

# Radio Frequency Alarm

**BATTERY POWERED 9V**  
RF Communication

## Model Ei3103RF Heat

- Fixed temperature fast response thermistor.
- Range 54°C to 62°C
- RF wireless interconnect
- Unique house coding feature
- Visual RF transmission indicator
- Test button
- Radio transmitter and receiver in each alarm
- Low power cell warning
- Kitemarked to BS5446-2:2000
- 5 year guarantee



### Product Description

The Ei3103RF is a Heat Alarm that runs on 9V alkaline battery and is part of the Radio Frequency range of alarms. The RF signal will wirelessly interconnect the Ei3103RF to other RadioLINK products.

The Ei3103RF gives a fire warning when the temperature reaches 58°C. Heat alarms are ideal for use in kitchens and garages, where the use of optical or ionization would lead to unwanted nuisance alarms.

The Ei3103RF uses advanced radio transceiver technology with unique software coding to transmit and receive the radio signals. The transmissions are frequency modulated (FM) and use Manchester coding to ensure robust signal integrity and avoid signal noise interference

The Ei3103RF has the ability to wireless interconnect up to twelve alarms to allow all alarms to sound if just one of the interconnected alarms should be triggered.

The Ei3103RF 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

- In normal standby mode the amber indicator will light to indicate transmission of an RF signal
- In code mode, the amber indicator will flash to indicate the number of other RF alarms that have been "learned" in the system
- The red indicator will flash rapidly to show an alarm condition for the heat detector
- 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 heat detector will emit a beep and the red light flashes every 40 seconds to indicate that the battery is depleted and needs to be changed



Shannon Free Zone, Shannon, Co. Clare, Ireland.  
Ph.+353 61 471277 Fx.+353 61 471053  
Email. [eielectronics@eiltd.ie](mailto:eielectronics@eiltd.ie)  
Web: [www.eielectronics.com](http://www.eielectronics.com)

# Model Ei3103RF Optical

## Technical Specification

<b>Sensor</b>	Thermistor	<b>Power-On Indicator:</b>	Red light flashes every 40 seconds
<b>Sensitivity:</b>	Complies with BS 5446 Part 1: 2000	<b>Alarm:</b>	Electronic Piezoelectric horn
<b>Supply Voltage:</b>	9V alkaline battery	<b>Alarm Sound Output:</b>	85dB (minimum) at 3m
<b>RF Range<sup>1</sup>:</b>	150 meters (min) free space	<b>Alarm Status:</b>	Red LED flashes every second on unit sensing fire
<b>RF Visual Indicator:</b>	Amber light flashes continuously for 1.5 to 3.5 seconds while transmitting RF signal	<b>Temperature Range:</b>	0 <sup>0</sup> to 40 <sup>0</sup> C
<b>RF Frequency:</b>	868.499MHZ (1% duty cycle)	<b>Humidity Range:</b>	15% to 95% Relative Humidity
<b>RF Power:</b>	+5dBm	<b>Interconnect:</b>	Up to 12 RadioLINK products
<b>Dimensions:</b>	140mm x 120mm x 45mm	<b>Plastic material:</b>	UL94HB flame retardant
<b>Weight:</b>	190g	<b>Warranty:</b>	5 year (limited) warranty
		<b>Approvals:</b>	Kitemarked to BS5446-1: 2000, CE Approved

1. Any obstructions of any sort will result in a reduction in range from the free space specification. As such, the actual range will vary dependina on installation.

Specifications are subject to change

## Installation & Placement



Place the alarm on the ceiling/wall and mark the screw holes. Drill with a suitable drill bit, insert the screw plugs and screw the alarm into position. Simply connect the battery on the alarm and slide into position on the mounting plate.

The RF alarms should be house coded to prevent possible interference from neighbouring installations – see instructions for more details.

## House Code Procedure

1. Connect the battery
2. Press the house code switch until the amber light turns on and then release
3. Similarly, place other alarms into house code mode
4. Check that the number of amber flashes (on each alarm) corresponds to the number of alarms in your system
5. Remove all alarms from house code
6. Button test each alarm to check your system



Shannon Free Zone, Shannon, Co. Clare, Ireland.  
Ph.+353 61 471277 Fx.+353 61 471053  
Email. [eielectronics@eiltl.ie](mailto:eielectronics@eiltl.ie)  
Web: [www.eielectronics.com](http://www.eielectronics.com)