GDS-58BX Sample Draw Monitor

Single / Dual Channel Sample Draw for Gas Measurement in Hazardous or Extreme Locations

✳ Designed for installation in Class I, Div 1 Hazardous Locations

✳ Sensors for CO_2, combustible and non-reactive toxic gases

✳ High visibility flow indicator shows RED or GREEN status

✳ Wiring junction box simplifies field wiring and maintenance

✳ Low flow indication on screen and fault interruption of 4-20mA out

✳ Built-in flow meter provides visual confirmation of sample flow rate

✳ Prompted calibration procedure and cal port for easy maintenance

✳ Accepts sample lines up to 500 ft in length

✳ Optional programmable 5A relays for low and high alarm indication

✳ High quality diaphragm pump with 24VDC brushless motor

✳ Optional matching 110/220VAC power supply available

✳ Setup in hazardous area requires only simple magnetic wand

✳ Manufactured in USA

Remote Sampling Made Easy

The GDS-58BX single or dual channel sample draw system is designed to accurately measure toxic, combustible, or VOC gas levels in areas with limited accessibility or in situations where harsh environmental conditions make the installation of a standard diffusion sensor difficult or impossible. The GDS-58BX combines the new advanced GASMAX BX gas monitor, adjustable flow meter, low flow switch and long life diaphragm pump in a single convenient package.

GASMAX BX Gas Monitor

The GASMAX BX state-of-the-art gas monitor features a high contrast full color display that shows real-time gas values and programmable trend date. High contrast alarm displays draw immediate attention to alarm conditions, and a diffused red/green LED flow indicator shows gas flow status at a glance. An internal real-time clock and event log time-stamps calibration and alarm events for later review.

Optional alarm relay and serial MODBUS port are available in addition to standard single or dual 4-20mA output.

The GDS-58BX supports all current GASMAX BX sensors, including electrochemical, photoionization or SmartIR infrared sensors. An easy-to-use menu-driven operator interface eliminates all analog potentiometers and allows setup and calibration to be completed without hazardous area declassification.

An integrated Run / Calibrate valve and user prompted calibration procedure make routine maintenance and field 'bump tests' quick and easy.

Rugged and Reliable

The GDS-58BX Sample Draw system is designed for installation and use in industrial applications and hazardous areas rated Class I, Div 1. Temperature-compensated sensors and industrial-quality components allow reliable operation and rapid response down to -20°C (max low temperature depends on selected sensor).

The GDS-58BX is ideal for sampling toxic or combustible gases in:

• *Sumps and enclosed areas*
• *Cabinets or storeroom with limited ventilation or airflow*
• *Air conditioning intake or exhaust plenums and ducts*
• *Boiler burners and ducting*

GDS Corp
Gas and Flame Detection

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

GDS-58BX SPECIFICATIONS

Power Input	24VDC +/- 5% at < 10 watts.
Display	Sunlight-readable full color QVGA TFT display with value, bargraph and trend graph screens
Sensor Options	Electrochemical sensors for toxic gases Electrochemical sensors for oxygen deficiency PID sensors for detection of volatile organic compounds SmartIR infrared sensors for detection of methane, propane or carbon dioxide in ppm and % by volume GDS-IR & IR2 sensors for a wide range of combustibles
Standard Output	Dual 3-wire 4-20mA current source. Max loop R is 750 ohms with nominal 24VDC power supply Bright LED red / green flow status indicator panel. Shows green if flow OK, red if flow blocked. Wiring Junction Box with Power On indicator, easy-connect wiring terminals and two 3/4" NPT female connections
Optional Output	Single 5A relay connections (NO, COM, NC) plus single RS-485 2-wire MODBUS slave interface.
Sample Pump	1.6L diaphragm pump with brushless 24VDC motor
Temp	-20°C to +55°C operating. Minimum and maximum operating temperature is dependent on sensor selected.
Housing	Aluminum housing with epoxy paint #316 stainless optional
Dimensions	16" x 12" x 5" for sensor types 10 - 70, 10 pounds 16" x 15" x 5" for sensor types 110+, 14 pounds Stainless steel plate, 21" x 21", 22 pounds 24" x 24" nonmetallic enclosure, 40 pounds
Inlet / Outlet	1/4" compression, stainless steel
Approvals	All components rated for Class I, Div 1 hazardous areas. Suitable for XP installations (may require GDS-IR or GDS-IR2 sensors)
Warranty	2 years from date of purchase on electronics

SENSOR TYPES (Contact GDS Corp for complete list)

10	Oxygen (0-25%)	0°C to +40°C	50	SmartIR, 0-100% LEL CH4	0°C to +40°C
11	Carbon Monoxide	0°C to +40°C	51	SmartIR, 0-100% LEL Propane	0°C to +40°C
14	Hydrogen	0°C to +40°C	52	SmartIR, 0-100% v/v	0°C to +40°C
15	Hydrogen Sulfide	0°C to +40°C	53	SmartIR, Carbon Dioxide (Lo)	0°C to +40°C
16	Hydrogen Cyanide	0°C to +40°C	54	SmartIR, Carbon Dioxide (Hi)	0°C to +40°C
19	Sulfur Dioxide	0°C to +40°C	61	PID, 10.6eV, low range	0°C to +40°C
24	Silane	0°C to +40°C	62	PID, 10.6eV, high range	0°C to +40°C
27	Hydrazine	0°C to +40°C	63	PID, 10.0eV, low range	0°C to +40°C
28	Nitric Oxide	0°C to +40°C	64	PID, 11.7eV, low range	0°C to +40°C
29	Nitrogen Dioxide	0°C to +40°C	1xx	GDS-IR family (LEL)	0°C to +55°C
			2xx	GDS-IR2 family	0°C to +55°C
			4xx	GDS-IR2 family	0°C to +55°C

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GDS-58BX Order Guide

GDS-58BX-A/B-C/D-E/F-G-H [SS]...

"A"	INLET FILTER[1] 0 = None 1 = Non-metallic particulate filter 2 = Stainless steel coalescing filter 3 = Pyrex clear coalescing filter
"B"	CHANNEL 1 SENSOR TYPE [2] See GDS Corp Product Configurator for full list of sensor types
"C"	CH1 DETECTION RANGE [2] See GDS Corp Product Configurator for full list of sensor range options
"D"	CHANNEL 2 SENSOR TYPE [2] See GDS Corp Product Configurator for full list of sensor types
"E"	CH2 DETECTION RANGE [2] See GDS Corp Product Configurator for full list of sensor range options
"F"	OUTPUT [3] 1 = 4-20mA with Flow Fault option 2 = Adds single 5A Relay and MODBUS RS-485 serial port
"G"	MOUNTING PLATE/ENCLOSURE 0 = None 1 = 21" x 21" stainless steel plate 2 = 24" x 24" non-metallic enclosure[4] 3 = 24" x 24" stainless steel enclosure
"H"	SAMPLE PROBE 0 = No duct mount sample 1 = 10" duct mount sample probe 2 = 16" duct mount sample probe 3 = 20" duct mount sample probe 4 = 24" duct mount sample probe
	[SS] = Stainless steel housings [TAG] = Stainless steel tag [HTR] = Enclosure heater [AC] = External 25W AC power supply [FIL] = Particulate filter + 50ft tubing [FLT] = Float probe [SCR] = End-of-line stainless steel screen

NOTES

Note 1: Inlet sample should be clean and dry. Inlet filters are designed primarily to remove particulate; DO NOT depend on coalescing filter to remove excess moisture in sample flow. Sample draw end-of-line float valve is recommended when sampling in area where liquid may be present.

Note 2: Contact GDS Corp for specific applications regarding sensor and sensor range selection.

Note 3: Analog and MODBUS outputs driven to FAULT level if sensor fault or sample flow fault is detected.

Note 4: Independent AC-powered enclosure heater is available as an option with 24" x 24" non-metallic enclosure and is recommended in outdoor applications in cold climates.