GASMAX II + PID

Photoionization Detector for Volatile Organics

- CSA Certified for explosion proof installations
- Diffusion sensor eliminates costly sample pump
- Monitor both Toxic / O_2 and LEL / VOC from single point
- Graphic display shows values, units, trend graph
- Non-intrusive one-person prompted calibration
- Power-up and post-cal delay eliminates false alarms
- Backlit display for better visibility in low light
- Options for 3x 5A alarm contacts, isolated 4-20mA and MODBUS® interface
- Security settings to lock critical settings
- Smart Sensors store calibration & alarm events

The GASMAX II *PID* Gas Monitor is a fixed point explosion-proof gas transmitter utilizing a photoionization detector (PID) to detect small concentrations of volatile organic compounds (VOC) such as benzene, toluene, xylene and chlorinated hydrocarbons.

The GASMAX II operates from 10 to 30 VDC and provides both 4-20mA analog and (optional) MODBUS® digital output. Calibrated engineering-units values are displayed on a large, backlit LCD. Standard features include two level alarm setpoints, fault alarm, LED indicators, non-intrusive calibration and a Smart Sensor interface for locally mounted sensors. Isolated 4-20mA output and alarm relays are available.

The *PID* Smart Sensor is available in two ranges, High Range (0-2000 ppm) and Low Range (0-20 ppm) that must be specified when ordering. The PID sensor is fitted with a replaceable 10.6 eV light source designed to ionize the most commonly found VOCs while at the same time remaining insensitive to changes in humidity, oxygen or CO_2 levels. Any compound with an ionization potential (IP) of 10.6 or less can be detected with the GASMAX II / PID monitor.

In addition to volatile organics, the dual-channel-capable GASMAX II can simultaneously host a second electrochemical sensor to measure oxygen levels or a specific toxic gas.

For more information on VOC compounds, IP levels and relative response factors contact GDS Corp or visit our website at www.gdscorp.com.

0-2000 ppm Isobutylene Equivalent (High Range)

GASMAX II PID Model GMII x-xx-x/1-60-9/x-x

0-20 ppm Isobutylene Equivalent (Low Range)

GASMAX II PID Model GMII x-xx-x/1-61-9/x-x

GDS Corp

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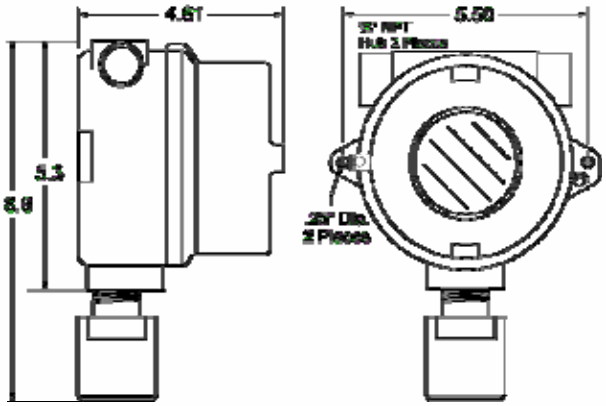
GDS CORP

ALL DIMENSIONS IN INCHES



Power	10-30VDC at < 3 watts with relay option; < 5 watts with Arctic Monitor
Display	Backlit 64 x 128 pixel LCD with 30-minute trend, bargraph and Eunits
Input	EC channel: Accepts signals from GDS Corp toxic / O_2 sensors mA / Bridge Channel: Configured for bridge input from PID sensor
Outputs	Standard dual 3-wire 4-20mA current source. Max loop R is 750 ohms with nominal 24VDC power supply Optional dual 1500CMV isolated 4-20mA current source. Max loop R is 650 ohms with nominal 24VDC. Optional three Form C Relays @ 5A Optional RS-485 2-wire MODBUS®
Accuracy	± 5% of full scale
Warm-up	< 30 minutes to final zero ± 1%
Response	T_{90} < 20 seconds @ 20°C ambient
Temp*	-20°C to +50°C Operating -55°C to +50°C Operating (Arctic Monitor)
Humidity	0 to 90% RH non-condensing
Housing	Aluminum housing with epoxy paint standard; #316 stainless steel opt
Dimensions	Width 5.4" (137 mm), Height 8" (203 mm), Depth 5" (127 mm) Shipping weight 6.5 pounds (3 kg)
Approvals	CSA Certified Div 1 & 2 Groups B, C, D. Suitable for XP installations
Warranty	Two years on electronics and one year on sensors from date of purchase

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GASMAX II Order Guide

GM II A - B - C / D - E - F / G - H [ATEX]

"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 arrestor [3, 4]
4 Local Aluminum; without flame arrestor; (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 arrestor [1, 2, 3, 4]
8 Remote Aluminum; without flame arrestor; (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 NH_3
21 Ozone
22 Ethylene Oxide
23 Arsine
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 CO_2
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

1 10-0234 3 Alarm Relays & RS-485 MODBUS® slave port
2 10-0250 Dual Isolated 4-20mA Output

"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 II with Aluminum sensor head NOT for XP installations
Note 4: ATEX certification not available with aluminum sensor head
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-adapter #10-1200
Note 10: Arctic option available for local sensors only; require 10-91xx sensor

Represented by: