

# Ei186 - Low Voltage Optical Smoke Alarm

with volt free relay contacts  
Alkaline Battery Back-up

## Key Features

- ▶ High performance optical sensor
- ▶ Powered by 11-30V DC from panel or external source
- ▶ One volt free contact output (NO/NC)
- ▶ Continuous or pulse mode
- ▶ Hardwire Interconnect
- ▶ Low voltage "easi-fit" type base
- ▶ Test/Silence button
- ▶ 5 year guarantee

## Product Description

The Ei186 Optical Smoke Alarm is designed to connect to a panel for its low voltage power supply but also as a trigger via a built in relay. The 9V replaceable battery back-up will ensure continuous operation (up to a year) in the event of power supply failure under normal operation.

It operates on the light scatter principle to detect smoke particles entering the optical chamber. This optical Alarm is sensitive to all domestic fire types but is especially sensitive to visible smouldering fires. When smoke is detected, the horn will sound and the relay will switch.

The relay can be set up as Pulse or Continuous mode of operation. When supplied it is set to Continuous (ie relay switches while detector is in alarm). If Pulse mode is selected, the relay switches for 5 seconds only when detector goes into alarm.

The Ei186 may operate as a standalone or may be hardwire interconnected to other low voltage Alarms from the same range. In an interconnected system, an Alarm sensing fire will cause all others to alarm and switch contact.

The Alarm is supplied with a low voltage base with an Easi-fit connection to facilitate simple detector head removal and replacement. The base automatically connects both the low voltage power supply and battery as the detector head slides on.

The Alarm self-checks its sensor, battery and internal circuitry every 40 seconds. A fault condition will be indicated by a short beep every 40 seconds.

The Alarm is fitted with a Test / Silence button to facilitate frequent testing of your Alarm. The Silence function allows the Alarm to be silenced in the case of a false alarm, e.g. cooking fumes.



## Technical Specification

<b>Sensor Type:</b>	Photoelectric
<b>Product life:</b>	10 years
<b>Supply Voltage:</b>	10.5-30V DC
<b>Battery back-up:</b>	9V alkaline battery (replaceable)
<b>Relay contacts:</b>	30V, 1A resistive (NO/NC) Continuous or Pulse mode
<b>Interconnection:</b>	via Hardwire
<b>Sound Level:</b>	85 dB(A) at 3m
<b>Button Test:</b>	Simulates the effect of smoke and checks sensor, electronics, horn and relay
<b>Indicators:</b>	Green LED - Power Red LED - Self Test, alarm, in hush mode (if red LED is flashing while unit is beeping, the battery is faulty, if red LED is not flashing & unit is beeping, sensor is faulty)
<b>Insect screen:</b>	Fine mesh
<b>Normal Operating and Storage Temperature:</b>	Range -10°C to 40°C <sup>1</sup>
<b>Normal Operating and Storage Humidity Range</b>	15 % to 95 % Relative Humidity (non-condensing)
<b>Plastic material:</b>	UL94VO flame retardant
<b>Fixing:</b>	Screw fixing and mounting plate supplied
<b>Dimensions:</b>	Product - 145mm x 62mm Packaged - 155mm x 182mm x 68mm
<b>Weight:</b>	374g (Pack +58g)
<b>Warranty:</b>	5 year (limited) warranty
<b>Approvals:</b>	



KM522831  
EN14604:2005 + AC:2008

Manufactured to ISO 9001 quality standards  
Specifications are subject to change

1. Temperature and Humidity conditions are for normal operation and storage. Units will function outside these ranges as required by the specific product Standards. Extended exposure to conditions outside these ranges can reduce product life. For advice on prolonged operation outside these ranges consult the manufacturer.

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