

# Wireless NH3 Ammonia Gas Sensor WS433-G4F-NH3

SKU: WSSFC-G4F-NH3

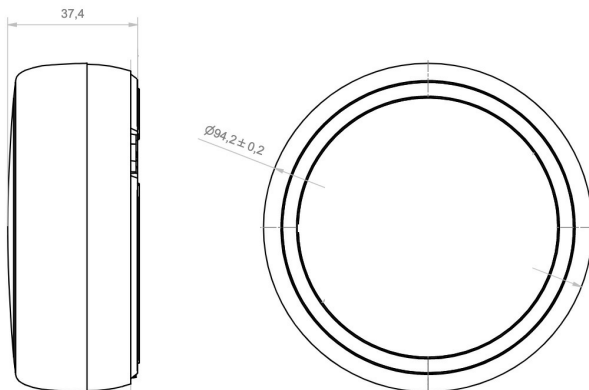
Doc No: WSSFC-G4F-NH3-DS-EN-10

## Introduction

WSSFC-G4F-NH3 is a Wireless Sub-GHz sensor with a built-in advanced electrochemical gas sensor to measure Ammonia NH3 gas concentration with very high sensitivity for detecting the odor level in public toilets. 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

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



## INTERFERENCE GASES

Gas	Concentration	Equivalent Output
CO	200ppm	<-6ppm
H2S	50ppm	<25ppm
CL2	10ppm	<-7ppm
C2H4	100ppm	0 ppm
H2	10000ppm	<14ppm
C2H5OH	1000ppm	<20ppm
SO2	20ppm	<9ppm
PH3	20ppm	<18ppm
CH2O	10ppm	<38ppm
C6H6	100ppm	<0.7ppm
CH3OH	200ppm	<4ppm

## Specification

SENSOR SPECIFICATION	
Measuring range NH3	0..100 ppm
Max detecting concentration	200 ppm
Repeatability	< 10% of Reading value
Resolution	0.1 ppm
Stability / month	< 10% of Reading value
Zero stability	< 1% of full scale
Working temperature	-20 .. + 50 oC
Working humidity	15 .. 90% RH
Working atmospheric pressure	101.3 Kpa +/- 10 Kpa
Sensor life	2 years
WIRELESS SPECIFICATION	
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-NH3-100-01	WIRELESS NH3 AMMONIA 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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