RadioLINK Panel Module

Smoke, Heat & CO Alarms interface for Fire & Security Panels

Model Ei413

- **The Ei413 enables Wireless RadioLINK Smoke, Heat and CO Alarms to interface with panel system, e.g. security, & fire panels.**
- **Powered by 11-30V DC from panel or external source.**
- **Three voltage free contacts outputs (NO & NC) for Fire Alarm, CO Alarm and Fault signals**
- **One voltage free contact input (NO) to trigger RadioLINK fire or test signal.**
- **One 11- 30V DC input triggers RF fire or test signal.**
- **In addition to panels the Ei413 can trigger modems, valves, magnetic door holders, etc.**
- **RadioLINK multi-repeater and multi-path functionality.**
- **RF performance to EN300 220-1 in accordance with EN300 220-2**
- **EMC performance to EN301 489-1 referencing EN301 489-3**
- **Unique system coding feature**
- **5 year Guarantee**

Product Description

The Ei413 Panel Module provides an interface between an Ei Electronics RadioLINK system and a security or fire panel system.

A RadioLINK system consists of Ei Electronics Smoke, Heat, CO Alarms along with accessory devices that are linked using a proprietary RF protocol. The Ei413 must be coded to the other RadioLINK devices in the system.

The Ei413 requires an 11-30VDC supply which is normally taken from the panel.

The Ei413 decodes "Fire", "CO" and "Fault" signals from the RadioLINK devices and activates the relevant onboard relays. The relays are wired to input terminals on the panel.

The NO voltage free contacts input and/or the DC voltage input, when activated, will result in the Ei413 transmitting a wireless Fire Alarm signal that will sound all the alarms in the RadioLINK system. These inputs are activated by a Fire Alarm signal or a Test Alarm signal from the panel.

The Ei413 uses RadioLINK multi-repeater, multi-path technology to deliver very robust and reliable RF signal coverage.

For convenience the Ei413 may be mounted inside the panel but care needs to be taken that the RF signal path is robust and reliable. We do not recommend that the Ei413 be placed inside a metal enclosure or in a position where the RF signal could be seriously attenuated. We recommend that close attention is paid to the positioning of the Ei413 during the installation.

It is possible to configure the wiring of the Fire and Fault relays so that the fire panel may indicate both Fire and Fault conditions. Consult the panel manufacturer's end of line (EOL) termination details when choosing this configuration.

Ei Electronics
fire + gas detection

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Technical Specification

Power Required:	11-30VDC (From Panel)	**Outputs to Panel:**	**Fire** Alarm Relay (NO/NC) **CO** Alarm Relay (NO/NC) **Fault** Relay (NO/NC)

Current Rating: 15mA (Standby)
60mA (Alarm Max)

The Fire and Fault relays may be configured, using on-board links, to interface to a typical fire panel detector circuit.

RF Range*: Over 100 meters in free space

RF Visual Indicator: Blue light indicates RF activity

All relays are rated 30V @ 1 Amp. NC, NO voltage free contacts

RF Frequency: 868.499 MHz

Input 1: Voltage Free contacts

RF Multi-repeater: Module acts as an RF repeater to extend range of other RadioLINK devices

Input 2: 11-30 VDC

Operating Temp: 0 – 40°C
Storage Temp: 0°C - +35°C (dry area)

Mounting: The Ei413 may have to be mounted outside the panel to ensure RF communication.

Humidity Range: 15% to 95% Relative Humidity – non condensing

Guarantee: 5 Years

Dimensions: 88mm x 88mm x 28mm

Weight: 150 grams

* Obstructions will result in a reduction on range from free

Performance: Designed to comply with EN300220-3

Wiring Diagrams:
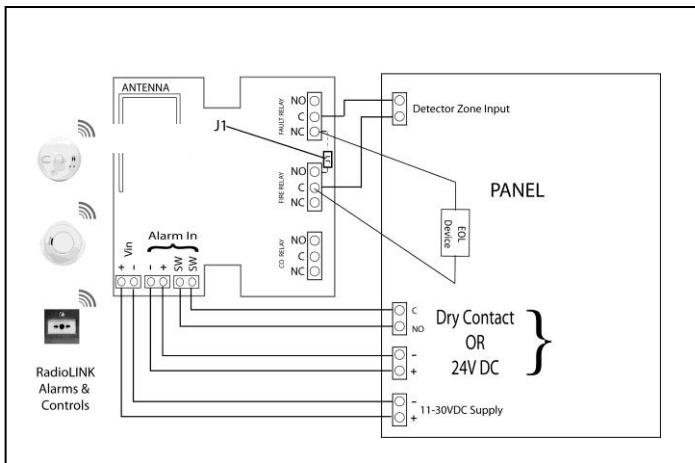
Typical Fire Panel wiring configuration
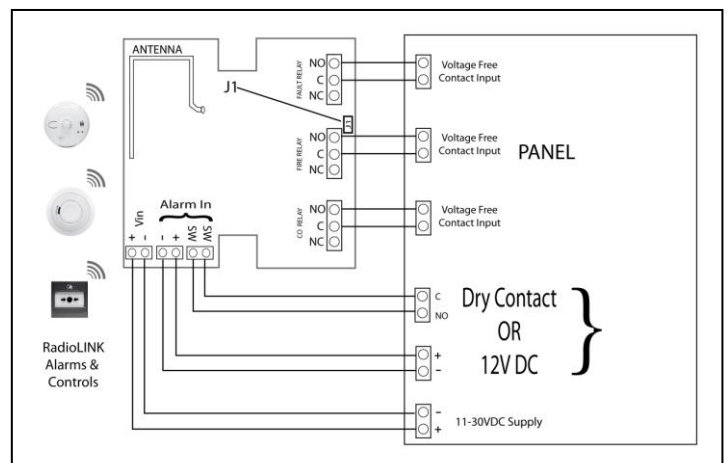
Security Panel wiring configuration

Caution!
Always check the panel manufacturer's installation manual for detailed wiring and End of Line (EOL) termination requirements before connecting to the Ei413

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