

# Wireless H2S Hydrogen Sulfide Gas Sensor WS433-G4F-H2S

SKU: WSSFC-G4F-H2S

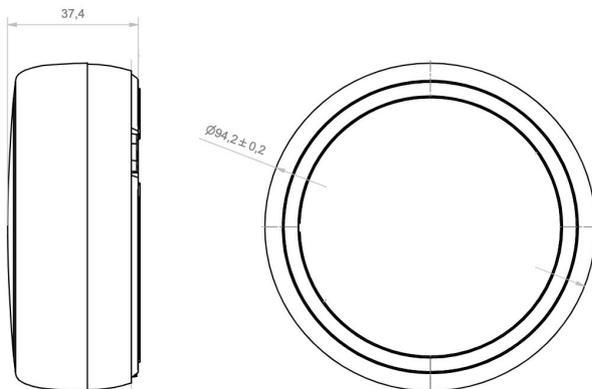
Doc No: WSSFC-G4F-H2S-DS-EN-10

## Introduction

WSSFC-G4F-H2S is a Wireless Sub-GHz sensor with a built-in advanced electrochemical gas sensor to measure H2S gas concentration with very high sensitivity for detecting the odor in waste bins in public. The wireless portion is Sub-GHz technology from Texas Instruments allows long-range transmission at ultra-low power consumption. It will connect 2-way wirelessly to the wireless coordinator WS433-CL to send data and receiving the configuration. It can be configured the operation parameters like data sending interval, health check cycle...remotely from Globiots platform or via Modbus RTU software (thru the WS433-CL). Its default data rate is 50 kbps, which can be switched to 625 bps to increase the communication range. It can last up to 2-5 years with 2 AA batteries.

## Highlight Features

- ❶ High stability Electrochemical sensor ;
- ❷ Sub-GHz Wireless Technology;
- ❸ 2-5 years battery life with 15 minutes updates;
- ❹ Plug & Play.



### CROSS-SENSITIVITY DATA

Gas	Test Concentration (ppm)	Displayed Readings as H2S (ppm)
Carbon Monoxide (CO)	100 ppm	<2 ppm
Sulfur Dioxide (SO <sub>2</sub> )	20 ppm	0 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	5 ppm	<0.5 ppm
Nitric Oxide (NO)	50 ppm	<0.5 ppm
Ammonia (NH <sub>3</sub> )	50 ppm	0 ppm
Chlorine (Cl <sub>2</sub> )	15 ppm	0 ppm
Ethylene (C <sub>2</sub> H <sub>4</sub> )	100 ppm	0 ppm
Carbon Dioxide (CO <sub>2</sub> )	5000 ppm	0 ppm

**Note:** This table is for reference only. Calibration should be carried out with the actual gas at a known concentration.

## Specification

### SENSOR SPECIFICATION

Measuring range H2S	0..100 ppm
Max detecting concentration	500 ppm
Linearity	< 0.1 ppm
Resolution	0.1 ppm
Long term output drift	< 15% per year
Zero stability	< 1% of full scale
Working temperature	-30 .. + 50 oC
Working humidity	15 .. 90% RH
Working atmospheric pressure	101.3 Kpa +/- 10 Kpa
Sensor life	2 years
<b>WIRELESS SPECIFICATION</b>	
Data speed	50kbps (default), 625 bps
Transmission distance, LOS	400m (2m height from ground)
Antenna	Internal Antenna
Battery	02 x AA 1.5VDC
Frequency Band	ISM 433.92 Mhz, Sub-GHz technology from Texas Instrument, USA
International Compliance	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval Certification	QCVN 73:2013/BTTTT, QCVN 96:2015/BTTTT (DAVITEQ B00122019)
Security Standard	AES-128
Dimensions (mm)	Diameter 95 x H40
Net-weight	< 200 grams
Housing	ABS self-extinguishing
Mounting Method	Ceiling mount

## Ordering Code

WS433-G4F-H2S-100-01	WIRELESS H2S HYDROGEN SULFIDE GAS SENSOR, 433MHZ, VERY HIGH SENSITIVITY TYPE, 0-100 PPM, 4-SERIE, BATTERY 1.5V, CEILING MOUNT
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 [Link for full datasheet:](#)

 [Link for manual:](#)



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