# ANALOGUE ADDRESSABLE MULTI SENSOR DETECTOR iQ568D-S

## Description

iQ568D analogue addressable photoelectric smoke/heat detectors are microprocessor controlled state-of-the-art detectors suitable for connection to addressable fire detection control and indicating equipment. Up to 254 detectors can be connected to each alarm zone loop.

Advanced electronics in conjunction with a photoelectric smoke sensing chamber and an electronic thermistor provide early detection of fire and high immunity against unwanted alarms. The heat sensor provides sensitive rate-of-rise or fixed-temperature operation when the response threshold value is exceeded.

The iQ568D range of analogue addressable detectors provides fire detection and alarm system designers with Standards-compliant, premium fire detector for life safety and property protection applications.

## Features

- Ideal for both fast-flaming and slow smouldering fires.

- Advanced algorithms provide true analogue detection discrimination

- Dual photoelectric smoke and heat sensors to detect either smoke, heat or a combination of the phenomena.

- Surface-mount device (SMD) circuit board design

- High immunity against unwanted alarms

- Stable smoke sensing chamber. No adjustment or replacement required

- Durable heat sensor. No adjustment or replacement required

- Sleek low-profile housing design

- Dual LEDs for 360° visibility

- DC 24 V operation

- Convenient 2-wire connection

- Easy installation with simple electronic address programming. No switches to fail in service.

- Up to 254 detectors can be connected to each alarm zone loop.

- Optional remote LED output

- Base options include
    - Low profile 100 mm diameter base
    - High profile 100 mm base for mounting on hard surfaces with conduit cable entry
    - Low profile 150 mm diameter base
    - Isolator base
    - Sounder base
    - Recessed mounting for base mounting

- Low maintenance



**iQ568D-SH Analogue addressable smoke/heat detector**

The iQ568D smoke/heat detectors are available with numerous attractive features.

## Approvals

iQ568D-SH detectors have the following approvals.

| | UL 268 [a] | UL 521 [b] |
|---|---|---|
| iQ568D-SH | ✔ | ✔ |
| iQ568D-SHL | ✔ | ✔ |

[a] UL 268 *Smoke detectors for fire alarm signaling systems*
[b] UL 521 *Heat detectors for fire protective signaling systems*

## Specifications

| Specifications | iQ568D-SH | iQ568D-SHL |
|---|---|---|
| Operating voltage | DC (17 ~ 28) V | |
| Start-up current | ≤ 800 µA | |
| Start-up time | ≤ 30 s | |
| Standby current | ≤ 500 µA | |
| Alarm current (max) | 7 mA @ DC 24 V | |
| Sampling time | 1 s | |
| Reset voltage | ≤ 5 V | |
| Reset time | ≤ 30 s | |
| Alarm response threshold (smoke) | (2.12 ± 0.61) % / foot obscuration | |
| Alarm response threshold (heat) | 59 °C fixed temperature and 11.1 °C rate-of-rise | |
| Remote LED output current (max) | 2 mA | |
| Usable addresses per alarm zone circuit | 254 | |
| Operating temperature | -10 °C ~ +37.8 °C [a] | |
| Operating humidity | 0 % ~ 95 % RH, non-condensing | |
| Storage temperature | -25 °C ~ +80 °C | |
| Storage humidity | 0 % ~ 98 % RH, non-condensing | |
| Alarm indicator | Two continuous emitting red LEDs | |
| Dimensions (excluding contacts) | Φ 100 mm × 48 mm | |
| Ingress protection rating | IP-43 | |
| Ceiling spacing [b] | ≤ 15 m | |
| Area of Coverage | 100m² | |

[a] Can transit to higher temperatures for heat sensor operation.
[b] Applies to heat sensor function.

## Ordering Information

| | 2-Wire | Nominal Operating Voltage | Remote LED Output |
|---|---|---|---|
| iQ568D-SH | ✔ | DC 24 V | — |
| iQ568D-SHL[a] | ✔ | DC 24 V | ✔ |

[a] Requires 8-terminal base if remote indicator is installed.