GDS-68SXP Natural Gas Odorant Monitor for Mercaptans & Tetrahydrothiophene

- Designed for use in Class I, Div 1 Hazardous Locations

- Sensors for mercaptan, THT and common odorant mixtures

- Large LCD color display shows current reading, alarms & status

- *GDS Connect* App provides local wireless monitoring and control

- Manual or automatic calibration from stream or cal reference gas

- Gas and air flow sensor detects closed valves & blocked lines

- Automatic overrange detection protects sensor from damage

- Built-in flow meter provides visual confirmation of gas flow rate

- Outputs include 4-20mA output and RS-485 Serial MODBUS

- Units available: lbs per million feet, ppm or mg /cubic meter

- Latest generation GASMAX CX sensor with Digital Smart Sensors

- High quality diaphragm pump with 24VDC brushless motor

- Security levels reduce risk of tampering by unauthorized personnel

- Manufactured in USA

The GDS-68SXP Odorant Monitor uses industry-proven electrochemical sensor technology to measure the level of odorants in natural gas. Sensors are available for mercaptans, tetrahydrothiophene (THT) and blends such as Spotleak® by Arkema and Scentinel® from Chevron Phillips.
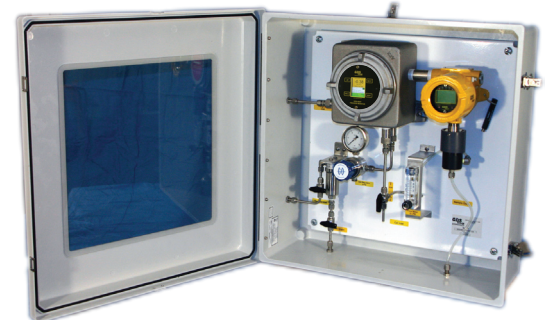
The GDS-68SXP Monitor offers an alternative to expensive analyzers or constant monitoring using pull tubes. While federal regulations still require human 'sniffers', the GDS-68SXP provides a cost-effective, automated and objective way to continuously measure and report odorant levels throughout a natural gas distribution network.
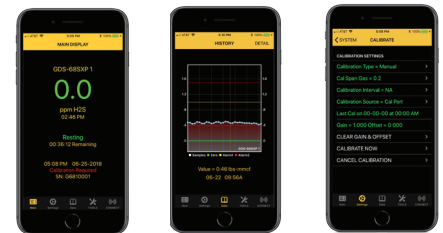
Reliable Measurements Day & Night

The GDS-68 SXP Odorant Monitor automates the entire measurement process. Before displaying the calculated value, each result is verified for proper gas flow, zero drift, overrange, sensor response and more.

Designed for Remote Environments

The GDS-68SXP is designed to be installed in remote, unattended locations. Power usage is less than 10 watts, making solar-powered operation practical and reliable. Automatic calibration allows the GDS-68SXP to periodically perform System Calibration cycles on daily, weekly or monthly intervals. Error conditions are reported as multi-level fault values, allowing remote diagnosis via the 4-20mA analog output or RS-485 MODBUS interface.

GDS-68SXP in NEMA 4X Enclosure

GDS CONNECT APP for GDS-68SXP

Download on the App Store

Advanced User Interface with Wireless Technology

The GDS-68SXP features a large, easy-to-read color screen that displays the current reading, system status, time to next measurement and more. The companion *GDS Connect* iOS app for iPhone® connects to the GDS-68SXP via an internal wireless interface allowing the user to monitor or change settings and issue commands if GDS-68SXP user security settings allow.

Hazardous Areas

The GDS-68SXP is designed for use in Class I Division 1 hazardous areas and includes all rated components.

Applications:
- Gas Pipeline Monitoring
- Odorant Monitoring
- Custody Transfer Compliance

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

GDS-68SXP SPECIFICATIONS

Power Input	24VDC +/- 5% at < 10 watts. Optional heater requires 110 VAC at 200 watts max External wiring junction box for easy connection
Primary Display	Backlit high resolution color LCD display shows latest reading, calibration and sample history and more
Sample Rate	From 48 samples per day to 1 sample per day
Repeatability	5% of range
Analog Output	Standard 3-wire 4-20mA current source. Max loop R is 750 ohms with nominal 24VDC power supply.
Digital Output	RS-485 serial 2-wire MODBUS slave interface with user-programmable security levels that allow for read / write or read-only modes
Wireless Output	Integrated wireless interface communicates with GDS Connect App on iOS devices. User programmable security levels allow for full enable / disable and wireless read / write or read-only modes
System Calibration	User-initiated ("Manual") system calibration from calibration gas port or gas sample stream Programmable ("Automatic") repeating system calibration on user-selected intervals from one day to six months.
Gas Sensor	GASMAX CX with highly sensitive electrochemical sensors for Mercaptans, THT or gas odorant mixtures. Includes sensor monitoring and temperature compensation for accurate measurements indoors or outdoors
Gas Sensor Calibration	Prompted manual calibration for GASMAX CX gas sensor. "Calibration Required" notice automatically generated.
Purge Air Pump	Long life diaphragm pump with brushless 24VDC motor.
Sample Conditioning	Max inlet pressure 1500 psig. High pressure stainless steel inlet filter with stainless steel regulator. Filter element PVDF fluorcarbon for removal of liquid aerosols, 99.99% removal of 0.1 micron particles.
Sample Temp	+5°C (+41°F) to +50°C (+122°F)
Operating Temp	0°C (32°F) to +50°C (+122°F)
Construction	XP enclosure: Cast aluminum. GASMAX CX: Aluminum housing with epoxy paint standard; Exterior stainless steel tubing and fittings. Backplate epoxy painted steel
Dimensions (NEMA 4X)	24" x 24" x 8" Non-metallic (20 Kg / 45 pounds) 24" x 24" x 8" Stainless Steel Enclosure
Inlet / Outlet	1/4" compression, stainless steel
Approvals	GASMAX CX, enclosures and flame arrestors CSA Certified for Class I, Div 1, Grps B, C, D. Suitable for XP installations
System Security	Low setting - all user interaction allowed Medium setting - operation from menu, no remote co High setting - No access to menu without security co
Warranty	Electronics - 2 years from date of purchase

GDS-68SXP Order Guide

GDS-68SXP-X-A-B-C / D-E-F

"X"	SAMPLE CONDITIONING 3 = Filter + Regulator
"A"	INPUT TYPE 37 = Sensor Head w/ Flow Cell
"B"	SENSOR TYPE (10-99xx) 30 = Tert-Butyl Mercaptan (TBM) (0-15 ppm, 0-3.00 lbs/mmcf, 0-50 mg/m3) 31 = Tetrahydrothiophene (THT) (0-15 ppm, 0-3.00 lbs/mmcf, 0-50 mg/m3) 40 = TBM / DMS Blends (0-3.00 lbs/mmcf, 0-50 mg/m3) 41 = TBM / THT Blends (0-3.00 lbs/mmcf, 0-50 mg/m3) 42 = TBM / MES Blends (0-3.00 lbs/mmcf, 0-50 mg/m3) 43 = TBM / Mercaptans Blends (0-3.00 lbs/mmcf, 0-50 mg/m3) 44 = General Mercaptans (0-3.00 lbs/mmcf, 0-50 mg/m3)
"C"	STANDARD RANGES (-R0003) 0-3.00 lbs/mmcf (-R0015) 0-15 ppm (-R0050) 0-50 mg/m3 (Contact factory for other ranges)
"D"	OUTPUT 1 = 4-20mA + RS-485 MODBUS serial slave interface
"E"	ENCLOSURE 1 = 24" x 24" non-metallic enclosure 2 = 24" x 24" stainless steel enclosure 3 = 24" x 24" non-m no window 4 = 24" x 24" stainless no window
"F"	HEATER / INSULATION 0 = None 1 = 110VAC, 200W, 50F (Note: Fixed thermostat setting)
[*]	OPTIONS [INS] = Enclosure Insulation [CMK] = Cal Cylinder Mounting Kit (internal or external mount)

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