



Gas Sensor Transmitter/Monitor GDX-350



Bacharach's all new state-of-the-art GDX-350 low temperature transmitters with B-Smart[®] technology provide accurate detection of ammonia (NH₃) and carbon dioxide (CO₂). These full featured standalone transmitters are designed to operate in extreme temperature conditions found in blast chillers and deep freezers. GDX-350's unique design includes programmable heaters for both the sensor and electronics that are automatically activated when temperatures drop below user selectable temperatures. Placing the sensors inside these harsh operating environments allow for quick detection and response to the smallest leaks, protecting human life as well as product and machinery.

Standalone Operation

The GDX-350 has a large LCD display that shows gas concentrations and engineering units, as well as the flexibility to show historical data for the previous 30 minutes. Utilizing the graphic display, users can navigate through its menu driven magnetic keypad to change alarm set points, instrument configurations, or enter into maintenance mode for non-intrusive sensor calibration. For security, the GDX-350's security menu allows entry 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.



GDX-350 Features & Benefits:

- Non-Dispersive Infrared (NDIR) CO₂ detection range of 0-5%
- Electrochemical sensors for detecting 0-500 ppm of Ammonia
- Heated sensors and electronics for low temperature operation (-55 degrees Celsius)
- Graphic LCD for real time monitoring of concentrations
- 4-20 mA and optional Modbus® RTU interface
- 30 minute onboard data trend
- B-Smart® sensor program
- Optional Relay outputs



The B-Smart® Sensor Exchange Program allows users to replace pre-calibrated sensors in the field, eliminating the need to send it in for calibration. With the B-Smart® Sensor Program, you receive factory-calibrated sensors, just plug them in and continue to use your instrument – there's no down time and it saves time and money.

GDX-350 Specifications

Detection Principle:	Infrared, Field Replaceable (CO ₂), Electrochemical (NH ₃)
Measuring Range:	CO ₂ : 0 - 5%, in .1% Increments NH ₃ : 0-500 ppm, in 1 ppm Increments
Dimensions:	8.0" x 5.5" x 4.61" (20.32 cm x 13.97 cm x 11.709 cm)
Housing:	Durable Aluminum Enclosure Suitable for Class 1, Div 1&2, Gr. B,C,D
Front Panel:	5 Indicator Lights; AL1, AL2, Fail, In Cal and RS-485
User Interface:	64 x 128 Pixel LCD Graphic Display for Gas Readings, 30 Minute Trend, Bar Graphing, Engineering Units and Backlight
Operating Temperature Range:	-67 to 140°F (-55 to 60°C)
Ambient Humidity Range:	5% to 90% RH Non-Condensing
Response Time:	CO ₂ : T50 < 15 s, T90 < 30s NH ₃ : T50 < 30 s, T90 < 90s
Security Mode:	Lock Out Critical Parameters
4-20 Output Signal:	3-Wire, 4-20 mA. Max Loop Resistance is 750 ohms (@24 VDC)
Alarm Relays:	Three 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 Loss of Power to GDX-350 will be Indicated as a "FAULT" Condition.
Communications:	RS-485, Modbus®
Power:	10 - 30 VDC, 250 mA (@ 24 VDC)
Power Safety Mode:	Fully Automatic System Reset – All Programmed Parameters Retained
Approvals:	CSA: Division 1 & 2, Class 1 Groups B,C,D (for CO ₂ only) ATEX: CE Mark, EExd IIB + H ₂ , T5 (for CO ₂ only)

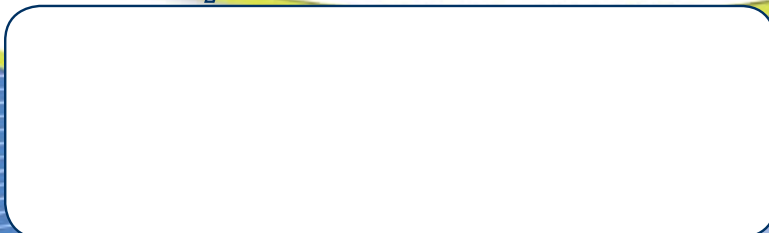
GDX-350 Ordering Information

5600-3224	GDX-350 CO ₂ Transmitter with Relays and Modbus® RTU Interface
5600-3223	GDX-350 CO ₂ Transmitter without Relays and Modbus® RTU Interface
5600-3054	GDX-350 NH ₃ Transmitter with Relays and Modbus® RTU Interface
5600-3053	GDX-350 NH ₃ Transmitter without Relays and Modbus® RTU Interface

GDX-350 Accessories and Replacement Parts

5600-0004	GDX Calibration Cup/Sample Draw Adaptor
5600-0003	GDX Splash Guard/Remote Cal-Cup
0024-7059	Calibration Kit – Regulator, Tubing, and Carrying Case (no gas included)
0051-3160	NH ₃ Calibration Gas, 25 ppm, 58 Liter
0054-0605	CO ₂ Calibration Gas, 2.0%Vol, 103 Liter
0051-7131	Zero Grade Air, 103 Liter
5600-5002	CO ₂ Replacement Sensor
5600-5003	NH ₃ Replacement Sensor
5600-6000	GDX-350 B-Smart® CO ₂ Sensor, Pre-Calibrated
5600-6001	GDX-350 B-Smart® NH ₃ Sensor, Pre-Calibrated
5600-8000	GDX-350 B-Smart® CO ₂ Sensor (2-year program/sensors replaced every 12 months)
5600-8001	GDX-350 B-Smart® NH ₃ Sensors (2-year program/sensors replaced every 6 months)

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MADE IN THE USA

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