# PSS-333031

#### Fire smoke sensor

#### **Product introduction**

PSS-333031 The fire smoke sensing (point type) alarm sensor is a smoke sensing fire detection alarm. It adopts advanced semiconductor components and excellent production technology. It has stable operation and simple installation. It can detect the smoke generated during the fire and send out an alarm in time.

## **Detection principle**

Photoelectric sensor measures the concentration of smoke through a beam of light and a light sensor. When the device is designed, the light beam deviates from the sensor. When the smoke enters the sensing chamber, the smoke particles will scatter part of the light beam onto the sensor. When the smoke concentration increases gradually, more light beams will be scattered to the sensor. When the light beam reaching the sensor reaches a certain level, the buzzer will sound.

#### **Product features**

- Fire smoke sensor
- The unique optical maze design can detect the smoke generated by the combustion of a variety of substances and has high sensitivity to black smoke

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- ❖ Built in buzzer makes a strong sound after alarm
- Photoelectric sensing, anti-interference
- Metal mesh window design, dust and insect proof
- Ceiling mounted



# **Product parameters**

Sensor	
Monitoring area	25 m <sup>2</sup> ~ 40 m <sup>2</sup>
Working current	<5uA(The quiescent current)
Working current	20 ~ 40mA
Output rated power	12VDC 1A、24VDC 2A
Temperature alarm	57 ℃ (International)
Smoke concentration	≥0.6%
Gas interface temperature	10%~90%
Beep volume level	85 dB at 10 feet
Interface	
Interface	Switch
Warranty	
Warranty period	1year
Mechanics	
Working temperature	- 10 °C~50 °C
Working humidity	45%~85%RH
Degree of protection	IP55
Size	Diameter 128mm * height 50mm
Power	
Power	DC12V / DC24V / DC9V (battery powered)

#### **Application**



The independent smoke detector can detect the smoke generated during fire and give an alarm in time. It can be widely used in computer room, instrument room, cable trench, tunnel, Internet cafe, song and dance hall, coffee shop, leisure hall, residence and other places for fire safety monitoring.

## **Ordering Guide**

- PSS-333031 sensor is a sensor only, it needs to use with WxS terminals to combine to different product series; On the basis of the combination, multiple PSS sensors can be loaded through the Multiple Purpose Interface (MPI) of the intelligent IoT terminal.
- According to the specific scenario of use case, the enclosure and antenna of intelligent IoT terminal will be replaced to ensure the product quality and performance.
- PSS sensors can be integrated with the WxS terminal via the MPI interface to form different product series.
- **Example of products are as follows:** 
  - WxS7800-333031 WiFi Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - WxS8800-333031 LoRaWAN Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - o WxS9800-333031 NB-IoT (China) Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - WxS9900-333031 NB-IoT (Global) Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - WxsC800-333031 LTE Cat1 Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - WxsC900-333031 LTE Cat1 w/GPS Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - WxSD800-333031 LTE Cat4 Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal
  - CxS1800-333031 Ethernet (RJ45) Series Fire smoke Smart Sensor & RTU 2-in-1 Terminal