

GASMAX IIx Gas Monitor

Wireless Toxic / O₂ / Combustible Gas Detection

- ◆ Powered wireless gas monitor for toxic, oxygen, LEL or VOC gases
- ◆ Built-in 1 watt 900Mhz license-free wireless radio (US, Canada)
- ◆ Graphic display shows value, units, trend
- ◆ Backlit display for better visibility in low light situations
- ◆ Range up to 20 miles with hi-gain external antenna
- ◆ Flashing alarm indicator LEDs
- ◆ Smart Sensors store setup data, cal records & alarm events
- ◆ Signal strength indication helps ensure reliable link
- ◆ Security settings lock critical values
- ◆ Power-up and post-cal delay eliminates false alarms

The GASMAX IIx DC-powered Wireless Gas Monitor delivers the latest in wireless gas detection technology, reliability and ease of use. The GASMAX IIx is designed for use in hazardous or explosion proof installations (NRTL certification pending).

The highly visible backlit LCD display shows calibrated engineering values, bar-graph data, 30-minute trend and setup information. An internal real-time clock time-stamps calibration and alarm events for later review. Front panel LEDs continuously indicate alarm conditions.

The GASMAX IIx supports toxic, oxygen, catalytic bead, infrared or PID sensors. Sensors can be mounted locally or remotely.

A 900Mhz license-free spread-spectrum wireless modem provides a secure communications link with the GDS Corp C1 *Protector* Controller. Every six seconds, the GASMAX IIx samples the sensor output and transmits a warning signal if a pre-programmed alarm level is exceeded. Under normal conditions when no gas is present, the GASMAX / ECx transmits a 'keep-alive' signal every five minutes to verify communications. The GDS Corp C1 *Protector* 16-channel controller (with RF900 wireless serial modem) is specifically designed to handle the GASMAX IIx communications protocol.

Operator interface is via a menu-driven magnetic keypad, allowing complete setup and calibration without hazardous area declassification.

Wireless Range Calculation

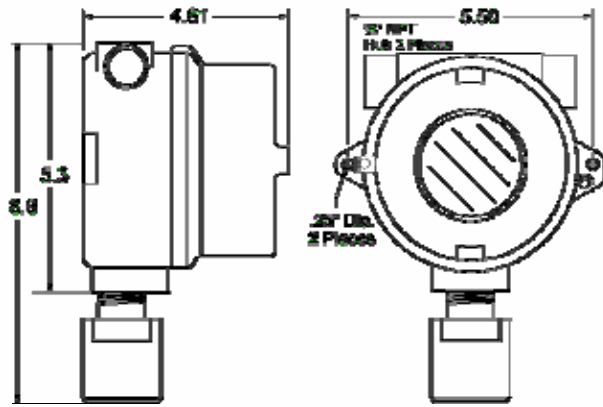
The range at which a wireless connection will operate reliably is dependent on frequency, distance, combined antenna height, transmitter power and receiver sensitivity. For reliable communication, the system margin (TX power - RX gain + Antenna gain - Path Loss) must exceed 10-20 dB. Contact GDS Corp for more information.



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GDS CORP

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Operating Voltage 10-30VDC at less than 1.5 watts. Additional power (4W peak) required for Arctic Monitor. **Optional solar power system available.**

Display Backlit 64 x 128 pixel LCD with 30-minute trend, bargraph and Eunits.

Inputs Analog - Accepts standard GDS Corp. toxic / O₂ sensors
 Bridge - Adjustable excitation for SmartIR, PID and catalytic bead sensors
 Optional bridge input converted to 4-20mA input into 10 ohms. Compatible with GDS-49 Sensor Transmitter or other standard 4-20mA source.

Outputs Standard 3-wire 0-20mA current source. Max loop R is 350 ohms with nominal 12VDC power supply.
 License-free 900Mhz frequency-hopping spread spectrum wireless modem with 256 bit encryption & MODBUS® protocol
 Output power adjustable 1mW to 1.0 watt (+30 dBm max); Data rate 9600 baud
 Receiver sensitivity -110dBm
 Range: Urban, indoor range up to 3000ft, or to 20 miles with RF line-of-sight and high-gain antenna
 Includes local 2.1 dB whip antenna with

Temp Range -40°C to +65°C operating
 -55°C to +65°C operating (Arctic)

Approvals FCC 15.247 & Industry Canada (IC)
 NRTL certification pending.

Warranty Two years on electronics and one year on sensors from date of purchase



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GASMAX IIx Order Guide

GM IIx A - B - C / D - E - F / 0 - H (Echem)

NOTE: Select ONE sensor type only

"A" - EC Channel Sensor Head Type ^{1, 2, 3, 4}

- 1 Local Stainless Steel Explosion-Proof
- 2 Local Stainless Steel Explosion-Proof (w/ splash guard)
- 3 Local Aluminum; without flame arrester ^{3, 4}
- 4 Local Aluminum; without flame arrester; (w/ splash guard) ^{3, 4}
- 5 Remote Stainless Steel Explosion-Proof ^{1, 2}
- 6 Remote Stainless Steel Explosion-Proof (w/ splash guard) ^{1, 2}
- 7 Remote Aluminum; without flame arrester ^{1, 2, 3, 4}
- 8 Remote Aluminum; without flame arrester; (w/ splash guard) ^{1, 2, 3, 4}

"B" - EC Channel Sensor ⁶

- 10 Oxygen
- 11 Carbon Monoxide
- 12 Chlorine ⁶
- 13 Chlorine Dioxide ⁶
- 14 Hydrogen
- 15 Hydrogen Sulfide
- 16 Hydrogen Cyanide
- 17 Hydrogen Chloride ⁶
- 18 Hydrogen Fluoride ⁶
- 19 Sulfur Dioxide
- 20 Ammonia NH₃
- 21 Ozone
- 22 Ethylene Oxide
- 23 Arsenic
- 24 Silane
- 25 Fluorine
- 26 Phosgene
- 27 Hydrazine
- 28 Nitric Oxide
- 29 Nitrogen Dioxide
- 30 Mercaptan TBM
- 31 Tetrahydrothiophene

"C" - EC Measurement Range ⁵

- 1 0-1.00
- 2 0-5.00
- 3 0-10.0
- 4 0-25
- 5 0-50
- 6 0-100
- 7 0-500
- 8 0-1000
- 9 Contact factory

"D" - mA / Bridge Channel Sensor Head Type ^{1, 8}

- 1 Local Stainless Steel Explosion-Proof ⁸
- 2 Local Stainless Steel Explosion-Proof (w/ splash guard) ⁸
- 5 Remote Stainless Steel Explosion-Proof ¹
- 6 Remote Stainless Steel Explosion-Proof with splash guard ¹
- 9 Local mount for GDS-IR Point Infrared (mA/Bridge channel only)
- 10 Remote mount for GDS-IR Point Infrared (mA/Bridge channel only)

"E" - mA / Bridge Channel Sensor

- 50 Smart IR 0-100% LEL (Methane)
- 51 Smart IR 0-100% LEL (Propane)
- 52 Smart IR 0-100% Volume (CH₄)
- 53 Smart IR 0-5% Volume CO₂
- 60 Photoionization Detector (0-2000ppm)
- 61 Photoionization Detector (0-20ppm)
- 70 Catalytic Bead for LEL
- 80 MOS H₂S 0-50 ppm
- 90 4-20mA Input
- 95 GDS-IR 0-100% LEL (CH₄)
- 96 GDS-IR (Other)

"F" - mA / Bridge Channel Measurement Range ⁵

- 1 0-1.00
- 2 0-5.00
- 3 0-10.0
- 4 0-25
- 5 0-50
- 6 0-100
- 7 0-500
- 8 0-1000
- 9 Contact factory

"G" - Options

- 0 No standard output options allowed with GASMAX IIx

"H" - Temperature Range ¹⁰

- 0 Standard operating range -40°C to +65°C
- 1 "Arctic Monitor" option operating range -55°C to + 65°C

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 3: GASMAX IIx with Aluminum sensor head NOT for XP installations

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

Note 6: Highly reactive gases REQUIRE Aluminum sensor head

Note 8: Dual local sensors require Y-adaptor #10-1200

Note 10: Arctic option available for local sensors only; require 10-91xx sensor

Represented by: