Bathroom Odor Detector

Featuring LoRaWAN®

UBG301

UBG301 is a 4-in-1 LoRaWAN® bathroom odor detector to detect ammonia (NH_3) gas according to electrochemical principle. UBG301 is also able to detect temperature and humidity to fully aware of the environment of bathrooms. When the NH_3 concentration reaches the preset threshold, the detector will trigger both LED light alarm and buzzer to notify people timely to ventilate, which is an important part in smart bathroom solution.

Apart from local alarms, UBG301 can also report the sensor data and alarm messages remotely by the use of LoRaWAN® technology. Integrating with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can monitor all the sensor data and control the device remotely and flexibly. Moreover, UBG301 supports Milesight D2D to enable ultra-low latency control without gateways.

◆ Features

➢ Built-in high accuracy electrochemical gas detection sensor with more than 3-year-long life expectancy

➢ Built-in multiple sensors including NH_3, H_2S (Optional) ,temperature and humidity

➢ Built-in batteries to achieve wireless power supply and decrease the installation cost

➢ Equipped with buzzer and LED indicator to indicate threshold alarms

➢ Damp proof coating inside the device to ensure device working well on various conditions of bathrooms

➢ Support Milesight D2D protocol to enable ultra-low latency and direct ventilation control without gateways

➢ Built-in NFC for easy configuration

➢ Compatible with standard LoRaWAN® gateways and network servers

➢ Quick and easy management with Milesight IoT Cloud solution

◆ Specifications

Wireless Transmission	
Protocol	LoRaWAN® , Milesight D2D
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16 dBm (868 MHz)/19 dBm (470 MHz)/22 dBm (915 MHz)
Sensitivity	-137dBm
Mode	OTAA/ABP Class A
Sensors	
Ammonia (NH$_3$)	
Detection Principle	Solid Polymer Electrochemical
Range	0 ~ 10 ppm
Accuracy	± 5% (-40 - 35°C)
Long-term Stability	< 1 % accuracy drift per month
Resolution	0.01 ppm
Hydrogen Sulfide (H$_2$S) — Optional	
Detection Principle	Solid Polymer Electrochemical
Range	0 ~ 5 ppm
Accuracy	± 5% (-40 - 35°C)
Long-term Stability	< 1 % accuracy drift per month
Resolution	0.01 ppm
Temperature	
Range	-40 - 85°C
Accuracy	± 0.2°C
Resolution	0.01°C
Humidity	
Range	0 - 100%RH

Accuracy	± 2%
Resolution	0.5%RH
Others	
LED& Buzzer	1 × Status/Alarm Indicator + 1 × Buzzer
Button	1 × Reset/Reboot Button
Configuration	Mobile App via NFC
Advanced Feature	Milesight D2D Controller
Physical Characteristics	
Power Supply	4 x 4000 mAh ER18505 Li-SOCl$_2$ Replaceable Batteries
Power Consumption	Less than 1 Watt
Sensor Life	> 3 Years
Battery Life	Around 3 Years (10 min interval)
Operating Temperature	-40°C - 55°C
Relative Humidity	0% - 95% (non-condensing)
Ingress Protection	IP30
Dimension	120 × 85 × 32.5 mm (4.72 × 3.35 × 1.28 in)
Material & Color	PC+ABS (Flame Retardant), White Resistant to cleaning agent and splashes
Installation	Wall Mounting

◆ Dimensions(mm)