

LoRaWAN NDIR Flammable Gas Sensor with Siren for Industrial Safety



Smart Building, Smart Facility, Smart Factory, Smart Transportation

SKU: WSLRW-GCB

LoRaWAN GAS SENSOR WITH SIREN WSLRW-GCB

LoRaWAN



WSLRW-GCB-H1.JPG



WSLRW-GCB is a LoRaWAN sensor designed to measure flammable 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 >7 years for NDIR sensors , depends on sensor type and actual operating conditions;
- Calibration cycle are about 30 months for NDIR sensor, 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 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 to notify at site

LoRaWAN NETWORK



WSLRW-GCB-H5.JPG

DAVITEQ TECHNOLOGIES INC

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Created date: Jul-18-2024

Updated date: Mar-05-2025

Specification

Type of measuring gas	Choose 1 of CH ₄ , C ₃ H ₈ gases
Measurement technology	High performance Non-Dispersive Infrared (NDIR) sensor
Measuring range	CH ₄ 0-100% LEL, C ₃ H ₈ 0-100% LEL
Resolution	0.1%
Reading stability	For C3H8 and CH4, refer Daviteq's NIDR 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 LiSOC12 3.6V size D battery
Housing	ABS, IP40
Dimensions	H260xW150xD80 (with external battery)
Net weight	2700 grams (without battery)
Installation	Wall mounting with screws

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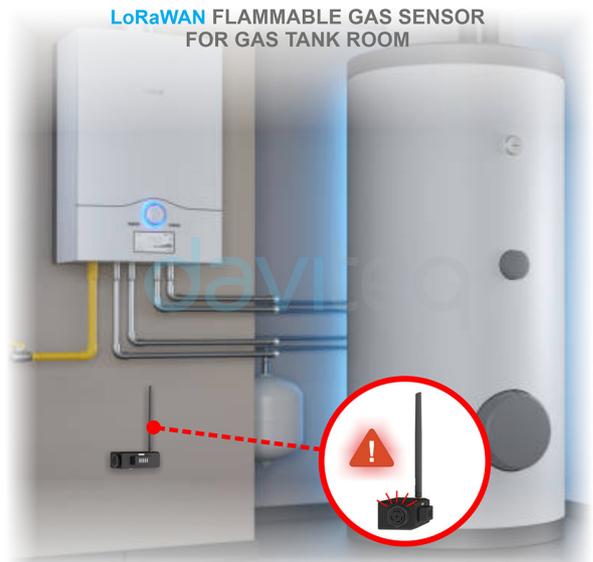
Updated date: Mar-05-2025

LoRaWAN FLAMMABLE GAS SENSOR FOR COMMERCIAL KITCHENS



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LoRaWAN FLAMMABLE GAS SENSOR FOR GAS TANK ROOM



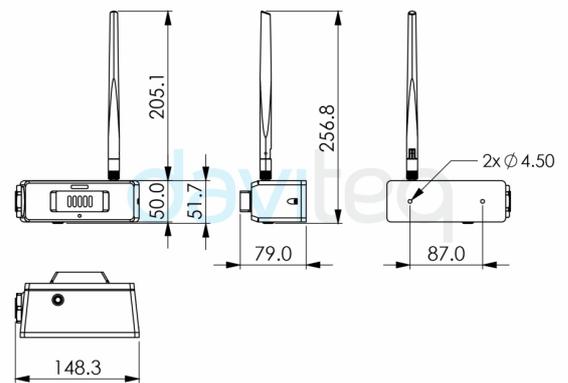
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INSTALL ON WALL 30-40MM ABOVE GROUND



WSLRW-GCB-H4.JPG

DIMENSION DRAWING OF WIRELESS NODE (Unit: mm)



WSLRW-GCB-H6.JPG

RECOMMENDED BATTERIES FOR SENSOR NODE

LS 33600 Lithium battery



-60°C..+85°C working temperature

Low self-discharge rate

17.0 Ah Capacity

WSLRW-GCB-H7.JPG

PRODUCT PACKAGE



WSLRW-GCB-H8.JPG

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Ordering Information

ITEM CODES	DESCRIPTIONS
WLSLRW-GCB-CH4-01	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, CH ₄ , 0-100% LEL, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDGMENT, ALL LORAWAN FREQUENCY PLANS
WLSLRW-GCB-C3H8-01	LORAWAN GAS SENSOR WITH SIREN FOR INDUSTRIAL SAFETY, C ₃ H ₈ , 0-100% LEL, 3.6V BATTERY, IP40, LOCAL ALARM SOUND & ACKNOWLEDGMENT, ALL LORAWAN FREQUENCY PLANS

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