



Wire-Free Optical Smoke Sensor

- ▶ Analogue/Addressable
- ▶ Proprietary sensor
- ▶ Protected sensing chamber
- ▶ Universal transmitter module
- ▶ 5 Year battery life
- ▶ Detector/Transmitter tamper
- ▶ Range in excess of 250 metres



Overview

The Analogue Addressable Optical Smoke Detector is bayonet-fitted to a radio address/transmitter module, incorporating alkaline batteries and supplied with a surface-mount base unit. Removal of the detector or address/transmitter module will indicate a fault condition. The detector is manufactured by Ziton limited and complies with BS5839 Part 5 and EN54 Part 7.

The Optical Smoke Detector operates on an advanced light scattering principle, using a wide-angle light beam, together with an extra high sensitivity photodiode receiver. An internal polling system checks for smoke particles every five seconds. Initial detection of smoke traces accelerates polling to every two seconds. The alarm is verified twice to ensure freedom from false alarms.

The detector incorporates a selectable automatic lock, which, if enabled locks it into its base when plugged in, preventing unauthorised removal. Each unit has a unique address configured during manufacture and is individually addressable by the system controller. The radio address module is programmed to report at regular intervals of 5-9 minutes.

Designed and manufactured using the latest techniques and surface mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The address/transmitter module is powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery board has been tested to provide five years of normal site operations. The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault allowing 30 days for the battery pack to be changed before unit failure.

Specification

PHYSICAL

DIMENSIONS: 106x75 mm with transmitter/address module
WEIGHT: 119g
COLOUR: White

ENVIRONMENT:

TEMPERATURE: -10 to 85 degrees C
HUMIDITY: 20 to 95% RH

SENSITIVITY

Four levels of sensitivity adjustment are provided responding nominally to smoke obscuration levels of 1.5%M, 2.3%M, 3.0%M and 3.6%M. In addition, a selectable alarm verification feature prevents false alarms due to transient smoke. Conformal coating seals the unit against moisture and dust and a fine mesh screen protects against ingress of insects.

SUPPLY: 6 x 1.5 volt alkaline AAA cells
Typical battery life 5 years (at normal site conditions 10-30°C)

OPERATING FREQUENCIES: VHF — 173.245 MHz

CHANNEL SPACING: 25 kHz

OUTPUT TRANSMITTER POWER: 1 mW ERP

OUTPUTS: Detector alarm — Fire and Fault
Detector identity
Battery condition
Auto report signal

STANDARDS: EN54 part 2 & BS5839 Part 5

Order details: 01-R-003
Detector/address module complete

For a full range of products and part numbers please contact us

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