

# Relay Module

**230V~ Mains powered with  
Rechargeable Battery back-up**



**Wireless Interconnection**

## Model Ei428

- Designed for use with all RadioLINK Professional alarms and accessories
- Rechargeable Lithium battery back-up
- Volt-free contacts as supplied for multiple use
- Can be configured to switch a 230V or 24V output
- Trunking knock-outs for easy and neat wiring
- Continuous or Pulse operation
- 5 Year Guarantee



### Product Description

The Ei428 is a RadioLINK Relay Module that runs on 230V AC mains power. The rechargeable Lithium cells are designed to have a ten year life and outlast the life of the relay. They will provide up to 2 months operation in the event of a mains failure.

The RadioLINK interconnectivity enables wireless transmission from all RadioLINK alarms in the system, and the module can then activate many devices including social alarm modules and warden call systems.

The module uses advanced transceiver and signal coding technology to ensure a robust and reliable RadioLINK signal. It Also has a "House Code" feature that allows a system of RadioLINK units to be coded together to prevent interference with neighboring systems.

It is designed to be remotely sited at any convenient point and is supplied complete with its own cover.

Volt free contacts (Normally Open and Normally Closed) as standard but can be wired to give a 230V output or 24V output using an external 24V supply.

### Operation

- On receiving a RadioLINK signal from one of the alarms in the system, the relay contacts will be operated causing a signal to be sent to the system to which it is connected
- The module can be "House Coded" by activating the House Code switch. The indicator will flash red to indicate the number of units it is coded with
- The indicator on the cover will show a constant green light when the mains power is connected
- If the Lithium cells are depleted, the indicator will flash red every 10 seconds to indicate they need recharging



Mile End Business Park, Oswestry, Shropshire SY10 8NN

Tel. 0870 758 4000

Fax. 0870 758 4010

[www.aico.co.uk](http://www.aico.co.uk)

E & OE Our policy is one of continuous improvement.

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

Ei428 DataSht Rev1 04.06.13

## Model Ei428

### Technical Specification

1. A relay module with cover to allow flexibility in siting. For use with Ei Professional 2100, 160RC and 140RC Series Smoke and Heat alarms when mounted on an Ei168RC RadioLINK base, and Ei262 RadioLINK Carbon Monoxide (CO) Alarms. Note: the Ei428 will not fit under the Smoke/Heat/CO alarms.
2. Eliminates the need for any cabling between the Ei428 and the Smoke/Heat/CO alarms used in the system.
3. Requires 230V AC Mains Power Supply – Green LED to indicate mains power is present.
4. Features built-in tamper proof Rechargeable Vanadium Pentoxide Lithium standby cells, capable of lasting at least 10 years and powering the module initially for at least 2 months in the event of mains power failure. The cell manufacturer endorses a minimum 10-year life expectation for the rechargeable cells, which are activated by operating the battery switch inside the module.
5. The product is CE marked to indicate conformance to BS EN 60065:1998 (Electrical Safety), EN300220-1 V1.3.1 (2000-09) (RF Performance), EN301489 V1.4.1 (2002 08) (EMC) and has been 3<sup>rd</sup> party tested for electrical safety in accordance with Annex K of BS 5446: Pt.1: 2000.
6. Radio frequency: 868 MHz Band in accordance with R&TTE Directive 1999/5/EC – this band has been designated for use with security products and only allows a 1% duty cycle, so continuous transmission and interference from external sources is extremely remote, and would be illegal.
7. Range: the type of building will be the major limiting factor e.g. the number and type of walls/ceilings that the radio signal has to pass through. As a guide, 30m should be the maximum distance between any of the RadioLINK units in the system.
8. Up to 20 RadioLINK units can be used in one system. Range will be the limiting factor (see point 7).
9. Low back-up warning signal – LED indicator flashes RED every 10 seconds to indicate that the lithium cells are depleted.
10. Units are in "Factory code" when received (they will all communicate with each other). They must be 'House Coded' to eliminate the risk of adjacent properties communicating with each other. After House Coding they will only communicate with other RadioLINK units coded at the same time.
11. House code: operate the 'House Code' switch on all RadioLINK units in the system – see the instructions supplied with the other RadioLINK units being used. The Green LED on the cover of the Ei428 will change to Red and flash slowly: this indicates that it will receive the unique serial numbers being sent by all other RadioLINK units in 'House Code'. The number of flashes of the LED indicates the number of units in the system. The Ei428 will return to normal standby mode automatically after 15 minutes. Pressing the 'House Code' switch again will return it to normal standby immediately.
12. Volt free contacts – (Normally Open or Normally Closed) rated up to 240V AC / 5 Amps, making it suitable for use with a wide range of AC or DC voltages. The relay contacts operate on mains power, or on back-up cells in the event of a mains failure.
13. A RadioLINK Manual Call Point, Ei407 and Remote Control Switches Ei450, Ei412 and Ei411H are also available for use in the system. See separate specification sheet(s) for further information.
14. Features 1 x 25mm trunking for surface wiring and centre knockout for recess wiring.
15. Ambient Temperature Range: 4°C to 40°C. Humidity Range: 0 to 90 % relative humidity.
16. Dimensions: 140mm diameter x 27mm depth. Weight inclusive of packaging: 220g.
17. 5 year guarantee.
18. Manufactured in Ireland.



Mile End Business Park, Oswestry, Shropshire SY10 8NN

Tel. 0870 758 4000

Fax. 0870 758 4010

[www.aico.co.uk](http://www.aico.co.uk)

E & OE Our policy is one of continuous improvement.

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

Ei428 DataSht Rev1 04.06.13

Aico Ltd is a wholly owned subsidiary of Ei Electronics



Europe's Leader in Residential Fire + Gas Detection  
Ei Electronics, Shannon, Ireland



Made in  
Ireland