



SG100

Intrinsically-safe detection of toxic gases or oxygen

SG100 series is a cost-effective and intrinsically safe gas detector for the continuous monitoring of more than 50 toxic gases,oxygen gases in most challenge environment. With IECEx, ATEX and CNEX certificated, explosion level reaches Ex db IIC T6 GB/Ex db ia IIC T6 GB. Ex da db ia IIC T6 GB. Having a 3-wire 4 to 20 mA analog output with relays, it also offers HART,RS485 Modbus protocol, making it compatible with most control systems. With optional wireless function, no need wires to save the labor cost and realize the transmission without limits.

Adopt three–key magnetic wand design, it's safe and easy to domenu navigation in explosion areas. It is also an intelligent hot–pluggable fixed gas detector, which is easily for maintenance after installation. Besides, with remote calibration, self–diagnosis, alarm latched functions make the SG100 monitor your choice for versatile gas detection in petroleum, chemical, metallurgy, electric power and other industrial sites.



Product advantages

Module sensor chamber design, easier for maintenance

- Module chamber design, no need to disassemble of the whole machine or return for calibration when maintenance, just replace the sensor chamber only and can work properly
- Adopt three-key magnetic wand design, realize on-site maintenance and operation in any explosion-proof area

ia intrinsically safe explosion-proof circuit design, safe and reliable

- The instrument has got IECEX, ATEX, Chinese explosion-proof certificates and the explosion-proof level reaches Ex db IIC T6 Gb /Ex db ia IIC T6 Gb/ Ex da db ia IIC T6 Gb
- The protection level reaches IP66/IP67

Small size and easier for installation

- Body weight is only 1 kg, easy to install by one-person
- One-person calibration is easily performed using calibration cap
- Standard equipped with infrared ray controller for remote setting
- Quick site installation using a mounting plate accessory
- A wide range of accessories is offered to suit various industrial applications, including flow cap, duct-mount kit, and pipe-mount kit
- Factory-calibrated for fast commissioning

Various data transmission

- Standard 4-20 mA current signal, RS485 Modbus, 1 set of relay signal output
- Optional with 2 sets of relay signals, voltage1~5V
- Optional HART digital communication provides configuration
- Optional wireless transmission modes can be selected



Product speciafications:

SG100 fixed gas detector

| | Wiodel SG100 |
|--|--------------|
|--|--------------|

Detected gas O2, CH4、VOC and other toxic gases

Principle Catalytic/electrochemical/PID photo-ion/infrared (depending on the sensor)

Precision $\leq \pm 5\%$ FS or $\pm 10\%$ (depending on the gas)

Response time T90<60s (depending on the gas and sensor)

Repeatability ± 1%F.S

Explosion-proof grade IECEX: Ex db IIC T6 Gb, Ex db ia IIC T6 Gb; ATEX: Ex db IIC T6 Gb, Ex db ia IIC T6 Gb

Protection grade IP66/67

Power dissipation toxic gas<2.5W, flammable gas<4W

Communication 4-20mA(3-wires)、RS485 1~5V,Hart(Optional)

Wireless LORA、GPRS/4G(Optional)

Working voltage 12-24VDC

Contact capacity standard with 1 set of relay signals, optional with 2 sets of relay signals

Display LED display

Working temperature $-40\% \sim 70\%$ (catalytic sensor), $-20\% \sim 50\%$ (Electrochemistry sensor)

Working pressure 86kPa~106kPa

Housing material Die casting aluminum

Electrical interface standard internal screw thread M20 * 1.5, optional 1/2NPT internal thread, G3/4, G1/2, 3/4NPT

Size 157.8x128.8x69.6mm

Weight about 1.0Kg

Standard configuration list

- Gas detector 1 piece
- Magnetic wand 1 piece
- User manual 1 piece
- Certificate of Conformity/Warranty Card 1 piece
- Mounting plate 1 piece
- M4 bolt 3 piece
- M4 nut 3 piece
- M4 Screw pad 3 piece
- M4 flat mat 3 piece



Application



▲ Petrochemical & Chemical Industry



▲ Municipal Engineering & Utilities



▲ Agricultural & Environmental Protection



▲ Electronic



▲ Food & Pharmaceutical Industry



▲ Other Industries

More Application

- Furniture, Floor, Wallpaper, Coating, Gardening, Interior Decoration and Renovation, Dyestuff, Papermaking, Pharmacy, Health Care, Foodstuff, Antiseptic.
- Disinfection, Chemical Fertilizer, Resin, Adhesive, Pesticide, Raw Material, Sample, Technological Process, Livestock Farm, Refuse Processing Plant, Perm Place.
- Bio-pharmaceutical Plant, Green Household, Livestock Breeding, Green House Cultivating, Warehouse Logistics, Brewing And Fermentation, Agricultural Production.