

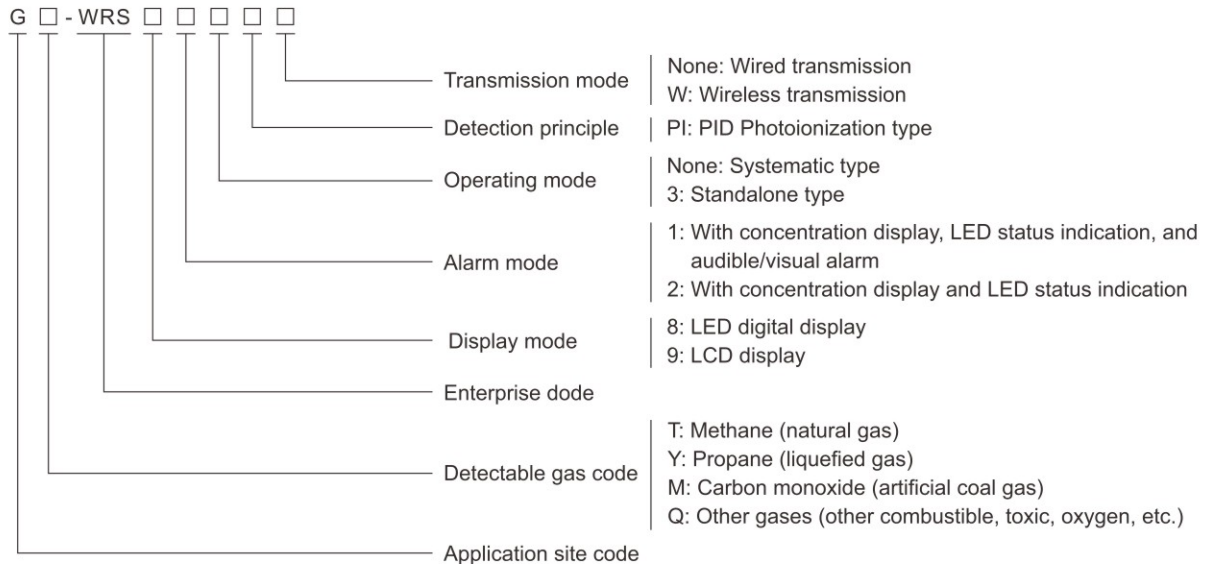
## SCS-GDS Combustible/Toxic Gas Detection and Alarm System

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



- ◆ 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



### ■ 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 continuously monitors low-concentration volatile organic compounds in industrial and commercial environments, converting gas concentration and system information into digital signals for transmission to the gas alarm control system, where they are identified, displayed, and processed.
- ◆ Utilizing a high-precision, highly sensitive, wide-range, low-power, and broad-spectrum new-generation PID photoionization sensor, the product meets the latest national standards. The PID sensor is a non-destructive sensor; after ionization detection, the gas reverts to its original state as a gas or vapor.

# Zones 1&2; 21&22

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

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Technical data	
<b>Point-type Toxic/Combustible Gas Detectors for Industrial and Commercial (PID Photoionization Type) G□-WRS</b>	
<b>Explosion protection</b>	
Global (IECEX) Gas and dust	IECEX NEP 25.0081X Ex db IIC T6 Gb Ex tb IIIC T80°C Db
Europe (ATEX) Gas and dust	ACE25ATEX054X Ⓔ II 2 G Ex db IIC T6 Gb Ⓔ II 2 D Ex tb IIIC T80°C Db
<b>Certificates</b>	IECEX; ATEX
<b>Conformity to standards</b>	IEC 60079-0, IEC 60079-1, IEC 60079-31, EN 60079-0, EN 60079-1, EN 60079-31
<b>Power supply</b>	Systematic: 3.7, 12, 24VDC Standalone: 220VAC
<b>Power consumption</b>	<3W
<b>Output signal</b>	Three-wire system: 4~20mA/RS485 (MODBUS protocol), optional relay output function
<b>Inlet specification</b>	M20×1.5 internal, optional NPT1/2"
<b>Transmission method</b>	4G, 5G, NB-IoT, LoraWAN, etc.
<b>Gas to be detected</b>	VOC gases (Refer to VOC gas list)
<b>Detection principle</b>	PID Photoionization type
<b>Measurement range</b>	Refer to VOC gas list
<b>Accuracy</b>	±3%FS
<b>Repeatability</b>	≤2%
<b>Protection rating</b>	IP65/IP66
<b>Temperature range</b>	-40°C~+55°C/-40°C~+70°C
<b>Humidity range</b>	<95% (no condensation)

VOC Gas List					
Gas Name	Measurement Range	Gas Name	Measurement Range	Gas Name	Measurement Range
Benzene	0~5µmol/mol	Phenol	0~7µmol/mol	Cyclohexanone	0~30µmol/mol
	0~10µmol/mol		0~20µmol/mol		0~36µmol/mol
	0~20µmol/mol		0~100µmol/mol		0~100µmol/mol
	0~50µmol/mol		0~200µmol/mol		0~200µmol/mol
	0~100µmol/mol		0~150µmol/mol		0~2.5µmol/mol
Toluene	0~20µmol/mol	Ethyl Acetate	0~300µmol/mol	Aniline	0~5µmol/mol
	0~30µmol/mol		0~500µmol/mol		0~10µmol/mol
	0~40µmol/mol		0~1000µmol/mol		0~20µmol/mol
	0~50µmol/mol		0~30µmol/mol		0~50µmol/mol
	0~100µmol/mol		0~50µmol/mol		0~100µmol/mol
Ethylbenzene	0~50µmol/mol	Styrene	0~100µmol/mol	Xylene	0~20µmol/mol
	0~68µmol/mol		0~10µmol/mol		0~30µmol/mol
	0~100µmol/mol		0~20µmol/mol		0~50µmol/mol
Acetone	0~100µmol/mol	Methylamine	0~50µmol/mol	Butadiene	0~100µmol/mol
	0~200µmol/mol		0~100µmol/mol		0~6µmol/mol
	0~300µmol/mol		0~200µmol/mol		0~10µmol/mol
	0~370µmol/mol		0~400µmol/mol		0~20µmol/mol
	0~500µmol/mol		0~500µmol/mol		

