

2230 IONISATION SMOKE SENSOR

APPLICATIONS

The 2230 Ionisation Smoke Sensor is designed for use with our addressable systems employing advanced protocol.

The sensor detects the invisible products of combustion evident at the early stages of fire. It is particularly sensitive to burning hydrocarbons such as wood, paper, solvents, etc, which emit small smoke particles.



FEATURES

- Low Profile
- Covers 100m²
- Low Current Consumption
- Automatic Contamination Compensation
- Self Test Facility
- Dual Status LED's
- Locking Option (sensor to base)

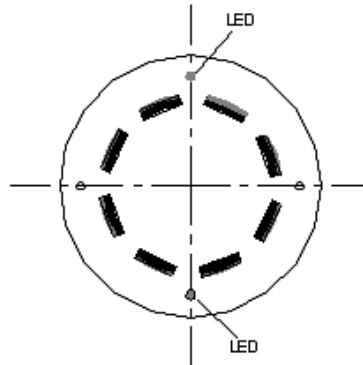
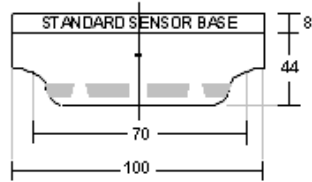
OPERATION

The 2230 Ionisation Smoke Sensor incorporates a single low level radioactive source which ionises two chambers and causes a small DC current to flow between the electrodes in each chamber. Smoke can freely enter the outer chamber whilst the inner chamber is virtually sealed. Smoke entering the outer chamber causes a reduction in the DC current, the imbalance between the two currents is proportional to smoke density which is transmitted as an analogue value to the alarm control panel for analysis and pre-alarm triggering.

The two-chamber design is utilised to compensate for changes in atmospheric and environmental conditions ensuring very stable operation. When the smoke density exceeds a predetermined threshold, the sensor transmits an 'interrupt' to the fire alarm control panel indicating a fire alarm. A 360o view of sensor status is achieved through twin LED's.

The simple input or change of 'address' is carried out on site. Extra integrity is promoted through a hand held programmer which also checks the analogue value / sensor integrity.

APPROVALS : Tested and approved to EN54 Part 7 by the Loss Prevention Council



SPECIFICATION	
Order Code	2230
Operating Voltage	Nominally 24v DC (17 – 41V DC)
Current Consumption	
Standby	Low Power Mode: 120uA (typical) Normal: 310uA (typical)
Polling	22mA +/- 20%
Alarm	5mA
Transmission Method	Advanced digital communications using USP
Operating Temperature	-10°C to +50°C
Material	ABS
Colours	Ivory, also available in black (Quote ref 2230/B)
Radiation Source	Americium 241 1uCi
Weight	115g (without base)
Dimensions	100 Diameter x 44 Depth (52 Depth with base)
Ingress Protection	IP42
Maximum Humidity	95% RH – non condensing (at 40°C)