LoRaWAN G4 Toxic Gas Sensor with Industrial Safety

Smart Building, Smart Facility, Smart Factory, Smart Transportation

SKU: WSLRW-GCBG4

daviteq

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

LoRaWAN

10-Year

CE FC ARIB

✓ Safe Zone   ◯ Hazardous Zones

WSLRW-GCB is a LoRaWAN sensor designed to measure toxic gas concentrations. It features high-performance, ultra-low-power gas sensing technology to accurately detect specific gas concentrations in the air. Additionally, the sensor includes a built-in siren for local alarm notifications and a button for local alarm acknowledgment. Its ultra-low-power design and smart firmware enable the sensor to operate on a single battery for 5-10 years. It supports all LoRaWAN frequency plans, making it versatile for global use. The sensor is ideal for monitoring gas concentrations in industrial or commercial buildings in the areas of kitchens, parking garages, boiler rooms, laboratories, basements, HVAC rooms, utility rooms, industrial workspaces and more.

Applications

Indoor Air Quality Monitor, Gas Analyzing, Warehouse Monitoring, Gas Leakage Detection

Notes For Applications

- Select the suitable sensor range to get highest accuracy v.s sensor life. Please consult our engineers;
- Life time are 1-2 years for Electro-chemical sensors , depends on sensor type and actual operating conditions;
- Calibration cycle are 6-12 months for Electro-chemical sensors, depends on actual operating conditions;
- Check carefully the working temperature and humidity of the application;

✓ LoRaWAN communication
LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market

✓ 5-10 years battery
Daviteq's ultra-low power sensing and wireless technology, smart firmware to allow the sensor can last up to 5-10 years with 01 battery

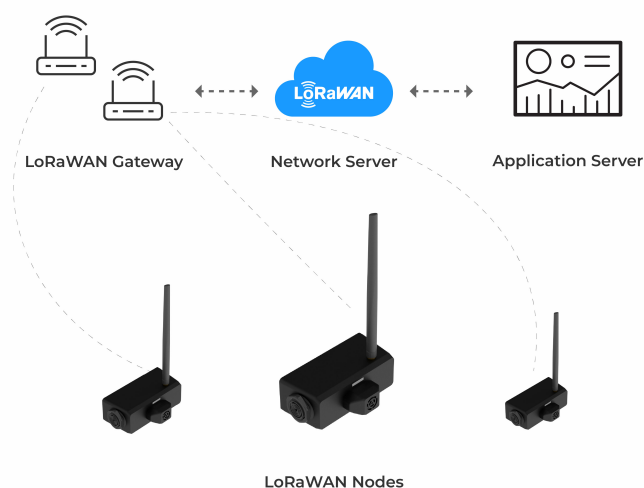### ✓ High Accuracy & Stable measurement
Advanced Electrochemical-type and Non-Dispersive Infrared gas sensor technology processing to deliver high accuracy and stable measurement

✓ Local alarm
Local alarm sound & light notification and local alarm acknowledgement for local notifications

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

LoRaWAN

LoRaWAN Gateway   Network Server   Application Server

LoRaWAN Nodes

SYSTEM ARCHITECTURE

Specification

Type of measuring gas	Choose 1 of CO, CL_2, H_2S, H_2, NH_3 gases
Measurement technology	High performance Electro-Chemical sensor
Measuring range	CO 0-500ppm, H_2S 0-100ppm, H_2 0-1000ppm, NH_3 0-100ppm, CL_2 0-20 ppm
Resolution	0.1ppm for CO, H_2S, NH_3, H_2 and 0.01ppm for CL_2
Reading stability	For CO, Cl_2, H_2S, H_2, NH_3, refer Daviteq's Electro-Chemical gas sensor link :
Sensor working temperature	-20~60°C
Sensor Working humidity	15-90% RH, non-condensing
Operating pressure	80kPa to 120kPa
Local functions	Alarm sound and alarm acknowledgement
SF Factors	SF7~SF12
RF Frequency and Power	860~930MHz, 14~20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN, class A
Antenna	External antenna
Data sending mode	Cycle, alarm and magnet key.
RF module compliant	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (USA), ARIB STD-T108 (Japan)
Configuration	Via downlink (only for some configurations) or USB cable (PC software provided free of charge)
Battery	01 x LiSOCl2 3.6V size D battery
Housing	ABS, IP40
Dimensions	H260xW150xD90 (with external antenna)
Net weight	280 grams (without battery)
Installation	Wall mounting with screws

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

CO GAS MONITORING
IN WINE CELLAR

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

CO GAS MONITORING
IN BASEMENT PARKING AREA

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

INSTALL ON WALL
30-40MM ABOVE THE GROUND

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

205.1   205.1

51.7   50.0

24.5

90.0   87.0

2x $\varnothing$ 4.6

142.5
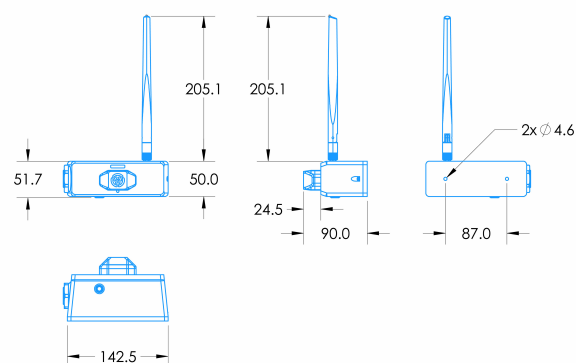
DIMENSION DRAWING OF
WIRELESS NODE (Unit: mm)

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB

SAFT

LS
33600

3.6V

Li-SOCl$_2$

LS 33600
Lithium battery

-60~85°C working temperature
Low self-discharge rate
17000 mAH capacity

DAVITEQ'S CHOICE
RECOMMEND

RECOMMENDED BATTERIES

LORAWAN G4 TOXIC GAS SENSOR WITH SIREN
WSLRW-GCB
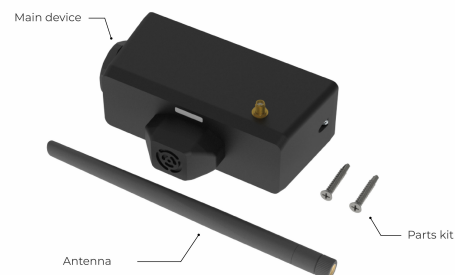
Main device

Antenna

Parts kit

PRODUCT PACKAGE

Ordering Information

ITEM CODES	DESCRIPTIONS
WSLRW-GCB-CO-500	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, CO, 0-500 PPM, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDMENT, ALL LORAWAN FREQUENCY PLANS
WSLRW-GCB-H2S-100	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, H_2S, 0-100 PPM, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDMENT, ALL LORAWAN FREQUENCY PLANS
WSLRW-GCB-H2-1K	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, H_2, 0-1000 PPM, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDMENT, ALL LORAWAN FREQUENCY PLANS
WSLRW-GCB-NH3-100	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, NH_3, 0-100 PPM, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDMENT, ALL LORAWAN FREQUENCY PLANS
WSLRW-GCB-CL2-20	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, CL_2, 0-20 PPM, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDMENT, ALL LORAWAN FREQUENCY PLANS