

# Optical Smoke Alarm

## Mains Powered 230V~ with Rechargeable Battery Back-up

### Model Ei156TLH

- Large volume Optical sensor chamber
- Tamper Proof rechargeable Lithium battery back-up
- Built in Test/Hush button
- Advanced suppression and calibration technology
- Interconnectable with other mains powered Aico alarms
- Low power cell warning
- Kitemarked to BS EN14604:2005
- 5 Year Guarantee



### Product Description

The Ei156TLH is an Optical Smoke Alarm that runs on 230V AC mains power, and has built in tamper proof Lithium cells that act as a battery back-up in the event of mains failure. These rechargeable Lithium cells are designed to have a ten-year life and outlast the life of the smoke alarm itself, whilst providing up to six months of smoke alarm operation without mains power.

The alarm gives a fire warning when adequate smoke enters the alarm.

The alarm has other advanced features such as built in circuitry to aid suppression of voltage transients and RF interference to further reduce the chances of false alarms under such conditions.

### Operation

- The green indicator will illuminate to show mains power is present
- The red indicator will flash every 40 seconds to show that the alarm has performed an automatic self test
- The red indicator will flash rapidly to show an alarm condition for the alarm that has triggered
- The "Test/Hush" button will either silence false alarms (if briefly pressed) or perform a self test (if pressed and held)
- When interconnected to other mains powered Aico alarms, an alarm on one alarm will trigger all other interconnected alarms (only the triggered alarm will flash a red indicator)
- The alarm will emit a beep every 40 seconds to indicate that the battery back-up is depleted and needs recharging



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### Technical Specification

1. The Smoke Alarm carries the BSI Kitemark to indicate type testing to BS EN14604: 2005. It will meet the requirements of Grade D (and exceed the requirements of Grades E and F) as defined in BS 5839: Pt.6: 2004. It carries the CE mark to indicate conformance to Low Voltage and Electromagnetic Compatibility Directives.
2. Optical (photoelectric) sensor with large volume chamber and large high sensitivity photodiode. Insect resistant fine mesh screen with holes less than 0.030 inches.
3. 230V AC Mains Power Supply with built-in tamper proof Rechargeable Vanadium Pentoxide Lithium standby cells, capable of lasting at least 10 years and powering the alarm initially for at least 6 months in the event of mains power failure. The Lithium cell manufacturer endorses a minimum 10 year life expectation for the rechargeable cells.
4. Built-in sounder gives a minimum sound output of 85db(A) at 3 metres. Frequency is in the range 2200/2800Hz. The diameter of the piezo disc in the sounder measures 40mm and has wire contacts soldered directly on to the piezo disc. The sounder includes a resonator or "trumpet" 30mm in length and reaches to the lid of the outer casing in order to amplify the sound.
5. Interconnection capability such that if one alarm sounds all interconnected alarms sound. Up to 20 units, Ionisation, Optical or Heat, can be interconnected in this way providing a relay is not used.
6. Manual integral 'Test/Hush' button tests circuitry, sensor and horn and activates all interconnected alarms in the system. Also operates 'Hush' feature to silence nuisance alarms. Red LED on alarm cover will flash every 10 seconds to indicate that alarm is in 'Hush' mode and will automatically reset after approximately 10 minutes.
7. Separate green LED mains indicator light to confirm integrity of mains power supply.
8. Separate red LED under 'Test/Hush' button to flash every 40 seconds to indicate auto test, and to flash rapidly in alarm condition.
9. Low power cell warning signal operates with or without mains power present.
10. Anti tamper locking device prevents unauthorised removal of the alarm without the use of a tool.
11. Foam gasket built into surface mount plate to prevent dust ingress into the rear of the unit.
12. Non-reversible mains connector with 200mm lead and wiring instruction label.
13. Dust cover is fitted to the alarm to protect it from contamination during installation.
14. Supplied with two separate sets of instructions - one for the installer and one for the user.
15. Ambient temperature range: -5°C to +40°C (23°F - 104°F). 15% to 95% relative humidity.
16. Dimensions: 140 x 120 x 46mm. Weight inclusive of packaging: 280g.
17. 5 year guarantee.
18. Manufactured in Ireland.



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We reserve the right to amend designs and specifications without prior notice.

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