GASMAX II Gas Monitor
Single / Dual Channel Toxic & Combustible Gas Monitor for Hazardous Locations

- CSA Certified for Class I, Div 1 explosion-proof installations
- Monitor toxic and combustible gases with one detector
- Graphic display shows values, units, trend graph, alarm levels
- 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
- Backlit display for better visibility in low light conditions
- Options for 3x 5A alarm contacts, isolated 4-20mA and MODBUS®
- 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
- Manufactured in USA

The GASMAX II gas monitor delivers the latest in toxic & combustible gas detection technology, reliability and ease of use.

**Widest Variety of Available Sensors**
Built-in dual channel electronics allow the GASMAX II to support almost any GDS Corp sensor or 4-20mA current source input. Local 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 II constantly tracks sensor performance and calculates an estimate of sensor life remaining.

**Advanced User Interface**
The highly visible backlit display and high intensity alarm LEDs constantly show alarm status, calibrated engineering values and programmable tag name; a trend screen shows alarm levels and the most recent 30 minute data values. An internal real-time clock and event log time-stamp calibration and alarm events for later review. A menu-driven operator interface using magnetic keys eliminates all analog potentiometers and allows complete setup and calibration without hazardous area declassification.

**Flexible Output Options**
In addition to standard dual 4-20mA current loop outputs, an optional dual isolated 4-20mA output board or an RS-485 two-wire MODBUS® interface with optional three 5A 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 II monitors can be daisy-chained up to 500m to minimize wiring.

**Reliable**
Available in both single and dual channel models, the GASMAX II is certified for use in Class I, Div 1 explosion proof installations. For low temperature applications, an Extended Temperature Monitor option adds thermostatically controlled heaters to enable operation as low as –40°C ambient.
GASMAX II SPECIFICATIONS

**Power Input**
10-30VDC at < 4 watts with relay board. Additional power required for Extended Temp & GDS-IR option.

**Display**
Backlit 64 x 128 pixel LCD with 30-minute trend, bargraph

**Electrochemical Sensor Input**
Channel 1 accepts micropump signals from GDS Corp toxic & oxygen deficiency sensors and 4-20mA current source

**Bridge Type Input**
Channel 2 provides adjustable excitation voltage for SmartIR, PID and catalytic head or 4-20mA current source

**Standard Output**
Standard dual 3-wire 4-20mA current source. Max loop R is 750 ohms with nominal 24VDC power supply

**Optional Outputs**
Dual 1500CMV isolated 4-20mA current source. Max loop R is 650 ohms with nominal 24VDC; Single or dual MODBUS slave ports; 3x programmable alarm relays with 5A capability

**Temp**
Electronics -40°C to +60°C; See Echem Sensor Manual for sensor limits

**Housing**
Aluminum housing with epoxy paint standard; Optional #316 stainless steel housing (specify [SS] in part number)

**Dimensions**
Width 5.4” (137 mm), Height 8” (203 mm), Depth 5” (127 mm) Shipping weight 6.5 pounds (3 kg)

**Approvals**
CSA Certified for Class I, Div 1, Grps B, C, D. 2 years on electronics and one year on sensors

GASMAX II Order Guide

**GM II A - B - C / D - E - F / G - H [SS] [TAG]**

**“A”**
SENSOR HEAD 1,2,3,5
& 0 = None

**“D”**
1 = Local sensor head
2 = Local sensor head + splash guard
3 = Local sensor head for reactive gases
4 = Local sensor head + SG for reactive gases
5 = Remote sensor head
6 = Remote sensor head + splash guard
7 = Remote sensor for reactive gases
8 = Remote sensor head + SG for reactive gases
9 = Local mount for GDS-IR
10 = Remote mount for GDS-IR
20 = Local 4-20mA sensor transmitter
21 = Local sensor transmitter + splash guard
22 = Local sensor transmitter for reactive gases
23 = Local sensor transmitter + SG for reactive gases
24 = Remote 4-20mA sensor transmitter
25 = Remote sensor transmitter + splash guard
26 = Remote sensor transmitter for reactive gases
27 = Remote sensor transmitter + SG for reactive gases

**“B”**
SENSOR TYPE (see chart) 1,5
& Using sensor types 10-32 on “E” requires local or remote 4-20mA sensor transmitter

**“C”**
DETECTION RANGE 1,5
& 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”**
OUTPUT OPTIONS
0 = Dual 4-20mA output (standard)
1 = MODBUS + 3X Alarm Relays
2 = Dual isolated 4-20mA outputs
3 = MODBUS slave port

**“H”**
OPERATING TEMPERATURE 10
0 = Standard temperature range (-10°C to +55°C)
1 = Extended temperature range (-40°C to +55°C)
[SS] = Stainless steel enclosure
[TAG] = Stainless steel tag

NOTES

Note 1: Remote sensor head, remote sensor transmitter and GDS-IR sensor installations do not utilize Smart Sensor interface

Note 2: Maximum distance for remote toxic sensor connection is 25ft (3m). Use ST option for longer runs

Note 3: GASMAX II for reactive gases not certified for XP

Note 5: Standard ranges; contact factory for others

Note 6: Certain highly reactive target gases require special handling. Contact factory for more information.

Note 7: Note 5 applies to GASMAX II for reactive gases.

Note 8: Dual local sensors require Y-adapter

Note 9: Sensor head types 20, 21, 22 and 23 not available for channel 1 (“Option A”)

Note 10: Operation below -10°C for sensor types 10 to 32 requires “H=1” option (local mount sensors only)

TOXIC SENSORS | BRIDGE / mA SENSORS | 114 | Cyclopentane
---|---|---|---
10 Oxygen | 50 | SmartIR LEL (Methane) | 115 | n-Butane
11 Carbon Monoxide | 51 | SmartIR LEL (Propane) | 116 | Ethanol
12 Chlorine | 52 | SmartIR v/v (Methane) | 117 | Methanol
13 Chlorine Dioxide | 53 | SmartIR % CO2 | 118 | Propylene
14 Hydrogen | 61 | PID Low (10.0eV) | 119 | Propane
15 Hydrogen Sulfide | 62 | PID High (10.6eV) | 120 | Ethylene
16 Hydrogen Cyanide | 64 | PID Low (10.0 eV) | 121 | Jet-A
17 Hydrogen Chloride | 65 | PID High (10.0 eV) | 122 | Diesel
18 Hydrogen Fluoride | 70 | Catalytic Bead LEL (CH4) | 123 | Gasoline
19 Sulfur Dioxide | 71 | Catalytic Bead LEL | 124 | Isopropyl Alcohol
20 Ammonia | 90 | 4-20mA input | 125 | Acetone
21 Ozone | 105 | Butanol | 126 | p-Xylene
22 Ethylene Oxide | 106 | Toluene | 127 | Ethylene Oxide (50%)
23 Arside | 107 | Isopropyl Acetate | 128 | MEK
24 Silane | 108 | Ethane | 129 | Styrene
25 Fluorine | 109 | Acetylene | 130 | Methane v/v
26 Photogene | 110 | Isopropyl Alcohol | 131 | Propane v/v
27 Hydrazine | 118 | Ethane | 132 | Carbon Dioxide (5%)n
28 Nitric Oxide | 119 | Acetylene | 133 | Carbon Dioxide (3.5%)
29 Nitrogen Dioxide | 110 | Methane | 210 | Methane (IR2)
30 Mercaptan TBM | 111 | Methane (Temp = 90°C) | 211 | Propane (IR2)
31 Tetrahydrothiophene | 112 | Methane | 212 | Propane (IR2)
32 Diborane | 113 | Propene | 213 | Propane (IR2)
33 Hydrogen Sulfide | 114 | Isobutane |
34 Phosphine | 115 | Pentane |

GDS Corp
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