Vape Detector

Featuring LoRaWAN®

GS601

GS601 is a LoRaWAN® vape detector designed to identify vaping and smoking events and send alerts. Equipped with a suite of powerful embedded sensors, GS601 simultaneously measures temperature, humidity, TVOC, and PM parameters.

When environmental changes reach the preset thresholds, the detector activates both the LED light alarm and buzzer sound alarm.

In addition to local alerts, GS601 can also remotely report the air quality status and alarm messages via LoRaWAN® technology. By integrating with Milesight LoRaWAN® gateway and Milesight Development Platform, users can visually monitor all sensor data and manage the device remotely.

GS601 seamlessly blends into various installation environments, making it ideal in restrooms, changing rooms, classrooms, stairwells, apartments and other locations.

◆ Features

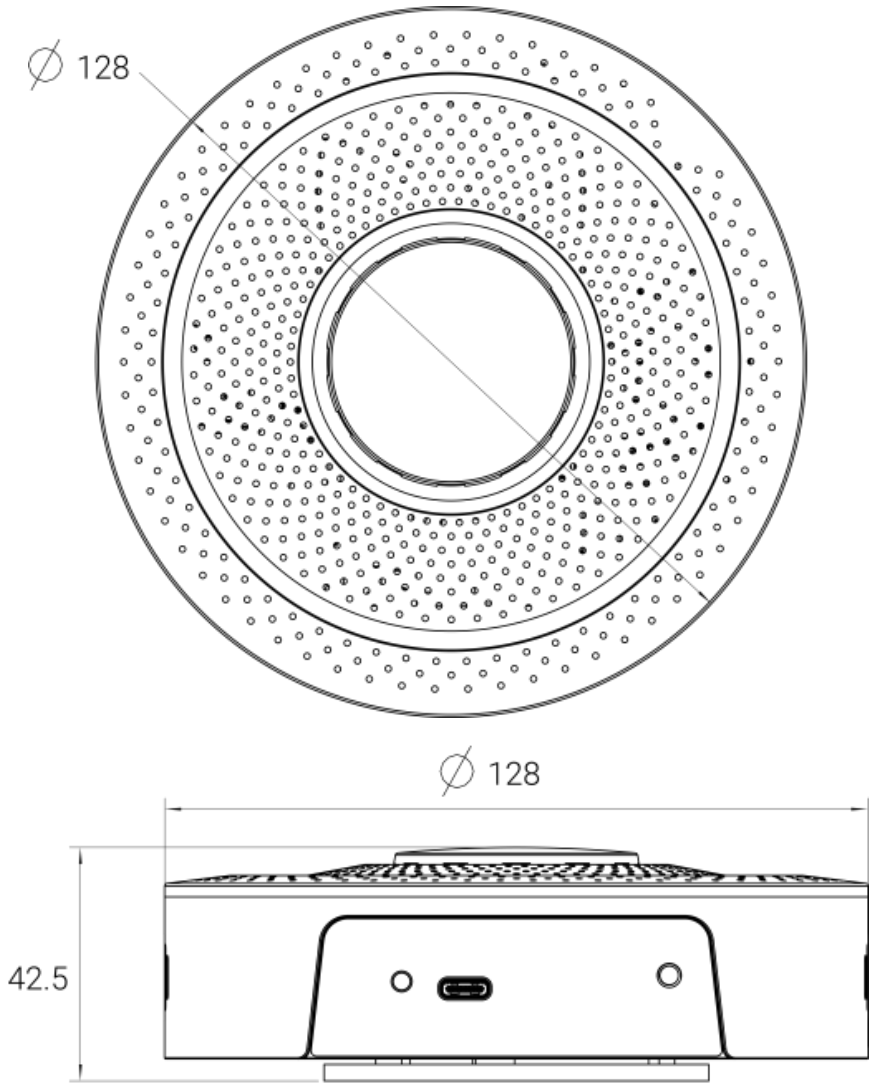
- Integrated with multiple sensors to detect vape, smoke, TVOC, temperature, humidity, and PM parameters
- Supports anti-water vapor disturbance and other gas interference, with interference information reported
- Equipped with a buzzer and indicator to signal when the device is powered, faulty, alarmed, or

in an invalid status

- Supports setting the buzzer hibernate time to avoid false alarms during deployment
- Equipped with a vibration sensor to detect acts of vandalism or tampering
- Built-in NFC for easy configuration
- Compatible with standard LoRaWAN® gateways and network servers
- Compliant with Milesight Development Platform
- Support Firmware Update Over the Air (FUOTA) feature

◆ Specifications

Wireless Transmission	
Technology	LoRaWAN®
Antenna	Internal Antenna
Frequency	RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16dBm (868MHz)/22dBm(915MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class C
Sensors	
Temperature	
Operating Principle	Digital CMOSens® technology (MEMS)
Range	-20°C ~ 60°C
Accuracy	± 0.2°C
Resolution	0.1°C
Humidity	
Operating Principle	Digital CMOSens® technology (MEMS)
Range	0% ~ 100% RH
Accuracy	± 2% RH
Resolution	0.5% RH
Vape Index	
Operating Principle	Laser Scattering
Range	0 ~ 100
Accuracy	±10
Resolution	1
TVOC	
Operating Principle	MOX (MEMS)

Range	0 ~ 2000 μg/m^3
Accuracy	20 μg/m^3 ±15% of readings (1 ~ 500 μg/m^3)
Resolution	1 μg/m^3
PM1.0 & PM2.5 & PM10	
Operating Principle	Laser Scattering
Range	0 ~ 1000 μg/m^3
PM1.0&PM2.5 Accuracy	0~100 μg/m^3: ±10 μg/m^3 100~1000 μg/m^3: ±10 % of measured value
PM10 Accuracy	0~100 μg/m^3: ±25 μg/m^3 100~1000 μg/m^3: ±25 % of measured value
Resolution	1 μg/m^3
Others	
Button	1 × Reset Button (External)
LED & Buzzer	1 × Status/Alarm Indicator + 1 × Buzzer (70dB@1m)
USB	1 × USB Type-C Port for Power Supply
Software	
Configuration	Mobile App via NFC or Downlink
Advanced Feature	Threshold Alarm, Tamper Alarm, Calibration, FUOTA
Physical Characteristics	
Power Supply	5V/1A by Type-C Port or (Optional) PoE Splitter
Operating Temperature	-5°C ~ 45°C
Relative Humidity	0 ~ 95% (non-condensing)
Ingress Protection	IP30
Color	White
Weight	178.6g
Dimension	Φ 128 × 40 mm (Φ 5.04 × 1.57 in)
Installation	Ceiling Mounting
Approvals	
Regulatory	CE, FCC
Environmental	RoHS

◆ Dimensions(mm)