GASMAX DSX Gas Monitor

Dual Channel Explosion Proof Gas Monitor for Toxic Gases, Oxygen Depletion and Hydrocarbon Combustible Gases

- Certified for use in Class I Div I hazardous locations
- Monitor toxic gases, oxygen levels or hydrocarbon combustibles
- Graphic display shows reading, alarm and fault conditions
- Supports both local and remote sensors for easy installation
- Non-intrusive user interface for calibration in hazardous areas
- Power-up and post-calibration delays eliminate false alarms
- Supports GDS-IR and GDS-IR2 infrared gas sensors
- Dual channels support redundant sensors or monitor multiple hazards
- Operates on +24VDC with +18 to +32VDC total range
- Four alarm relays configurable for multi-sensor array logic
- MODBUS wiring junction box allows for easy daisy chain setup
- Setup in hazardous area requires only simple magnetic wand
- Manufactured in USA

The ***GASMAX DSX*** gas monitor is an ideal solution for fixed ambient gas detection applications where multiple sensors are required. The monitor is designed to detect a wide range of toxic and combustible gases in potentially hazardous environments. The monitor operates on +18 to +32 volts DC and outputs dual industry standard 4-20mA analog signals. Optional programmable alarm relays allow the GASMAX DSX to operate with a wide range of industry devices and system controllers.

Wide Variety of Available Sensors
The ***GASMAX DSX*** supports both local and remote electrochemical, infrared and catalytic bead combustible sensors. Several electrochemical sensors, including hydrogen sulfide are available in low, medium and high ranges.

Non-Intrusive User Interface
The ***GASMAX DSX*** features non-intrusive magnetic switches that allow complete system configuration, regular calibration and product maintenance to be performed in the field without compromising the explosion-proof rating. The display screen always shows the current calibrted level of gas present at the sensor.

Flexible Output Options
In addition to an industry-standard 4-20mA current loop output, a built-in isolated RS-485 two-wire MODBUS® interface is available to communicate with controllers, PLCs or large DCS system. When used with the any controller's MODBUS master port, multiple ***GASMAX DSX*** monitors can be daisy-chained up to 500m to minimize wiring. A special Modbus Wiring Junction Box option makes it possible to easily create the daisy chain wiring for power and Modbus signal.

GASMAX DSX Transmitter

GDS-IR Infrared Sensor


Toxic Sensor

Certifications
The ***GASMAX DSX*** is CSA and IECEx certified for use in hazardous areas and is ideal for power plants, refineries, tank farms, chemical plants, compressor stations, pipelines and other industrial installations where fixed gas detection is required for user safety and equipment protection. Please contact GDS Corp to discuss application details or to obtain a quote for monitors or complete gas detection systems.

GDS Corp
Gas and Flame Detection

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GASMAX DSX SPECIFICATIONS

Power Input	+18-32VDC, +24VDC nominal Operating current 315 mA @ 24VDC all options Transmitter only 50mA @ 24V, 65mA @ 18V
Display	High resolution graphical LCD transflective (sunlight readable) screen with white LED backlight
User Interface	Three magnetic switches for non-intrusive setup and calibration in hazardous areas
Sensor Input	Supports local or remote toxic gas or infrared combustible / CO2 using four-wire digital interface
Alarm Settings	Two user-adjustable alarm settings
Standard Output	Dual industry-standard 4-20mA outputs; max 1000 ohm loop load
Optional Relay Out	Four alarm / fault relays configurable for alarm set points; latching and non-latching mode; multi-sensor array logic
Digital Out	Single isolated two-wire MODBUS serial slave port.
Optional Radio	No radio
Temp	Electronics -20°C to +40°C; Limits may vary depending on sensor Relative humidity 0-99% non-condensing
Housing	Aluminum instrument housing, 303 Stainless Steel sensor housing
Dimensions	5.25" W x 5.3" L x 4.95" H (Transmitter only); Approx 6 lbs 5.25" W x 15" L x 4.95" H (Transmitter + GDS-IR) Approx 11 lbs
Certifications	**CSA**: Class I Div 1 Groups B, C, D; T5 **IECEx:** Ex d IIC TS Gb UL 2075 (when used with UL-Approved GDS-IR)
Hardware Warranty	One-year limited warranty
Sensor Warranty	Varies with gas type (warranty subject to verification by GDS Corp)

GASMAX DSX Order Guide

GM/DSX-HEAD1-SEN1-RNG1/HEAD2-SEN2-RNG2/ OPT1 [SS][TAG][MBJB][CAL]

HEADx	0 = No sensor head 1 = Local sensor head 2 = Local horizontal sensor head (IR only) 3 = Remote sensor head 4 = Remote horizontal sensor head (IR only)
SENx	Select sensor type from list below: 10-29 Toxic Sensors 110 - 304 Infrared Sensors
RNGx	For available ranges see GDS Configurator
OPT1	0 = No Relays 1 = 4x Alarm Relays
	[SS] = Stainless steel enclosure [TAG] = Stainless steel tag [MBJB] = Modbus wiring junction box [CAL] = Ships with cal adapter

EC SENSORS		INFRARED SENSORS		INFRARED SENSORS	
10	Oxygen (O2), 0-25%	**112**	GDS-IR Isobutane 0-100% LEL	**133**	GDS-IR Carbon Dioxide 0-3.5% v/v
11	Carbon Monoxide (CO), 0-1000 ppm	**113**	GDS-IR Pentane 0-100% LEL	**134**	GDS-IR Propane 0-9.75% by volume (UEL)
12	Chlorine (CL2), 0-20 ppm*	**114**	GDS-IR Cyclopentane 0-100% LEL	**135**	GDS-IR Carbon Dioxide 0-2.00 v/v
13	Chlorine Dioxide (CLO2), 0-5.0 ppm	**116**	GDS-IR Ethanol 0-100% LEL	**137**	GDS-IR Carbon Dioxide 0-1.00% v/v
14	Hydrogen (H2), 0-4% by volume	**117**	GDS-IR Methanol 0-100% LEL	**138**	GDS-IR Carbon Dioxide 0-5000 ppm
15	Hydrogen Sulfide (H2S), 0-100 ppm	**118**	GDS-IR Propylene 0-100% LEL	**139**	GDS-IR Carbon Dioxide 0-2000 ppm
16	Hydrogen Cyanide (HCN), 0-50 ppm	**119**	GDS-IR Ethylene 0-100% LEL	**209**	GDS-IR2 Acetylene, 0-100% LEL
17	Hydrogen Chloride (HCL), 0-20 ppm	**120**	GDS-IR Hexane 0-100% LEL	**210**	GDS-IR2 Methane, 0-100% LEL
18	Hydrogen Fluoride (HF), 0-10 ppm	**121**	GDS-IR Jet-A 0-100% LEL	**211**	GDS-IR2 Propane 0-100% LEL
19	Sulfur Dioxide (SO2), 0-20 ppm	**122**	GDS-IR Diesel 0-100% LEL	**220**	GDS-IR2 Methyl Acetate 0-100% LEL
20	Ammonia (NH3), 0-1000 ppm	**123**	GDS-IR Gasoline 0-100% LEL	**221**	GDS-IR2 Vinyl Acetate 0-100% LEL
21	Ozone (O3), 0-1 ppm	**124**	GDS-IR Isopropyl Alcohol 0-100% LEL	**222**	GDS-IR2 Acetic Acid 0-100% LEL
22	Ethylene Oxide (ETO), 0-50 ppm	**125**	GDS-IR Acetone 0-100% LEL	**230**	GDS-IR Methane 0-100% by volume
24	Silane (SiH4), 0-50 ppm	**126**	GDS-IR p-Xylene 0-100% LEL	**231**	GDS-IR2 Propane 0-100% by volume
28	Nitric Oxide (NO), 0-250 ppm	**127**	GDS-IR Ethylene Oxide 0-50% LEL	**232**	GDS-IR2 Carbon Dioxide 0-5%
29	Nitrogen Dioxide (NO2) 0-10 ppm	**128**	GDS-IR MEK 0-100% LEL	**233**	GDS-IR2 Carbon Dioxide 0-3.5%
70	Catalytic Bead (CH4)	**129**	GDS-IR Styrene	**301**	GDS-IR2 Ammonia 0-1000 ppm
90	Optional 4-20mA input	**130**	GDS-IR Methane 0-100% by volume	**302**	GDS-IR2 Ammonia 0-2500 ppm
110	GDS-IR Methane 0-100% LEL 70°C	**131**	GDS-IR Propane 0-100% by volume	**303**	GDS-IR2 Ammonia 0-1% v/v
111	GDS-IR Propane 0-100% LEL	**132**	GDS-IR Carbon Dioxide 0-5% v/v	**304**	GDS-IR2 Ammonia 0-10% v/v

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