Product Introduction

Smoke sensor is stand-alone photoelectric smoke detection fire alarms. The infrared rays scattered over the smoke are used to whether or not there is a smoke sensor. When smoke is monitored, the alarm sounds through the piezoelectric horn. Smoke sensor using a unique structural design and photoelectric signal processing technology. Effective detection of fire in the initial negative combustion produced by visible smoke or smoke produced by open combustion.

Use Case Scenarios

The sensor is suitable for indoor environments such as residences, hotels, offices, shopping malls, warehouses, and senior citizen flats.

Features

1. Wide coverage area, easy to install.
2. High decibel alarm with sensitive response.
3. Strong anti-interference ability.

Product Specifications

Specifications	
Model	UB-SS-N1
Power Supply	DC 9~36V
Measuring Range	Ethylene: 0~20ppm, Oxygen: 0~25%Vol
Resolution	Ethylene: 0.1ppm, Oxygen: 0.1%Vol
Detection Area	20~40㎡
Sensitivity	0.5db/m （±0.1db/m)
Alarm Sound	≥85dB/3m
Dimension	φ101mm*34mm
Working Environment	-10~40℃, 0~95%RH
Connector	Audio
Cable Length	3m
Communication Protocol	RS485 Modbus RTU Protocol
RS485 Address	0x09
Baud Rate	1200 bit/s,2400 bit/s, 4800 bit/s, 9600 bit/s (default), 19200 bit/s

Wiring Instruction

Communication protocols

1. Communication basic parameters

Communication Basic Parameter	
Coding System	8–bit binary
Data Bit	8 bits
Parity Checking Bit	none
Stop Bit	1 bit
Error Checking	CRC Check
Baud Rate	1200 bit/s, 2400 bit/s, 4800 bit/s, 9600 bit/s (default), 19200 bit/s

2. Data Frame Format

The Modbus-RTU communication protocol is used in the following format:

- Initial structure ≥ 4 bytes in time.
- Address code: 1 byte, default 0x09.
- Function code: 1 byte, support function code 0x03 (read only) and 0x06 (read/write).
- Data area: N bytes, 16-bit data, high byte comes first.
- Error check: 16-bit CRC code.
- End structure ≥ 4 bytes of time.

Request					
Slave Address	Function Code	Register Address	No. of Registers	CRC LSB	CRC MSB
1 byte	1 byte	2 bytes	2 bytes	1 byte	1 byte

Response							
Slave Address	Function Code	No. of Bytes	Content 1	Content 1	…	Content n	CRC
1 byte	1 byte	1 byte	2 bytes	2 bytes	…	2 bytes	2 bytes

3. Register Address

Register Address				
Address	Content	Register Length	Function Code	Description of definitions
0x0001	State	1	03	Integer (0 for normal, 1 for alarm)

NOTE

1. Do not pull the sensor lead wire, do not drop or hit the sensor violently.

2. The sensor is not suitable for installation in high temperature, humidity, dusty, kitchen, bathroom and other locations.