

Photoelectric Smoke Detector



Operation Theory

The infrared light beam from Transmitter intersect the smoke particles will cause the light spread to all directions. When receiver has sensed the light, it will send signal to control panel for fire alarm status as soon as the density of smoke reaches pre-determined alarm level.

Construction and Characteristics

- Electronic circuit are mainly use ONECHIP HIBRID IC and SMT technology, low profile design, low power consumption, high precision and stability.
- Transmitter projects beam signal every 3 seconds to check any smoke caused by real fire. When smoke density reaches the preset standard, receiver will confirm the signal for 16 consecutive times. Control panel will then receive the fire signal after confirmation is made.
- Detector has a monitoring LED operates about every 16 seconds (flash) during standby status. When there is smoke, detector will issue fire signal after 16 consecutive times of confirmation on every 0.3 second. If any dust cause flashing or inconsecutive signal, it will back to normal status after 32 confirmations.
- Insect guard has a radius 0.5mm it can prevent the invasion by insects, decrease fault alarm. Besides, it also has great discharge effect on electrostatics.
- Smoke gate has a special design to obscure the strong light effectively and lead smoke comes in easily. Steam will not stay on the insect guard screen to cause the false alarm.

Specification

Model	AHS-871
Type	2-wire , 3-wire , 4-wire
Alarm Contact	N/A N/A 0.8A @30V DC 0.4A @125V AC
Voltage Range	12 ~ 30V DC
Alarm Current	Max. 30mA
Surge Current	2A/100ms
Standby Current	20 ~ 30μA (Loop response under 75μA)
Permissible Current	185mA
Sensitivity Setting	1.50 ~ 2.80%ft
Ambient Temperature	0°C ~ +37.8°C
Material	Fire-proof plastic
Dimensions	102mm(Dia.) x 50mm(H)
Weight	About 170g
Color	White

Effective Alert Area

Building Height	Area Covered
Under 4M	150 M ²
4 ~ 20M	75 M ²

Approvals



EN54 CE