

Gas Detector Series GD100



- 4-20 mAdc output and contact out
- Battery backup (optional)

Engineering Specification

	Minimum	Standard	Maximum
CL2	1PPM	10PPM	10PPM
NH3	5PPM	20PPM	100PPM
SO2	1PPM	20PPM	20PPM

Detect range :

Case :

Monitor housing : Polystyrene & Polycarbonate

Sensor housing : Polycarbonate & PVC

Grade : NEMA 4X (IP65)

Installation : Wall-mounted type

Surrounding temperature condition

Temperature monitor : -5 - 55°C

Sensor : -30 - 55°C

Barometer pressure : 0.8 - 1.2 in atmosphere

Humidity : Until 99%

Electric connection

Monitor : Conduit Connection

Sensor housing : 1/2" NPT Conduit Connection

Power condition

Voltage : 110V or 220V

Frequency : 47 - 63 Hz

Power : Maximum 18Watts

(14 Amp / 120V)

(8 Amp / 24V dc)

Relay : 3-SPDT 10 Amps (240VAC) standard

Analog output : 4 - 20mA/750ohms

The Series GD100 Gas Detector is a fast, reliable, easy-to-program instrument for detection of chlorine, sulfur dioxide and other specified gases in air. The Series GD100 is capable of responding to levels of gas in air over a range of 0.1-30PPM. The unit consists of an electro-chemical gas sensor and a microprocessor-based alarm indicator unit. The sensor can be mounted in the hazardous area, while the monitor remains in a safe area, protecting the operator from exposure to the hazardous gas. The operator is alerted to the hazardous condition by an audible alarm and flashing display on the indicator. The alarm indicating unit can interface with up to four sensors, each of which can detect the same or a different gas.

Design Features

- Alarms in presence of target gas (Chlorine, sulfur dioxide or other)
- Up to four sensors input
- Field programmable alarms and range settings
- Long sensor life: 3 years expected
- Alphanumeric display of gas concentration (18Characters × 4line)
- Simple, fast calibration in engineering units
- Integral audible and visual alarms

Shipping Weight and Cubage

Monitor : 1.82Kg/ (29.21Cm)×(21.59Cm)×(13.34Cm)

Sensor : 0.34Kg/ (10Cm)×(10Cm)×(6Cm)

Operation

The Series GD100 Gas Detector is a sensor for gas using semiconductor element and detects specific gas and main monitor is normally connected with 4 sensors. Solidified sensor is not combined with glass type additive or consumption type reagent. Each sensor is located where wanted to detect and installed each case and each sensor can be remotely installed to 305m from the monitor. Each sensor also can control ON/OFF at the monitor and can intercept scrubber operation or transmission from malfunction of sensor.

Monitor also consistently checks each sensor's condition and when abnormal condition happens, it transmits signal to the outside to let them know the condition instantly. Monitor body includes relay contact point's malfunction condition and two independence 10 Amp alarm contact points. Normally one relay contact point can be used for hearing alarm signal and the other relay contact point can be used for separate function which can operate scrubber system. 6 additional relay contact points also used for other purpose. Additional 4-20MA DC analog output can be used for data record or data collection and so on.

Monitor also can present 4 concentration portions at the same time and it can control the whole condition of each sensor with simple one button.

Options

- Battery backup
- Critical alarm relay for multi input channel
- RS485 output
- Serial-to-analog converter
- Electrochemical Gas Generators for live calibration

Ordering Information

- Gas(es) to be monitored
- Number of sensor assemblies
- Initial Range (for factory calibration)
- Options required

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