GASMAX GX Gas Monitor

Single Channel Gas Monitor for Hazardous Locations
Toxics, Combustibles and Volatile Organic Compounds

- Certified for use in Class I Div I hazardous locations
- Monitor toxic, combustible or volatile organic compounds
- Graphic display shows reading, alarm and fault conditions
- Supports both local and remote sensors for easy installation
- Automated calibration with programmable cal gas
- Power-up and post-calibration delays eliminate false alarms
- Supports electrochemical, PID, infrared or catalytic bead sensors
- Options for 2x 5A alarm contacts, and MODBUS®
- Operates on DC power from +12 to +35VDC
- Wet contact FAULT output for common fault conditions
- MODBUS wiring junction box allows for easy daisy chain setup
- Setup in hazardous area requires only simple magnetic wand
- Manufactured in USA

The GASMAX GX gas monitor is an ideal solution for fixed ambient gas detection applications. The monitor is designed to detect a wide range of toxic and combustible gases in potentially hazardous environments. The monitor operates on +12 to +35 volts DC and outputs an industry standard 4-20mA analog signal. Optional programmable alarm relays and MODBUS serial slave interface allow the GASMAX GX to operate with a wide range of industry devices and system controllers.

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

Non-Intrusive User Interface
The GASMAX GX features both push-buttons and 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 calibrated level of gas present at the sensor.

Flexible Output Options
In addition to an industry-standard 4-20mA current loop output, an optional RS-485 two-wire MODBUS® interface with optional two SPDT relays are

available to communicate with controllers or drive local alarm indicators. When used with the any controller's MODBUS master port, multiple GASMAX GX 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.
The GASMAX GX can also be fitted with a 900 MHz or 2.4 GHz radio that will allow it to communicate with compatible GDS Corp wireless controllers and alarm stations.

Certifications
The GASMAX GX is CSA, ATEX 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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League City, Texas 77573
409-927-2980 • 409-927-4180 (fax)
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GASMAX GX SPECIFICATIONS

Power Input	10-35VDC at < 2 watts maximum Surge protection on 4-20mA output and MODBUS interface
Display	102x64 resolution graphical LCD transflective (sunlight readable) screen with white LED backlight
User Interface	Three manual push buttons (Menu, Add, Sub) and three corresponding magnetic non-intrusive switches for setup in hazardous areas
Sensor Input	Sensor adapter boards support electrochemical, catalytic bead, infrared or PID sensors.
Alarm Settings	Two user-adjustable alarm settings
Standard Output	Standard 3-wire 4-20mA current source and Fault Relay (wet contacts)
Optional Relay Out	2x programmable alarm relays with 5A capability
Optional Digital Out	Single two-wire MODBUS serial slave port.
Optional Radio	900 MHz or 2.4 GHz radio interface
Temp	Electronics -40°C to +60°C; Limits may vary depending on sensor
Housing	Aluminum instrument housing, 303 Stainless Steel sensor housing
Dimensions	5.5" T x 6" W x 7" H (8" W x 17" H with attachments)
Certifications	**CSA** Class I Division 1 Groups C and D, Ex d IIB T6 Gb Class I Zone 1, AEx db IIB T6 Gb Tamb= -40C to +54C **ATEX (without radio option)** EX 2 II G Ex db mb IIB T6 Gb Ta= -40C to +54C **ATEX (with radio option)** EX II 2 (1) G Ex db mb IIB ia [ia Ga] T6 Gb Ta= -40C to +54C **IECEx (without antenna fitting)** Ex db mb IIB T6 Gb Ta = -40C to +54C **IECEx (with antenna fitting)** Ex db mb ia [ia Ga] IIB T6 Gb Ta = -40C to +54C
Hardware Warranty	One-year limited warranty
Sensor Warranty	Varies with gas type (warranty subject to verification by GDS Corp)

GASMAX GX Order Guide

GM/GX-HEAD-LEN-SEN-RNG-OPT1-OPT2-OPT3 [SS]|[TAG]|[MBJB]|[CAL]

HEAD	1 = Local Sensor (all types) 2 = Remote Electrochemical (EC) Sensor 3 = Remote Infrared (IR) Sensor 4 = Remote PID Sensor 5 = Remote Catalytic Bead Sensor
LEN	Max length determined by sensor type: Electrochemical sensors up to 100' Infrared sensors up to 40' PID sensors up to 30' Catbead sensors up to 20'
SEN	Select sensor type from list below: 10-42 Toxic Sensors 50-53 Infrared Sensors 61-64 Photoionization Sensors (PID) 70-71 Catalytic Bead Sensors
RNG	For available ranges see GDS Configurator
OPT1	0 = No Relays 1 = 2x Alarm Relays
OPT2	0 = No Radio 1 = 900 MHz Radio 2 = 2.4 GHz Radio
OPT3	0 = No sensor head accessories 1 = Sensor Rain Guard 2 = Sensor Flow Cell
	[SS] = Stainless steel enclosure [TAG] = Stainless steel tag [MBJB] = Modbus wiring junction box [NS] = Ships without sensor (sent later) [CAL] = Ships with Cal Cup

EC SENSORS		EC SENSORS		PID SENSORS	
10	Oxygen (O2), 0-25%	**28**	Nitric Oxide (NO), 0-250 ppm	**61**	PID Isobutylene (10.6eV) Low Range
11	Carbon Monoxide (CO), 0-1000 ppm	**25**	Nitrogen Dioxide, (NO2), 0-20 ppm	**62**	PID Isobutylene (10.6eV) High Range
12	Chlorine (CL2), 0-20 ppm*	**35**	Formaldehyde (CH2O), 0-10 ppm	**63**	PID Isobutylene (10.0eV) Low Range
13	Chlorine Dioxide (CLO2), 0-5.0 ppm	**36**	Phosphine (PH3), 0-5.0 ppm	**64**	PID Isobutylene (11.7eV) Low Range
14	Hydrogen (H2), 0-4% by volume	**40**	Hydrogen Sulfide (H2S), 0-2000 ppm		
15	Hydrogen Sulfide (H2S), 0-100 ppm	**41**	Ammonia (NH3), 0-300 ppm*		
16	Hydrogen Cyanide (HCN), 0-50 ppm	**42**	Ammonia (NH3), 0-1000 ppm*		
17	Hydrogen Chloride (HCL), 0-30 ppm*				
18	Hydrogen Fluoride (HF), 0-10 ppm*	**INFRARED SENSORS**		**CATALYTIC BEAD SENSORS**	
19	Sulfur Dioxide (SO2), 0-20 ppm	**50**	Methane (CH4), 0-100% LEL (IR)	**70**	Catalytic Bead LEL (CH4)
20	Ammonia (NH3), 0-100 ppm*	**51**	Methane (CH4), 0-100% by volume (IR)	**71**	Catalytic Bead LEL (Other - specify gas)
21	Ozone (O3), 0-5 ppm*	**53**	Carbon Dioxide (CO2), 0-4% by volume (IR)		
22	Ethylene Oxide (ETO), 0-10 ppm				

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