



# Gas Sensor Transmitter GDC-150



The all new GDC-150 transmitter from Bacharach offers detection and protection for a wide range of hazards including toxic gases such as carbon monoxide (CO), oxygen depletion, combustible gases, refrigerant leaks and total volatile organic compounds (TVOCs). Analog interfaces allow the transmitter to be connected back to Bacharach's GDA Series of controllers (or any other gas detection controller), building management systems or control systems. The GDC-150 features 4-20 mA or 0-10 VDC linear output signals, an automatic thermal resetting fuse, RoHS compliant circuit boards and LED indicators for power and open loop.

# Reliability and Durability

The onboard alarm LED's indicate when alarm threshold values are exceeded. The unit can be ordered with an optional alpha numeric LED display that shows gas concentrations in real time while alarm relays alert personnel of potential dangers, avoiding incidents and potential hazards.

The GDC-150 is packaged in a rugged, polycarbonate housing for both indoor and outdoor applications. When leaks occur, the GDC-150 sensors respond quickly and accurately to protect people and property. Automated calibration and simple maintenance procedures performed in the field allow for continuous operation and assurance that areas are monitored and protected at all times.

## **GDC-150 Specifications**

Gases Detected: Carbon Monoxide (CO), Hydrogen Sulfide (H2S), Oxygen (O2), Nitrogen Dioxide (NO2), Ammonia (NH3), Nitric Oxide (NO), Sulfur Dioxide (SO2), Formaldehyde (HCHO), Combustible Gases (LEL), Refrigerants and Total Volatile Organic Compounds (TVOCs)

	CO	H <sub>2</sub> S	02	NO <sub>2</sub>	NH3	NO	SO <sub>2</sub>
Range: Resolution:	0-200 ppm 1 ppm	0-50 ppm 0.5 ppm	0-25% Vol. 0.1% Vol.	0-10 ppm 0.1 ppm	0-500 ppm 1-2 ppm	0-100 ppm 1 ppm	0-20 ppm 1 ppm
	нсно	LEL (Catalytic)	LEL (Solid State)	Refrigerants	TVOC (PID)	TVOC (PID)	TVOC (Solid State)

**Detection Principle:** Electrochemical, Solid State, Catalytic Bead, Photoionization Detector (PID)

Temperature: -4° F to 104° F (-20° C to 40° C)
Relative Humidity: 15-95% RH Non-Condensing

Housing Options: Standard: Rugged PVC with hinged, secured, drip-proof door

NEMA 4X: Water and dust-tight, corrosion resistant polycarbonate with hinged, secured door

User Interface: One tricolor LED: Green = power, Red = alarm, Flashing Red = fail

Amber color LED, internal relay coil status indicator (only supplied with relay option)

Alarm Relay:
Optional, one only S.P.D.T. dry contact relay rated 2 amp at 30V
4-20 mA "open loop" indicator (red LED) for remote transmitter

Dimensions: Standard: 4.43" L x 6.5" W x 2.54" D (113 mm x 165 mm x 65 mm) NEMA 4X: 5.05" L x 5.05" L x 5.05" D (129 mm x 129 mm x 77 mm)

Weight: Standard: 20 oz (0.57 kg) NEMA 4X: 16 oz (0.45 kg)
Outputs: Linear 4-20 mA or 0-10 VDC signal, jumper selectable
Wiring: VDC 3 conductor shielded; VAC 4-conductor shielded

Fuse: Automatic resetting thermal

Power: 12-30 VAC or 16-30 VDC (non-ground reference supply only)

Approvals: C-Tick Certified

GDC-150 Part Number Configu	urator 5201-ABCD
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1	Standard	Standard	Standard	Standard Enclosure Option Feature Option		Feature Option	Sensor Option	
	5	2	0	1	Α	В	C and D	
				*	0 = N/A	0 = Nothing	00 = N/A	
				1 = Standard enclosure	1 = LED numeric display	01 = Carbon Monoxide (CO)		
					2 = NEMA 4X enclosure	2 = Relay	02 = Hydrogen Sulfide (H <sub>2</sub> S)	
					3 = NEMA 4X enclosure w/ splash guard	3 = Relay and display	03 = 0xygen (02)	
							04 = Nitrogen Dioxide (NO2)	
							05 = Ammonia (NH3)	

### **GDC-150 Common Configurations**

**5201-3001** GDC-150 NEMA 4X, CO, splash guard, no display/ relays

**5201-3101** GDC-150 NEMA 4X, CO, splash guard and display GDC-150 NEMA 4X, Refrigerant, display and relays

**5201-3305** GDC-150 NEMA 4X, NH3, display and relays **5201-1001** GDC-150 Standard, CO, no display/ relay

**5201-1104** GDC-150 Standard, NO2, display

5201-1303 GDC-150 Standard, O<sub>2</sub>, display and relays

**5201-2320** GDC-150 NEMA 4X, Combustible Gas (Catalytic), display and relays

**5201-2020** GDC-150 NEMA 4X, Combustible Gas (Catalytic),

no display 5201-1013 GDC-150 Standard, HCHO, no display

#### **GDC-150** Accessories

5209-0004 Splash guard (NEMA 4X only)
5209-0016 Calibration adapter for catalytic sensor
5209-0006 Calibration adapter for all other

sensors

5209-0017 Sample draw pump (24 VAC powered)
5209-0018 Sample draw pump (24 VDC powered)
5209-0019 Guard to protect GDC-150 (16 gauge

galvanized metal)

#### 06 = Nitric Oxide (NO)

09 = Sulfur Dioxide (SO2)

13 = Formaldehyde (HCHO)

20 = Combustible Gas (Catalytic)

28 = TVOC 0-50 ppm (PID)

29 = TVOC 0-300 ppm (PID)

30 = Combustible Gas (Solid State)

31 = Refrigerant (Solid State)

32 = TVOC (Solid State)

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