

# Smoke Alarm

**MAINS POWERED 230V~**

Remote System Control Capability  
& Rechargeable Battery Back-Up

## Model Ei166RC

- **Remote System Control capability**
- **Easi-fit base**
- **Tamper-proof rechargeable Lithium battery back-up**
- **High performance optical chamber with integral insect screen**
- **Test/Hush button**
- **Advanced suppression and calibration technology**
- **Interconnectable to other Ei mains powered alarms**
- **Low power cell warning**
- **Kitemarked to BS5446-1:2000**
- **5 year guarantee**



## Product Description

The Ei166RC is an Optical Smoke Alarm that runs on 230V AC mains power, and has built in tamper-proof rechargeable 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. They provide up to six months of smoke alarm operation without mains power.

The Ei166RC also has Remote Control capability - allowing the detector to be controlled remotely from a Control Switch (Ei1529RC). This then allows remote Test, Locate and Hush functions to be performed. If the Ei166RC is also interconnected to other Ei 'RC' mains powered alarms, then the whole system can be controlled remotely. Up to twelve alarms can be interconnected which will cause all alarms to sound when one unit senses smoke/heat. A Manual Call Point (MCP401RC) is also available.

The Ei166RC is supplied with the Easi-fit base that allows very quick and simple installation of the smoke alarm, combined with simple detector head removal and replacement. The Easi-fit base automatically connects both mains power and battery as the detector head slides on.

The Ei166RC has other advanced features such as integral insect screens, to reduce the chances of false alarms, and built in circuitry to aid suppression of voltage transients and RF interference to further reduce the chances of false alarms.

## Operation

- The green indicator will illuminate to show mains power is present
- The red indicator will flash every 40 seconds to show that the detector has performed an automatic self test
- The red indicator will flash rapidly to show an alarm condition for the smoke detector
- The "Test/Hush" button will either silence false alarms (if briefly pressed) or perform a smoke chamber test (if pressed and held)
- In "Test" mode the alarm will perform a smoke chamber test and sound the horn
- In "Hush" mode the alarm enters a ten-minute period of reduced sensitivity to overcome false alarm conditions. It will then automatically reset itself
- When interconnected to other Ei mains powered alarms, an alarm on one detector will trigger all other interconnected alarms within one second (only the triggered alarm will flash a red indicator)
- The smoke alarm will emit a beep and flash the red light every 40 seconds to indicate that the battery back up is depleted and needs recharging



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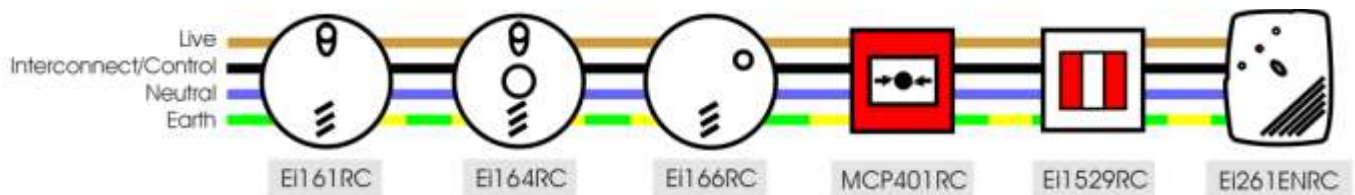
## Technical Specification

<b>Sensor</b>	Optical, uses light scatter from smoke	<b>Power-On Indicator:</b>	Continuous green LED
<b>Sensitivity:</b>	Complies with BS 5446 Part 1: 2000	<b>Alarm:</b>	Electronic Piezoelectric horn
<b>Source:</b>	Contains no radioactive material	<b>Alarm Sound Output:</b>	85dB(A) (minimum) at 3m
<b>Airspeed:</b>	Essentially immune to the effect of airspeed	<b>Alarm Status:</b>	Red LED flashes every second on unit sensing fire
<b>Button Test:</b>	Simulates the effect of smoke and checks chamber, electronics and horn	<b>Normal Operating Temperature Range:</b>	0 to 40°C
<b>Ambient Light:</b>	Chamber housing design and compensation overcomes problems with stray light	<b>Humidity Range:</b>	15% to 95% Relative Humidity
<b>Automatic Self-Test:</b>	Smoke Chamber is tested every 40 seconds and unit beeps (without red LED flash) if it is degraded	<b>Interconnect:</b>	Up to 12 of these units can be interconnected: - Ei161RC/164RC/166RC smoke or heat alarms - Ei261ENRC/261DENRC CO alarm - Ei128RBU relay base Use with optional control (see below)
<b>Insect Screen:</b>	Prevents insects or debris entering chamber (1.00mm mesh size)	<b>Optional Controls:</b>	- Ei1529RC Control Switch - MCP401RC Manual Call Point
<b>Supply Voltage:</b>	230V AC, 50Hz	<b>Fixing:</b>	Easi-fit mounting base
<b>Battery back up:</b>	Rechargeable Lithium cells	<b>Plastic material:</b>	UL94VO flame retardant
		<b>Dimensions:</b>	152mm diameter x 50mm depth
		<b>Weight:</b>	320g
		<b>Warranty:</b>	5 year (limited) warranty
		<b>Approvals:</b>	Kitemarked to BS5446-1:2000 (License no. KM07862) and CE certified

*Specifications are subject to change*

## System Wiring

### Wiring for Interconnected Alarms with optional Remote System Control Switch & Manual Call Point



*Ensure correct wiring of the alarms and switches as mixing Live and Neutral will blow / damage interconnected units.*



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