

# RadioLINK Repeater

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

## Model Ei420

- Stand-alone unit designed for use with RadioLINK enabled alarms & accessories
- Multiple Repeater RF signaling
- Hard-wired input for Ei mains powered alarms
- Cover to allow remote siting
- Unique "House Code" feature
- Visual RF transmission and power indicators
- Mains powered with built-in rechargeable Lithium back-up
- RF performance to EN 300220-3
- EMC performance to EN 301489-3
- 5 year guarantee



## Product Description

The Ei420 is a RadioLINK Alarm Repeater Module for use in installations that require additional signal coverage but where the installation of an additional alarm may not be suitable. It is designed to be remotely sited and comes complete with its own cover.

It 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 minimum ten-year life and outlast the life of the module itself.

The module uses advanced transceiver and signal coding technology to ensure robust and reliable RF signaling.

## Operation

- Received RadioLINK signals will be re-transmitted, increasing the possible number of barriers penetrated by the signal and contributing to multiple signal paths throughout the system.
- The unit can be "House Coded" by activating the House Code switch. The indicator will flash red to indicate the number of units 'learned'.
- The indicator will illuminate green to show that mains power is present (this is overridden by any red flashes).
- If the rechargeable back-up is depleted, the indicator will flash red every 10 seconds to indicate they need recharging



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### Technical Specification

1. For use with Ei Professional 2100, 160RC and 140 Series mains powered Smoke and Heat alarms (when mounted on an Ei168RC RadioLINK base) and Ei262 RadioLINK Carbon Monoxide (CO) alarms.
2. Requires 230V AC Mains Power Supply – Constant Green LED indicates mains power is present.
3. Features built-in tamper proof Rechargeable Vanadium Pentoxide Lithium standby cells, capable of lasting at least 10 years and powering the base 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 base.
4. Low back-up warning signal – LED indicator flashes RED every 10 seconds to indicate that the lithium cells are depleted.
5. When installed, the unit will receive RadioLINK signals and re-transmit them. This can be useful in providing multiple RF signal paths to strengthen the RadioLINK system in difficult installations.
6. Radio frequency: 868MHz 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 8.
9. 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.
10. 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 Ei420 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 Ei420 will return to normal standby mode automatically after 30 minutes. Pressing the 'House Code' switch again will return it to normal standby immediately.
11. A RadioLINK Manual Call Point, Ei407, and Remote Control Switch, Ei411H, are also available for use in the system. See separate specification sheet(s) for further information.
12. 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.
13. Features 1 x 25mm trunking for surface wiring and centre knockout for recess wiring.
14. Ambient Temperature Range: 4°C to 40°C. Humidity Range: 0 to 90 % relative humidity.
15. Dimensions: 140 diameter x 27mm depth. Weight inclusive of packaging: 220g.
16. 5 year guarantee.
17. Manufactured in Ireland.



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