

Sigfox Toilet Odor Sensor



Smart Building, Smart City, Smart Facility, Smart Factory, Smart Healthcare, Smart Retail, Smart Transportation

SKU: WSSFC-G4F-NH3

SIGFOX-READY AMMONIA TOILET SENSOR WSSFC-G4F-NH3



WSSFC-G4F-NH3-H1.JPG

Safe Zone

Hazardous Zones

WSSFC-G4F-NH3 is a Sigfox-ready sensor with a built-in advanced gas sensor to measure the concentration of Ammonia NH_3 and H_2S to help assess odors in the Toilet. With a special design that increases the sensitivity of the sensor, even though it is mounted on the ceiling at a distance of up to 2.6m. The sensor has an ultra-low-power design and smart firmware that allows the sensor to run on 2 x 1.5VDC AA batteries for 2-5 years with 15 minutes of updating. The sensor supports all Sigfox network regions of the World. Typical application: Odor monitoring in private or public restrooms, toilets, and WC, helps to manage optimal cleaning staff.

Applications

Indoor Air Quality Monitor, Gas Analyzing, Warehouse Monitoring, Odor Monitoring

Notes For Applications

- Select the suitable sensor range to get highest accuracy v.s sensor life. Please consult our engineers;
- Electro-chemical sensors have life time is 1-2 years, depends on sensor type and actual operating conditions;
- Electro-chemical sensors need to be calibrated regularly (6-12 months), depends on actual operating conditions;
- Check carefully the working temperature and humidity of the application;

- High Sensitive Odor Sensor**
Special design to get high sensitivity even the sensor is mounted on ceiling up to 2.6m
- Anti-tampering**
Allow mounting the sensor on ceiling or high wall to prevent tampering
- Sigfox-Ready**
For Sigfox zone RC1, RC2, RC3, RC4, RC5, RC6, and RC7
- 10-Year battery**
Ultra-low-power design with high accuracy and stable



WSSFC-G4F-NH3-H2.JPG

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Created date: Dec-21-2022

Updated date: Aug-28-2024

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Specification

Sensor type	High-sensitive electrochemical type sensor with advanced amplifier circuit
NH ₃ range	0~100ppm (or equivalent 0~285.7ppm H ₂ S)
NH ₃ tolerance limit	200 ppm
Repeatability/ Resolution/ Stability per month	< 3% of reading/ 0.1ppm/ < 1% of reading/ month
Zero-point stability	0~0.15ppm
Ambient pressure	101.3kPa ±10%
Sensor life	2 years, in clean air
Working temperature	-10~50°C
Working humidity	15~90% RH
COMMUNICATION	
Sigfox region supports	RC1~RC7.
Antenna	Internal antenna 2.0 dbi
Configuration	Via Downlink or USB cable (software on PC provided free of charge)
Battery	02 x AA size 1.5VDC, battery not included
RF module	Complied to CE, FCC, ARIB standards
Electronics	-40~60°C (AA Energizer® Lithium Ultimate battery installed)
Case/ protection grade	ABS, indoor use, do not spray water directly on the device
Dimensions/ Weight	Diameter 95mm x Height 40mm/ < 250g

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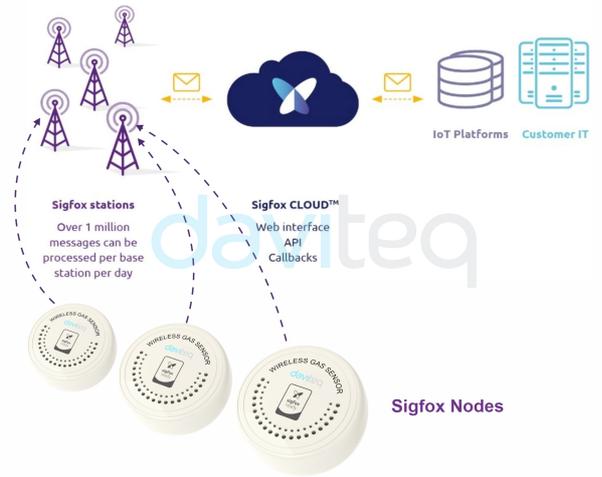
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INTERFERENCE GASES

Interfering Gas	Concentration [ppm]	Reading [ppm]
Cl ₂	20	-55
CO	300	0
CO ₂	20000	0
H ₂	200	0
H ₂ S	20	7
NO	20	-1
NO ₂	20	-20
SiH ₄	10	0
SO ₂	20	-7

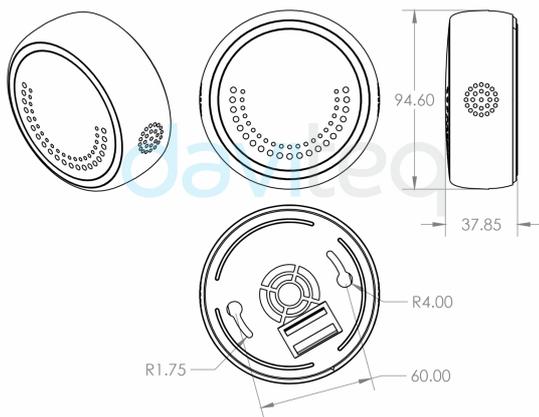
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SYSTEM ARCHITECTURE



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DIMENSION DRAWING OF WIRELESS SENSOR
(Unit: mm)



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RECOMMENDED BATTERIES

E91 AA Alkaline battery



- 18 .. + 60 oC working temperature
- 10-year shelf life
- 3000 mAh Capacity
- Price: 1X

L91 AA Lithium battery



- 40 .. + 60 oC working temperature
- 20-year shelf life
- 3500 mAh Capacity
- Price: 3.5X

WSSFC-G4F-NH3-H6.JPG

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Ordering Information

ITEM CODES	DESCRIPTIONS
WSSFC-G4F-NH3-100-01	SIGFOX-READY AMMONIA GAS SENSOR FOR TOILET ODOR, 0-100ppm, CEILING MOUNT, TYPE AA BATTERY 1.5VDC, FOR ALL RC ZONES
	undefined

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