SPD-668D

MODBUS Smoke Detector

SPD-668D smoke detector is a RS485 communication output, it's suitable for households, shops, dance halls, warehouses, computer rooms and other places, especially widely used in computer room monitoring places. The alarm has the characteristics of wide power supply range, serial communication, high inspiration, stable and reliable, low power consumption, durable, and easy to use.

Technical Specification

Power supply	DC9V~DC60V
Static current	≤4mA
Alarm current	≤120mA
Protocol	MODBUS RTU
Communication	RS485
Address	1-254, default address 1
Baud rate	1200,2400,4800,9600,19200, default 9600
Operating temperature	-20℃~+60℃
Ambient humidity	≤95%RH（25℃±2℃）
Alarm indication	Sound and light
Alarm sound	≥85db(3 meters)
Smoke Sensitivity	Comply with UL217 standard, test standard 0.65~1.52%FT
Surge (impact) immunity	power input: line ~ line ≥ 2KV communication output: line ~ line ≥ 2KV
Dimension	104mm (diameter) * 53mm (height)

Functions

- **Power-on reminder:** After the alarm is powered on, the indicator light flashes once, and the buzzer sounds once to indicate that the power has been turned on.

- **Self-test:** When the test button is pressed manually, there will be sound and light alarm, and the alarm register will not update the data. After the manual test is completed, there is no need for remote power-off reset. When the self-test button is released, the sound and light alarm will automatically resume.

- **Smoke alarm:** Under normal circumstances, the indicator light of the alarm will automatically flash once every 40 seconds. The alarm automatically detects the smoke concentration in the surrounding environment every certain time (about 1 second). If the smoke concentration is close to the alarm threshold, the alarm starts to perform intelligent calculation. If the operation result reaches or exceeds the alarm threshold, the alarm will start sound and light alarm, and update the alarm register data and the historical total alarm times data. When the smoke concentration in the surrounding environment drops below the alarm threshold, the alarm will automatically resume normal operation. The alarm register data and the historical total alarm times data can be obtained through 485 communication.

- **Output:** RS485/MODBUS-RTU communication protocol. Default address 1, default baud rate 9600bps

Installation and wiring

Drill two φ5mm mounting holes on the ceiling at a distance of 43~62.5mm, fix the base of the detector with plugs and screws, and connect the power line and communication output line. Fasten the detector on the base in the correct direction, press it down and screw it clockwise. It can work when connected to the power supply. The wiring is shown as below:

Wire color	Explanation
RED	DC9V~DC60V
BLACK	GND
YELLOW	RS485+
GREEN	RS485-

Notes

- Read the manual carefully before installation. Improper use will cause damage to the sensor or affect the performance of the sensor.
- Avoid installing in places with high wind speed and high humidity, otherwise it will affect the sensitivity.
- In order to keep the sensor in good working condition, the sensor needs to be cleaned and tested every 6 months. Specific method: Turn off the power first, sweep the dust with a soft brush, then turn on the power and test.
- Not suitable for places

a. Places where smoke remains under normal circumstances;

b. Places with large dust, water mist, steam, oil mist pollution and corrosive gas;

c. Relative humidity greater than 95%;

d. The ventilation speed is greater than 5M/sec.