



Fixed Gas Monitors

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 ₂ S	O ₂	NO ₂	NH ₃	NO	SO ₂
Range:	0-200 ppm	0-50 ppm	0-25% Vol.	0-10 ppm	0-500 ppm	0-100 ppm	0-20 ppm
Resolution:	1 ppm	0.5 ppm	0.1% Vol.	0.1 ppm	1-2 ppm	1 ppm	1 ppm
	HCHO	LEL (Catalytic)	LEL (Solid State)	Refrigerants	TVOC (PID)	TVOC (PID)	TVOC (Solid State)
Range:	0-10 ppm	0-100%	0-50%	0-2,000 ppm	0-50 ppm	0-300 ppm	0-500 ppm
Resolution:	0.1 ppm	1%	1%	1 ppm	0.1 ppm	1 ppm	1 ppm

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)

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

Alarm Relay:

Indicators:

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" W x 3.05" 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 Configurator 5201-ABCD

Standard	Standard	Standard	Standard	Enclosure Option	Feature Option	Sensor Option
5	2	0	1	A	B	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 ₂ S)
				3 = NEMA 4X enclosure w/ splash guard	3 = Relay and display	03 = Oxygen (O ₂)
						04 = Nitrogen Dioxide (NO ₂)
						05 = Ammonia (NH ₃)
						06 = Nitric Oxide (NO)
						09 = Sulfur Dioxide (SO ₂)
						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)

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
5201-3331	GDC-150 NEMA 4X, Refrigerant, display and relays
5201-3305	GDC-150 NEMA 4X, NH ₃ , display and relays
5201-1001	GDC-150 Standard, CO, no display/ relay
5201-1104	GDC-150 Standard, NO ₂ , display
5201-1303	GDC-150 Standard, O ₂ , 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)

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