

GDS-48 Remote Gas Sensor

Remote Gas Sensor for Combustible, CO₂ & VOC Applications with Replaceable Sensor & Bridge-Style Millivolt Output

- * Certified for Class I Division 1 Hazardous Locations
- * Interchangeable catalytic bead and SmartIR combustible sensors for combustible applications
- * SmartIR infrared Carbon Dioxide Sensor for ppm to 100% v/v
- * Photoionization Detector (PID) for Volatile Organic Compounds
- * Three-wire bridge-style interface to GDS Corp controllers
- * Stainless steel enclosure for high noise immunity
- * Low impedance output for long distance cable runs (> 2000ft)
- * Field-replaceable sensor module for easy maintenance
- * Manufactured in USA



The GDS-48 is a three-wire remote sensor for combustible, carbon dioxide or volatile organic compounds that provides a low impedance bridge-style output suitable for long distance transmission to an appropriate receiver device such as a *C1 Protector*, *C2 Protector*, *C2 Quad Protector* Controller or GASMAX II gas monitor.

Wide Variety of Available Sensors

The GDS-48 is compatible with all GDS Corp catalytic bead combustible, SmartIR infrared combustible, SmartIR carbon dioxide and photoionization detectors. Sensors can be easily replaced in the field. Interchangeable catalytic bead and infrared sensors allow users the opportunity to switch between the two technologies with minimal impact to controllers and wiring.

Volatile Organics

In today's highly regulated environment, monitoring for organic compounds, such as benzene and low level gasoline vapors

Hydrocarbon mixtures
Carbon Monoxide (LEL)
Acetone
Benzene
Butane
Carbon Dioxide
Diesel Fuel
Ethane
Ethylene
Gasoline Vapors
Hydrogen
Hexane
LPG
Methane
Propane

... And More

is critical. The GDS-48 with photoionization detector is available in two ranges, 0-50 ppm and 0-300 ppm isobutylene equivalent.

Rugged Detection

The GDS-48 encloses the sensor in a stainless steel housing with integrated flame arrestor that is CSA approved for all Class I, Division 1 and 2 hazardous environments.

Low Cost Solution

The GDS-48 is designed specifically to work with GDS Corp controllers that provide the necessary excitation voltage and bridge-style interface circuitry, often delivering the the lowest overall cost per point. GDS Corp offers single, dual, four, eight and sixteen channel controllers with compatible bridge-style inputs suitable for final calibration, alarm, display and retransmission of monitored gas values.

Easy Installation

The GDS-48 includes an explosion proof junction box with wiring terminals for easy installation and maintenance. An optional splash guard is recommended for locations where water or liquid may be present.



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GDS-48 SPECIFICATIONS	
Power Input	Catalytic Bead: 2.0v @ 300mA (average) SmartIR Combustible or CO ₂ : 4.5v @100mA (average) Photoionization Detector: 5v @ 100mA (average)
Display	None
Input	Accepts bridge-style catalytic bead or SmartIR infrared combustible, infrared carbon dioxide or PID sensors
Calibration Range	Calibration function must be performed by remote receiver device
Accuracy	Depends on sensor and range
Standard Output	Three-wire bridge-style millivolt interface to GDS Corp Display & Alarm Controllers
Temp	See sensor limitations
Housing	GDS-48 Stainless steel with flame arrestor
Dimensions	Width 5.3" x Height 9.3" x Depth 2.75" with splash guard Shipping weight 6.5 pounds (3 kg)
Approvals	CSA Certified for Div. 1 & 2 Groups B, C, D. Suitable for Explosion Proof installations.
Warranty	Two years on electronics and one year on sensors from date of purchase

GDS-48 Order Guide	
GDS-48 A - B - C [SM]	
"A"	SENSOR HEAD 1 = Stainless Steel Sensor Head for XP Installations 2 = Stainless Steel Sensor Head for XP w/ Splash Guard
"B"	SENSOR TYPE (see chart)
"C"	DETECTION RANGE ¹ 1 = 0 - 1 2 = 0 - 5 3 = 0 - 10 4 = 0 - 25 5 = 0 - 50 6 = 0 - 100 7 = 0 - 500 8 = 0 - 1000 Custom RXXXX (0-9999)
[SM]	Includes quick-connect fitting for SiteMAX Rapid Deployment System

GDS-48 Sensor Types		
50	SmartIR 0-100% LEL (Methane)	-20 to +50C
51	SmartIR 0-100% LEL (Propane)	-20 to +50C
53	SmartIR 0-100% v/v (Methane)	-20 to +50C
53	SmartIR Carbon Dioxide	-20 to +50C
61	PID Low (0-50 ppm) 10.6 eV	-40 to +60C
62	PID High (0-300 ppm) 10.6 eV	-40 to +60C
63	PID Low (0-50 ppm) 9.6 eV	-40 to +60C
64	PID Low (0-15 ppm) 1.0 eV	-40 to +60C
70	Catalytic Bead 0-100% LEL	-55 to +65C



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NOTES
Note 1: Standard ranges shown; contact factory for additional ranges