Vape Detector

Featuring LoRaWAN®

IV-VAPED1

IV-VAPED1 is a LoRaWAN® vape detector to detect vaping and smoking events and send alarms. With a collection of powerful embedded sensors, IV-VAPED1 simultaneously measures temperature, humidity, TVOC, PM parameter and motion. When the environment changed reaches the preset threshold, the detector will trigger both LED light alarm and buzzer sound alarm. Apart from local alarms, IV-VAPED1 can also report the normal status of the device and alarm messages remotely by the use of LoRaWAN® technology. Integrating with IDVIEW LoRaWAN® gateway and IDVIEW Development platform, users can monitor all the sensor data and control the device remotely and visually. IV-VAPED1 is easy to fuse with the installation environment, making it ideal in bathrooms, changing rooms, classrooms, stairwells, apartments and other locations.

◆ Features

- Equipped with buzzer and light indicators to indicate the device powered, faulty, alarmed, and invalid status
- Support setting the buzzer hibernate time, can avoid false alarm in the fixed time
- Detection types including vape, smoke, TVOC, temperature, humidity, PM parameter and motion
- Measures vibration to detect acts of vandalism or tampering
- Support anti-water vapor disturbance & other gas interference, and the interference information will be reported
- Support OTA remote upgrade to make the upgrade more convenient
- 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	
Range	-20°C ~ 60°C
Accuracy	± 0.2°C (to be tested)
Resolution	0.1°C
Humidity	
Range	0% ~ 100% RH
Accuracy	± 2% RH (to be tested)
Resolution	0.5% RH
Vape Index	
Range	0 ~ 100 (to be tested)
Accuracy	±10 (to be tested)
Resolution	1
TVOC	
Range	0 ~ 2000 µg/m^3
Accuracy	20 µg/m^3 ±15% of readings (1 - 500 µg/m^3) (to be tested)
Resolution	1 µg/m^3
PM1.0 & PM2.5 & PM10	
Range	0 ~ 1000 µg/m^3
Accuracy	0~100(±10 µg/m^3), 100~1000(±10 %) (-10°C~ 60°C) (to be tested)

Resolution	1 µg/m³
Others	
Button	1 × Reset Button
LED & Buzzer	1 × Traffic Light Status Indicator + 1 × Buzzer
Configuration	Mobile App via NFC
Physical Characteristics	
Power Supply	5V/1A by Type-C Port
Operating Temperature	-20°C ~ 60°C
Relative Humidity	0 ~ 95% (non-condensing)
Ingress Protection	IP30
Dimension	Φ 128 × 40 mm (Φ 5.04 × 1.57 in)
Installation	Ceiling Mounting