

SIGFOX-READY AMMONIA NH3 GAS SENSOR

daviteq

SKU: WSSFC-NH3

SIGFOX-READY AMMONIA GAS SENSOR WSSFC-NH3



WSSFC-NH3-H1.JPG

WSSFC-NH3 is a Sigfox-ready electrochemical-type gas sensor that has a high sensitivity to low concentrations of ammonia gas, high selectivity, and a stable baseline. With Ultra-low-power design and smart firmware allow the complete Wireless and Sensor package run on 1 x AA battery 3.6V for 2-5 years with 15 minutes updates. It can support all regions of the Sigfox network over the World, RC1, RC2, & RC4.

Typical Applications: Monitor leakage of Ammonia gas for Refrigerator, Chiller...



SIGFOX READY

Device are best operating performance on the SIGFOX network



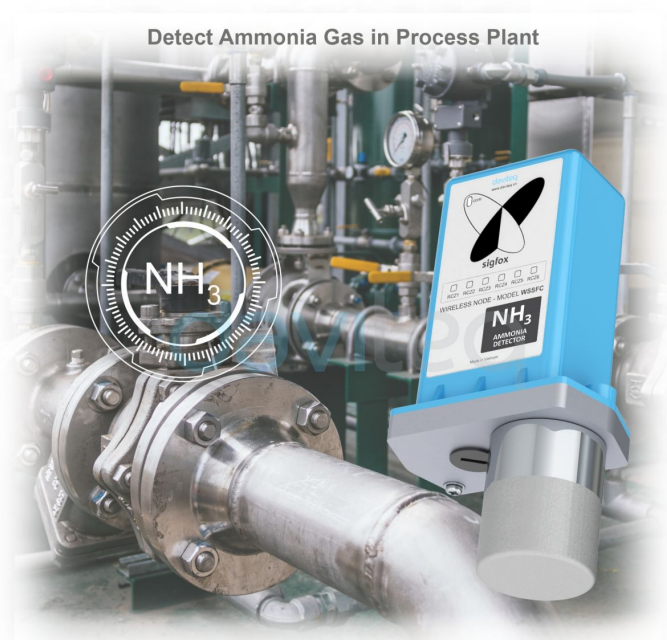
ULTRA-LOW POWER WITH 5 YEARS BATTERY

Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can operated up to 5 years with 02 x AA batteries



HIGH ACCURACY & STABLE

Advanced electrochemical-type gas sensor technology processing to deliver high accuracy and stable measurement



WSSFC-NH3-H2.JPG

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SPECIFICATION

SENSOR SPECIFICATION	
NH3 sensor	electrochemical-type gas sensor
Measuring range for NH3	0..100 ppm
Max detecting concentration	200 ppm
Repeatability / Resolution / Stability per month	< 10% of Reading value / 0.1 ppm / < 2% of Reading value
Zero stability	+/- 1.0 ppm
Working atmospheric pressure	101.3 Kpa +/- 10%
Working temperature and humidity	-40 .. + 50°C, 15 .. 90% RH
Sensor life	2 years in pure air
Sensor housing / Rating	SS316/SS304 housing with 316SS sintered filter / for Indoor use
Sigfox SPECIFICATION	
Sigfox zones	select RC1-RC2-RC4
Antenna	Internal Antenna 2dbi
Battery	02 x AA Type 1.5VDC, working time up to 10 years (depends on configuration)
RF Module complies to	CE, FCC, ARIB
Working temperature	-40°C..+60°C (using Energizer Lithium Ultimate AA battery)
Housing/Protection	Aluminum + Polycarbonate / IP67
Dimension / Net weight	H180xW73xD42 / < 400 grams

Monitoring Ammonia and H2S in private or public toilets



WSSFC-NH3-H3.JPG

GAS SENSOR WITH RAIN GUARD FOR OUTDOOR INSTALLATION



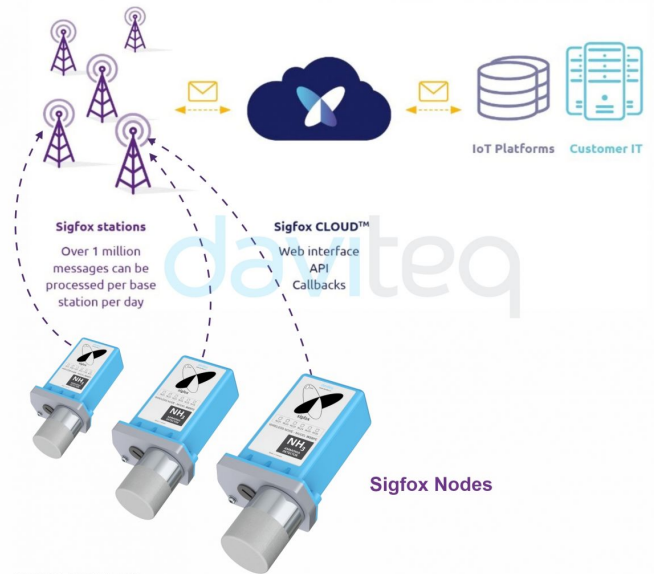
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INTERFERENCE GASES

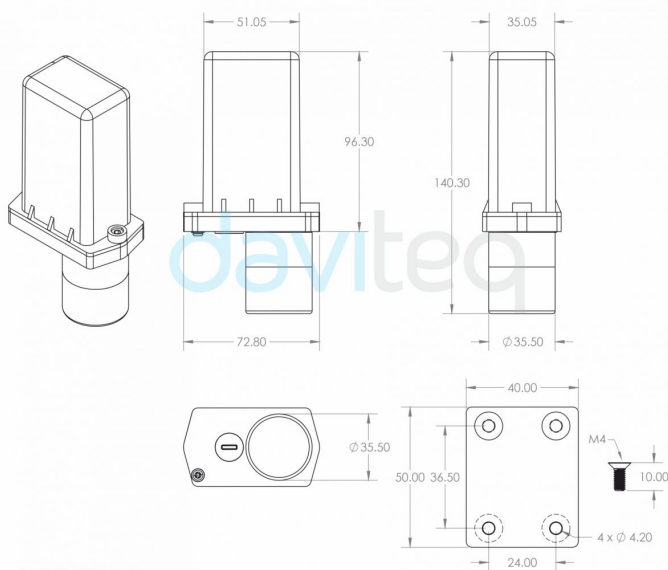
Gas	Concentration	Equivalent Output
CO	200ppm	<-6ppm
H2S	50ppm	<25ppm
CL2	10ppm	<-7ppm
C2H4	100ppm	0 ppm
H2	10000ppm	<14ppm
C2H5OH	1000ppm	<20ppm
SO2	20ppm	<9ppm
PH3	20ppm	<18ppm
CH2O	10ppm	<38ppm
C6H6	100ppm	<0.7ppm
CH3OH	200ppm	<4ppm

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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

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ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WSSFC-NH3-8-01	Wireless Sigfox Ammonia Gas Sensor, Internal antenna, Type AA battery 1.5VDC, IP67, RC1 zone
WSSFC-NH3-9-01	Wireless Sigfox Ammonia Gas Sensor, Internal antenna, Type AA battery 1.5VDC, IP67, RC2-RC4 zones

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