

Vape Detector

Featuring LoRaWAN®

GS601

The Milesight logo features a stylized blue 'M' followed by the word 'Milesight' in a black, sans-serif font.

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
- Supports management and OTA upgrades via Milesight Development Platform
- Built-in NFC for easy configuration
- Compatible with standard LoRaWAN[®] gateways and network servers

◆ Specifications

Wireless Transmission	
Technology	LoRaWAN [®]
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 $\mu\text{g}/\text{m}^3$
PM1.0 & PM2.5 & PM10	
Operating Principle	Laser Scattering
Range	0 ~ 1000 $\mu\text{g}/\text{m}^3$
Measured Temperature	-10°C~ 60°C
Accuracy	0~100 $\mu\text{g}/\text{m}^3$: $\pm 10 \mu\text{g}/\text{m}^3$ 100~1000 $\mu\text{g}/\text{m}^3$: $\pm 10 \%$ of measured value
Resolution	1 $\mu\text{g}/\text{m}^3$
Others	
Button	1 × Reset Button
LED & Buzzer	1 × Status/Alarm Indicator + 1 × Buzzer (70dB@1m)
Configuration	Mobile App via NFC
Physical Characteristics	
Power Supply	5V/1A by Type-C Port
Operating Temperature	-5°C ~ 45°C
Relative Humidity	0 ~ 95% (non-condensing)
Ingress Protection	IP30
Dimension	$\Phi 128 \times 40 \text{ mm}$ ($\Phi 5.04 \times 1.57 \text{ in}$)
Installation	Ceiling Mounting

