

# Smoke Alarms

## Mains Powered 230V 9 Volt Alkaline Battery-Up

### Photoelectric Alarm

#### Model EIB146

- Easi-Fit base
- 9V Alkaline Battery back up
- High performance optical chamber with integral stainless steel insect screen
- Test/Hush button
- Advanced suppression and calibration technology
- Interconnectable to other Brooks mains powered alarms. **\*\* Up to 12 alarms can be interconnected. In certain applications up to 20 alarms may be interconnected. Contact Brooks for further information.**
- Low Battery warning
- Built-in auto test facility
- Certified to the requirements of AS3786 - ActivFire Listed
- 5 year guarantee limited



### Product Description

The EIB146P is a Photoelectric Smoke Alarm that runs on 230V AC mains power, and has a 9V alkaline battery back up in the event of mains failure. The 9V battery will last for up to 4 years in standby mode, and capable of powering the smoke detector for up to 2 years in the event of mains failure.

The EIB146P has a high performance optical chamber fitted with integral stainless steel insect screens to reduce the chances of false alarms. Photoelectric (Optical) smoke alarms use the light scatter principle to detect smoke particles entering the optical chamber within the alarm and are most suited to fires producing visibly dense smoke, typically given off from smouldering bed linen, plastics, and fused electrical appliances.

Visibly dense smoke, which also contains toxic fumes, impairs the occupant's ability to see and make their way to an exit. The design standard AS1670.1 mandates the use of photoelectric smoke detection in all sleeping areas and paths to an exit.

The EIB146P has the ability to interconnect up to 12 140 series alarms to allow all alarms to sound if just one of the interconnected alarms should be triggered. Interconnecting all alarms significantly increases the audible warning provided and the chances of waking sleeping occupants.

#### **\*\*see features**

This provides early warning throughout the building, no lost time while the fire threat grows.

The EIB146P has soldered alarm sounder contacts to prevent sounder failure due to pressure fit contact corrosion, an identified source of occupant warning failure.

The EIB146P 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 onto the Easi-Fit base.

The EIB146P has 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 once every 40 seconds to indicate a self test and rapidly (every second) to show an alarm condition for the smoke alarm.
- The red indicator will flash rapidly to show an alarm condition for the smoke detector
- The "Test/Hush" button will either silence false alarms or perform a unit self test
- In "Test" mode the alarm will perform a self test and sound the horn



**Australia** Head Office: 4 Pike Street Rydalmere NSW 2116  
**Ph**+61 2 9684 1466 **Fx**+61 2 9684 4146 **Toll Free** 1300 78 FIRE

**New Zealand** Unit 106, The Zone, 23 Edwin Street Mount Eden 1024  
**Ph**+64 9 638 4644 **Fx**+64 9 6384645 **Toll Free** 0800 220 007

**Web:** AUS - [www.brooks.com.au](http://www.brooks.com.au) NZ - [www.brooks.co.nz](http://www.brooks.co.nz)

- In "Hush" mode the alarm enters a ten minute period of reduced sensitivity to overcome false alarm conditions, and will then automatically reset itself
- When interconnected to other Brooks 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 replacing

**For further details see the operator and installer manuals**

## Technical Specification

<b>Sensor:</b>	Optical, uses light scatter from smoke <b>(Note: Sensing chamber meets the 25mm stand-off installation requirements of AS1670.1 and AS1670.6)</b>
<b>Ambient Light:</b>	Chamber housing and compensation overcomes possible problems due to stray light
<b>Sensitivity:</b>	Complies with AS 3786 (Nominal 10%Obs/m)
<b>Source:</b>	Contains NO radioactive material
<b>Airspeed:</b>	Essentially immune to the effects of airspeed
<b>Test Facility:</b>	Simulates the effect of smoke and checks electronics and horn
<b>Automatic Self-Test:</b>	Smoke chamber is tested every 40 seconds and unit beeps (without LED flash) if the sensor is de-graded
<b>Insect Screen:</b>	1mm diameter stainless steel mesh mitigates insect and debris entry into the smoke chamber.
<b>Hush Facility:</b>	In "Hush" mode the alarm enters a ten minute period of reduced sensitivity to overcome false alarm conditions, and will then automatically reset itself
<b>Primary Supply:</b>	230 Volts AC
<b>Power 'ON' Indicator:</b>	Continuous Green LED
<b>Secondary Supply:</b>	9 Volt Alkaline Battery
<b>Low Battery Warning:</b>	Beeps every 40 second when the stand-by battery reaches it depletion threshold
<b>Alarm Sounder:</b>	Integral electronic piezo horn.
<b>Alarm Sounder Connection:</b>	Piezo contacts are soldered to prevent failure due to contact corrosion over time.
<b>Alarm Sounder Output:</b>	85 dB (minimum) at 3m.
<b>Alarm Status Indicator:</b>	Red LED flashes every second on device sensing fire.
<b>Temperature Range:</b>	0°C to 40°C
<b>Humidity Range:</b>	15% to 95% Relative Humidity.
<b>Interconnection:</b>	Up to 12 140 series smoke or heat alarms, along with one EIB128 relay base, may be interconnected. (NOTE: Do not interconnect to other manufacturer's devices). <b>See features.</b>
<b>Fixing:</b>	Easi-Fit mounting base.
<b>Enclosure Material:</b>	UL94VO flame retardant.
<b>Dimensions:</b>	152mm diameter x 50mm depth.
<b>Weight:</b>	345g
<b>Warranty:</b>	5 year (limited) warranty
<b>Approvals:</b>	<i>Australian</i> - Certified to AS3786 ActivFire afp 1578, <i>International</i> - Kitemarked to BS5446-1:2000, CE Approved

## Accessories

EIB127	- Surface Mount Base
EIB128R	- Surface Mount Base with Relay
EIB128RBU	- Surface Mount Base with Relay and rechargeable lithium battery backup
EIB168RF	- RadioLink base



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