
<b>Ambient Humidity Range:</b>	5% - 90% RH Non-Condensing
<b>Security Mode:</b>	Lock Out Critical Parameters
<b>4-20 mA Output Signal:</b>	3-wire, 4-20 mA. Max Loop Resistance is 750 Ω (@24 VDC)
<b>Alarm Relays:</b>	3 Configurable Form C (SPDT) Relays rated for 5 amp at 30 VDC or 240 ~ VAC RESISTIVE.   Relay 1 and Relay 2 Level Alarms are configurable for HIGH or LOW Trip, for Normally Energized (Failsafe) or Normally De-Energized and for Latching or Non-Latching. Relay 3 is always Normally Energized for Failsafe Operation so any loss of power to the GD <sub>X</sub> -350 will be indicated as a "FAULT" condition.
<b>Communications:</b>	RS-485, Modbus®
<b>Power:</b>	10 - 30 VDC, 250 mA (@ 24 VDC)
<b>Power Safety Mode:</b>	Fully automatic system reset. All program parameters are retained.
<b>Approvals:</b>	CSA: Division 1 & 2, Class 1: Groups B, C, D (excludes NH <sub>3</sub> )

## GD<sub>X</sub>-350 Ordering Information - Common Configurations\*

<b>5600-3011</b>	GD <sub>X</sub> -350 [CO] 0-1,000 ppm, 3-wire	<b>5600-3201</b>	GD <sub>X</sub> -350 [C <sub>3</sub> H <sub>8</sub> ] 0-100% LEL, IR, 3-wire
<b>5600-3021</b>	GD <sub>X</sub> -350 [H <sub>2</sub> S] 0-500 ppm, 3-wire	<b>5600-3201</b>	GD <sub>X</sub> -350 [Pentane] 0-100% LEL, Cat. Bead, 3-wire
<b>5600-3031</b>	GD <sub>X</sub> -350 [O <sub>2</sub> ] 0-30%, 3-wire	<b>5600-3012</b>	GD <sub>X</sub> -350 [CO] 0-1,000 ppm, 3-wire - with Relays and Modbus®
<b>5600-3041</b>	GD <sub>X</sub> -350 [NO <sub>2</sub> ] 0-100 ppm, 3-wire	<b>5600-3022</b>	GD <sub>X</sub> -350 [H <sub>2</sub> S] 0-500 ppm, 3-wire - with Relays and Modbus®
<b>5600-3051</b>	GD <sub>X</sub> -350 [NH <sub>3</sub> ] 0-500 ppm, 3-wire	<b>5600-3032</b>	GD <sub>X</sub> -350 [O <sub>2</sub> ] 0-30%, 3-wire - with Relays and Modbus®
<b>5600-3061</b>	GD <sub>X</sub> -350 [SO <sub>2</sub> ] 0-100 ppm, 3-wire	<b>5600-3042</b>	GD <sub>X</sub> -350 [O <sub>2</sub> ] 0-30%, 3-wire - with Relays and Modbus®
<b>5600-3071</b>	GD <sub>X</sub> -350 [PH <sub>3</sub> ] 0-10 ppm, 3-wire	<b>5600-3052</b>	GD <sub>X</sub> -350 [NH <sub>3</sub> ] 0-500 ppm, 3-wire - with Relays and Modbus®
<b>5600-3201</b>	GD <sub>X</sub> -350 [CH <sub>4</sub> ] 0-100% LEL, Cat. Bead, 3-wire	<b>5600-3202</b>	GD <sub>X</sub> -350 [CH <sub>4</sub> ] 0-100% LEL, Cat. Bead, 3-wire - with Relays and Modbus®
<b>5600-3211</b>	GD <sub>X</sub> -350 [CH <sub>4</sub> ] 0-100% LEL, IR, 3-wire	<b>5600-3212</b>	GD <sub>X</sub> -350 [CH <sub>4</sub> ] 0-100% LEL, IR, 3-wire - with Relays and Modbus®
<b>5600-3221</b>	GD <sub>X</sub> -350 [CO <sub>2</sub> ] 0-5% Vol., IR, 3-wire	<b>5600-3222</b>	GD <sub>X</sub> -350 [CO <sub>2</sub> ] 0-5% Vol., IR, 3-wire - with Relays and Modbus®

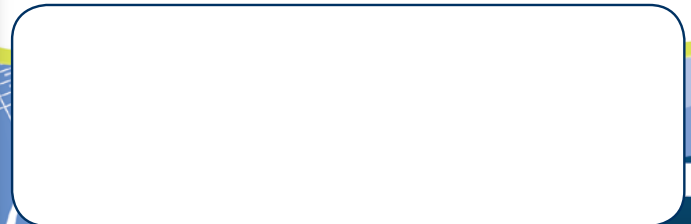
\*Customized sensor configurations are available based on your specific needs. Ask your authorized Bacharach representative for details.

## GD<sub>X</sub>-350 Accessories & Replacement Parts

<b>5600-6010</b>	GD <sub>X</sub> -350 Smart CO Sensor, Pre-Calibrated Replacement
<b>5600-6020</b>	GD <sub>X</sub> -350 Smart H <sub>2</sub> S Sensor, Pre-Calibrated Replacement
<b>5600-6030</b>	GD <sub>X</sub> -350 Smart O <sub>2</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6040</b>	GD <sub>X</sub> -350 Smart NO <sub>2</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6050</b>	GD <sub>X</sub> -350 Smart NH <sub>3</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6060</b>	GD <sub>X</sub> -350 Smart SO <sub>2</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6070</b>	GD <sub>X</sub> -350 Smart PH <sub>3</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6110</b>	GD <sub>X</sub> -350 Smart H <sub>2</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6200</b>	GD <sub>X</sub> -350 Smart CH <sub>4</sub> Sensor (Cat. Bead), Pre-Calibrated Replacement
<b>5600-6210</b>	GD <sub>X</sub> -350 Smart CH <sub>4</sub> Sensor (IR), Pre-Calibrated Replacement
<b>5600-6220</b>	GD <sub>X</sub> -350 Smart CO <sub>2</sub> Sensor, Pre-Calibrated Replacement
<b>5600-6330</b>	GD <sub>X</sub> -350 Smart C <sub>3</sub> H <sub>8</sub> Sensor (IR), Pre-Calibrated Replacement

Replacement sensors can be set-up on a pre-determined delivery schedule for additional convenience.

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