

## SCS-GDS Combustible/Toxic Gas Detection and Alarm System

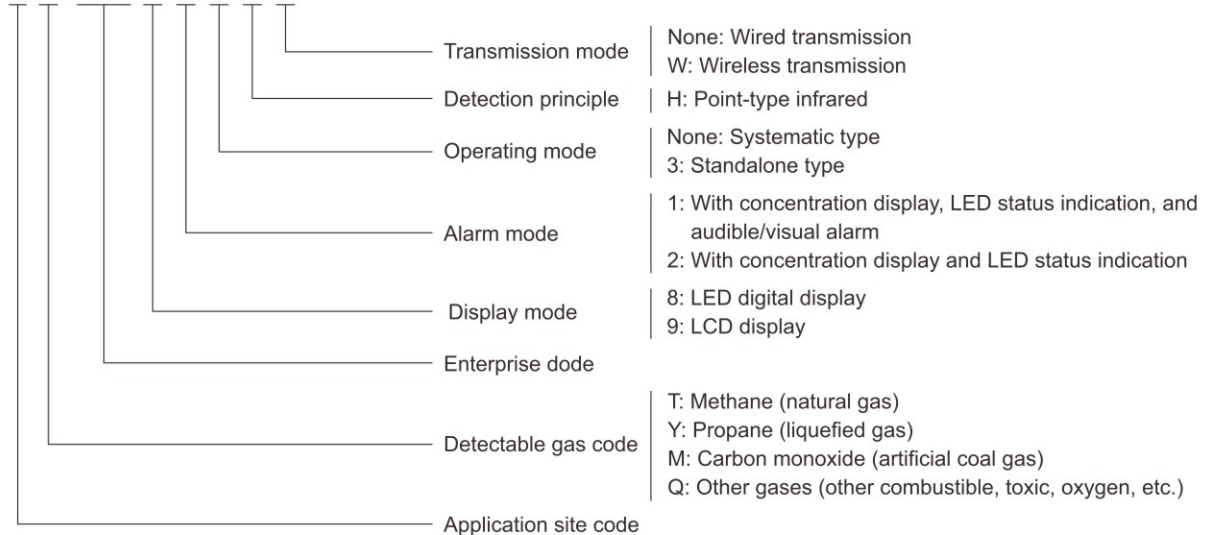
G□-WRS Point-type Toxic/Combustible Gas Detectors for Industrial and Commercial (Point-type Infrared)



- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Explosion-proof design with flameproof enclosure, suitable for indoor and outdoor explosive gas and dust environments, ensuring safety and reliability.
- ◆ LCD or LED digital screen for on-site concentration display, LED indicators for on-site status: "Normal" indicated by green light, "Fault" by yellow light, and "Alarm" by red light.

### ■ Catalogue number logic

G □ - WRS □ □ □ □ □ □



### ■ Product features

- ◆ The detector is equipped with an integrated infrared receiving module, enabling on-site zero calibration and other settings via an infrared remote control.
- ◆ The sensor module features a hot-swappable design, facilitating easy installation and maintenance; replacement of the module does not require re-calibration and can be used directly.
- ◆ The product utilizes the property of gases absorbing specific infrared wavelengths, employing a dual-wavelength IR absorption principle for detection. It continuously monitors hydrocarbon combustible gases and carbon dioxide in industrial and commercial environments, converting gas concentration and system information into digital signals, which are then transmitted to the gas alarm control system for identification, display, and processing.
- ◆ The detector incorporates a high-precision, moisture-resistant, new-generation point-type infrared sensor with strong anti-interference capabilities, a long lifespan, and compliance with the latest national standards. The sensor's lifespan exceeds five years.

# Zones 1&2; 21&22



## SCS-GDS Combustible/Toxic Gas Detection and Alarm System

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### Technical data

#### Point-type Toxic/Combustible Gas Detectors for Industrial and Commercial (Point-type Infrared)

G□-WRS

#### Explosion protection

Global (IECEX)	IECEX NEP 25.0081X
Gas and dust	Ex db IIC T6 Gb Ex tb IIIC T80°C Db
Europe (ATEX)	ACE25ATEX054X
Gas and dust	⊕ II 2 G Ex db IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80°C Db

#### Certificates

IECEX; ATEX

#### Conformity to standards

IEC 60079-0, IEC 60079-1, IEC 60079-31, EN 60079-0, EN 60079-1, EN 60079-31

#### Power supply

Systematic: 3.7, 12, 24VDC  
Standalone: 220VAC

#### Power consumption

<3W

#### Output signal

Three-wire system: 4~20mA/RS485 (MODBUS protocol), optional relay output function

#### Inlet specification

M20×1.5 internal, optional NPT1/2"

#### Transmission method

4G, 5G, NB-IoT, LoraWAN, etc.

#### Gas to be detected

Refer to the infrared gases list.

#### Detection principle

Point-type Infrared

#### Measurement range

(3~100)%LEL

#### Accuracy

±3%LEL

#### Repeatability

≤2%

#### Protection rating

IP65/IP66

#### Temperature range

-40°C~+55°C/-40°C~+70°C

#### Humidity range

<95% (no condensation)



### Infrared Gases List

Methane	Acetone	Xylene
Toluene	Butane	Gasoline
Methanol	Butanone (Methyl Ethyl Ketone, MEK)	Ethyl Acetate
Ethane	Pentane	Dichloroethane
Ethanol	Hexane	Difluoromethane
Ethylene	Isopropanol	Chloromethane
Propane	Cyclopentane	Carbon Dioxide
Propene	Ethylene Oxide	

### Dimension drawings (all dimensions in mm) - subject to alteration

