

# 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 model 5-5100 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 5 seconds. Initial detection of smoke traces accelerates polling to every 2 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 pack has been tested to provide 5 years life at normal site operations( $10 - 30^{\circ}$ C). 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: WEIGHT: COLOUR:	106x75 mm with transmitter/address module 119g White
ENVIRONMENT:	TEMPERATURE: HUMIDITY:	-10 to 85 degrees C 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 kH	1Z
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OUTPUT TRANSMITTER POWER: 1 mW ERP

- OUTPUTS: Detector alarm Fire and Fault Detector identity Battery condition Auto report signal
- STANDARDS: EN54 part 7 and BS5839 Part 5

### **Ordering Information**

53 - 5100 Detector / address module complete

For the full range of products and part numbers please contact us.



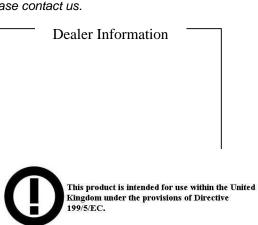
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