GASMAX TX *Wireless* Gas Monitor

Battery-Powered, Stand-Alone Wireless Gas Monitor for Oxygen, Toxic or Combustible Hydrocarbon Gases

- Third-generation ultra-low power design for toxics and combustibles
- Single or dual channel, local or remote Smart Sensors
- Graphic display shows values, units, trend graph, alarm levels
- Power ON / Power OFF using magnetic wand only
- Non-intrusive, user-prompted calibration procedure
- Transmits all setup information to new C2/TX Wireless Site Manager
- Reliable Frequency-Hopping Spread Spectrum technology
- 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
- Typical > 1 mile range with local 'whip' antenna (900Mhz)
- For VOC applications, see the GASMAX IIx gas monitor
- Manufactured in USA

The GASMAX TX wireless gas monitor combines the latest in ultra-low power microprocessor design, infrared sensor technology and ease-of-use features to deliver the most advanced wireless toxic and combustible gas monitor available.

The GASMAX TX is compatible with all GDS Corp toxic sensors, including hydrogen sulfide, carbon dioxide, oxygen, hydrogen cyanide and many others. In addition, the GASMAX TX also supports the new SmartIR/LP low-power infrared sensor for hydrocarbon combustibles or carbon dioxide.

Advanced User Interface
The highly visible LCD display shows sensor status, calibrated engineering values and programmable tag name, along with a trend screen that displays the most recent 30 minute trend. A real-time clock and event log records calibration and alarm events for later review, and a menu-driven operator interface using magnetic keys eliminates all analog potentiometers and enables power on/off switching and setup without opening the enclosure.

Fully Integrated Wireless Solution
An internal easily-replaceable D-cell lithium battery and 900Mhz or 2.4Ghz license-free Frequency-Hopping Spread Spectrum (FHSS) wireless modem provide up to six months of continuous operation in typical applications. FHSS technology provides the best choice for long-range, reliable communications with high levels of noise immunity. When gas is present, the GASMAX TX transmits gas level data on six second intervals.

Shown with local stainless steel sensor head and 900Mhz whip antenna

Complete Wireless System
The GASMAX TX is designed to operate most efficiently with the new mult-channel C2/TX Wireless System Manager. The C2/TX WSM supports up to 32 GASMAX/TX monitors and offers 8x relay outputs as well as optional serial MODBUS, data logging and WiFi access.

In addition to the new C2/TX WSM, the GASMAX TX also works with GDS Corp C1 *Protector* 8/16 channel controller / receivers, C2 *Quad Protector* 4 channel controller / receivers and the new C64 *Protector* multi-channel controller.

GDS Corp
Gas and Flame Detection

AUTHORIZED DISTRIBUTOR: GasDetectorsUSA.com
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GASMAX TX Specifications	
Power Input	Replaceable internal D-cell lithium battery; six-month operation (typical)
Display	64 x 128 pixel LCD with 30-minute trend, bargraph and engineering units display.
Input	Single or dual channel input from 10-98xx toxic or 10-97xx infrared hydorcarbon combustible sensors
Standard Output	License-free 900Mhz or 2.4Ghz frequency-hopping spread spectrum (FHSS) wireless modem with data encryption 900MHz power adjustable from 10mW to 1.0 watt 2.4GHz output set at 50mW or 125mW (US only) Receiver sensitivity typically -100dBm
Temp	-25°C to +55°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	FCC 15.247 & Industry Canada (IC)
Warranty	Two years on electronics and one year on sensors from date of purchase

SENSOR TYPES[1]					
10	Oxygen	-30 to +55C	**24**	Silane	-20 to +40C
11	Carbon Monoxide	-30 to +50C	**25**	Fluorine[1]	-10 to +40C
12	Chlorine[1]	-20 to +50C	**26**	Phosgene[1]	-20 to +40C
13	Chlorine Dioxide[1]	-20 to +40C	**27**	Hydrazine	-10 to +40C
14	Hydrogen	-20 to +50C	**28**	Nitric Oxide	-20 to +50C
15	Hydrogen Sulfide	-30 to +50C	**29**	Nitrogen Dioxide	-20 to +50C
16	Hydrogen Cyanide	-20 to +50C	**30**	Mercaptan TBM	-10 to +40C
17	Hydrogen Chloride[1]	-20 to +50C	**31**	Tetrahydrothiophene	-10 to +40C
18	Hydrogen Fluoride[1]	-20 to +50C	**32**	Diborane	-20 to +40C
19	Sulfur Dioxide	-30 to +50C	**33**	Hydrogen Sulfide (Low RH)	-30 to +50C
20	Ammonia[1]	-20 to +40C			
21	Ozone[1]	-20 to +40C	**50**	Methane (0-100% LEL)	-40 to +60C
22	Ethylene Oxide	-20 to +50C	**51**	Propane (0-100% LEL)	-40 to +60C
23	Arsine	-20 to +40C	**53**	Carbon Dioxide	-40 to +60C

Determining Wireless Communications Range

The distance at which any wireless connection will operate is dependent on many factors, including terrain, frequency, path length, interference from existing radio sources, combined antenna height, transmitter power and receiver sensitivity. For reliable communication, the system power margin (TX power + RX gain + Antenna gain - Path Loss) must exceed 20 dB. Range can be improved by increasing antenna height, using directional antennas or increasing transmitter power.

GASMAX TX Order Guide	
GM/TX A-B-C/D-E-F-G [900][2400][SS][TAG][XP]	
A	SENSOR HEAD [1,] 1 = Local sensor 2 = Local sensor with splash guard 3 = Local sensor for reactive gases 4 = Local sensor / reactive gases / splash guard 5 = Remote sensor 6 = Remote sensor with splash guard 7 = Remote sensor for reactive gases 8 = Remote sensor / reactive gases / splash guard
B	SENSOR TYPE (see chart)
C	DETECTION RANGE[2] 1 = 0 - 1 5 = 0 - 50 2 = 0 - 5 6 = 0 - 100 3 = 0 - 10 7 = 0 - 500 4 = 0 - 25 8 = 0 - 1000 Custom RXXXX (0-9999)
D	SENSOR HEAD [1] 0 = None 1 = Local sensor head 2 = Local sensor head with splash guard 3 = Local sensor head for reactive gases[1] 4 = Local head / reactive gases / splash guard[1] 5 = Remote sensor head 6 = Remote sensor head with splash guard 7 = Remote sensor head for reactive gases[1] 8 = Remote head / reactive gases / splash guard[1]
E	SENSOR TYPE (see chart) or "00" for None
F	DETECTION RANGE[2] 0 = None 1 = 0 - 1 5 = 0 - 50 2 = 0 - 5 6 = 0 - 100 3 = 0 - 10 7 = 0 - 500 4 = 0 - 25 8 = 0 - 1000 Custom RXXXX (0-9999)
G	ANTENNA 1 = Standard omnidirectional antenna 2 = Flexible omnidirectional antenna 3 = Remote omnidirectional antenna w/ 10' cable 4 = Remote YAGI directional antenna w/ 10' cable 5 = Explosion proof suitable for C1D1 areas
	[900] = configured for 900 Mhz[3] [2400] = configured for 2.4 Ghz[3] [SS] = Stainless steel enclosure [TAG] = Stainless steel tag [XP] = Rated antenna coupler for C1D2

NOTES
Note 1: Certain sensors require sensor head for reactive gases
Note 2: Multiple ranges available - contact GDS Corp for details
Note 3: Frequency selection must be made a time of order and cannot be fi

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