# GASMAX EC Gas Monitor

## Loop-Powered Gas Monitor for Toxic Applications

- \* Certified for Explosion Proof and Intrinsically Safe Installations
- Non-polarized loop powered interface eliminates wiring errors
- Graphic display shows values, units, trend graph, alarm levels
- Three flProgrammable Alarm Levels
- Real time clock tags alarm and calibration events
- Supports both local and remote sensors for easy installation
- Non-intrusive, prompted calibration with programmable cal gas
- Power-up and post-calibration delays eliminate false alarms
- Security settings to lock critical parameters
- Auto-recognition of Smart Sensors uploads calibration data & more
- Fault supervision circuitry detects failed sensor & transmits warning
- Setup in hazardous area requires only simple magnetic wand
- For combustible applications, see the GASMAX II gas monitor
- Manufactured in USA



Hydrogen Sulfide Oxygen Deficiency Carbon Monoxide Hydrogen Fluoride Ammonia Chlorine

... And More

Over 20 different sensor options for Explosion Proof and Intrinsically Safe Installations

The GASMAX EC single channel gas monitor for toxic or oxygen defi plications delivers the latest in loop-powered gas detection technology, reliability and ease of use.

#### Wide Variety of Available Sensors

The GASMAX EC support all GDS Corp toxic sensors, including oxygen, hydrogen sulfide, chlorine, carbon monoxide and more. In addition, GDS Corp Smart Sensors enhance this capability by maintaining their own record of serial number, born-on date, initial calibration values, engineering units and more. Using this information, the GASMAX EC constantly tracks sensor performance and calculates an estimate of sensor life remaining. Built-in fault detection circuity constantly monitors the sensor for correct operation.

#### **Advanced User Interface**

The highly visible graphic display and flashing alarm LEDs constantly show

AUTHORIZED DISTRIBUTOR: GasDetectorsUSA.com Houston, Texas USA sales@GasDetectorsUSA.com alarm status, calibrated engineering values and a programmable tag name, plus a trend screen shows alarm levels and a graph of the most recent 30 minutes.

An internal real-time clock and event log time-stamp up to 300 calibration and alarm events for later review. Taking advantage of the high-resolution graphic display, an easy-to-use menu-driven operator interface using magnetic keys eliminates all analog potentiometers and allows complete setup and calibration without hazardous area declassifi

Three operational levels of security allow the GASMAX EC to be fully field configurable, partially restricted or completely restricted by way of user ID and access code.

**Explosion-Proof or Intrinsically Safe** 

The GASMAX EC is CSA certified for use in Div 1 & Div 2 hazardous areas and can be installed as Explosion Proof or Intrinsically Safe using appropriate wiring techniques and an Intrinsically Safe barrier. See notes on IS installation on back.

An ATEX certified version for XP installations is also available.

Gas and Flame Detection 832-615-3588

Toxic & Combustible Gas Detection • Controllers • Process Monitors • Calibration Supplies

GASMAX EC SPECIFICATIONS					
Power Input	10-30VDC at less than 0.75 watts				
Display	64 x 128 pixel LCD with 30-minute trend, bargraph and engineering units display.				
Input	Accepts microamp-level signals from local or remote GDS Corp toxic or oxygen defi				
Accuracy	+/- 5% of full scale range (typical)				
Standard Output					
Temp	$-40^{\circ}$ C to $+60^{\circ}$ C (see sensor limitations)				
Housing	Aluminum housing with epoxy paint standard; #316 stainless steel optional				
Dimensions	Width 5.4" (137 mm), Height 8" (203 mm), Depth 5" (127 mm) Shipping weight 6.5 pounds (3 kg)				
Approvals	CSA Certifi explosion-proof installations CSA Certified Div 1 & 2 Groups A, B, C, D. Intrinsi- cally safe. IMPORTANT: Intrinsically Safe installations require IS barrier #10-0263 (MTL 7787P+) or equivalent. ATEX Certifi				
Warranty	Two years on electronics and one year on sensors.				

	GASMAX EC Order Guide					
GM EC A - B - C [ATEX][SM][SS]						
"A"	SENSOR HEAD <sup>1,2,6</sup>					
	1 = Local stainless steel sensor head					
	2 = Local SS head + splash guard (SG)					
	3 = Local SS head for reactive gases					
	4 = Local SS head + SG for reactive gases					
	5 = Remote stainless steel sensor head					
	6 = Remote SS head + splash guard					
	7 = Remote SS head for reactive gases					
	8 = Remote SS head + SG for reactive gases					
	12 = Local ATEX sensor head					
	13 = Local ATEX head + splash guard					
	14 = Remote ATEX sensor head					
	15 = Remote ATEX sensor head + SG					
"В"	SENSOR TYPE (see chart) <sup>5</sup>					
"C"	DETECTION RANGE <sup>5</sup>					
	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)					

SENSOR TYPES								
10	Oxygen	-30 to +55C	21	Ozone <sup>6</sup>	-20 to +40C			
11	Carbon Monoxide	-30 to +50C	22	Ethylene Oxide	-20 to +50C			
12	Chlorine <sup>6</sup>	-20 to +50C	23	Arsine	-20 to +40C			
13	Chlorine Dioxide <sup>6</sup>	-20 to +40C	24	Silane	-20 to +40C			
14	Hydrogen	-20 to +50C	25	Fluorine <sup>6</sup>	-10 to +40C			
15	Hydrogen Sulfide	-30 to +50C	26	Phosgene <sup>6</sup>	-20 to +40C			
16	Hydrogen Cyanide	-20 to +50C	27	Hydrazine <sup>6</sup>	-10 to +40C			
17	Hydrogen Chloride <sup>6</sup>	-20 to +50C	28	Nitric Oxide	-20 to +50C			
18	Hydrogen Fluoride <sup>6</sup>	-20 to +50C	29	Nitrogen Dioxide	-20 to +50C			
19	Sulfur Dioxide	-30 to +50C	30	Mercaptan TBM	-10 to +40C			
20	Ammonia <sup>6</sup>	-20 to +40C	31	Tetrahydrothiophene	-10 to +40C			
			32	Diborane	-20 to +40C			

### **Intrinsically Safe Installations**

Certain highly reactive gases (see Note 6 above) require special sensor heads and Intrinsically Safe (IS) installation in hazardous locations. Intrinsically Safe equipment is defined as "equipment which is incapable of releasing suffic electrical or thermal energy under normal or abnormal conditions to cause ignition of a specific hazardous atmospheric mixture in its most easily ignited concentration." IS installations require an IS barrier (#10-0263 MTL 7787P+) or equivalent that must be mounted in an area designated as Non-hazardous.





#### NOTES

Note 1: Remote sensor installations do not utilize Smart Sensor interface

Note 2: Maximum distance for remote e-chem sensor connection is 25ft (3m).

Note 5: Standard ranges shown; contact factory for additional ranges

Note 6: Certain highly reactive gases require types 3.4 or types 7,8 sensor head