Conventional radio panel
Model M400RFE-AS

Overview

Features

- 2 Zone Conventional panel to control radio devices

- Manages up to 32 radio detectors or radio call points, each with their own unique address

- Communicates across 24 bi-directional channels in total, 20 x 75kHz channels at 434MHz with 75kHz separation and 4 x 75kHz channels at 868MHz with 150kHz separation

- Detectors and call points are organised into two zones of 16 devices

- Can be used as a stand-alone radio fire detection system with fire and fault outputs from each zone

- 45 status LEDs

- Sequentially interrogates radio detectors and radio call points every 90 seconds

- Receives fire, fault and low battery signals from input devices

- Local indicators for detector status, system status and received power levels

- Mains powered with optional battery back up; can be externally powered if required

- 300m range in free air

- Complies to the R+TTE Directive 1999/5/EC.

- EN300 220-1 V1.3.1 (2000-09) & EN300 220-3 V1.3.1 (2000-09)

VdS

G204104

Description

The stand-alone radio control panel can be used to provide a pseudo-conventional, two zone radio fire detection system. Each zone can have up to 16 devices – radio detectors or radio call points – per zone; the individual device addresses are automatically allocated during the set-up procedure.

The panel is mains powered, through an intergral power supply, with battery back-up facility available, and should ideally be located in the geographic centre of the area to be protected.

The panel contains a total of 45 status LEDs. There are 32 red LEDs (1 per device) showing the connection status, 2 red LEDs indicating alarms, 8 amber LEDs showing faults, and 3 LEDs showing the panel's status.
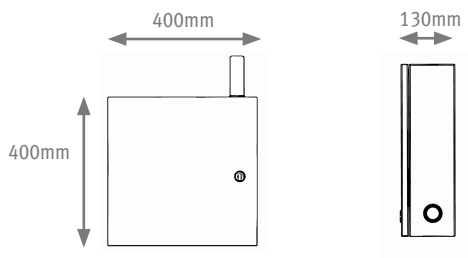
The panel provides 24 bi-directional channels in total, 20 x 75kHz channels at 434MHz with 75kHz separation and 4 x 75kHz channels at 868MHz with 150kHz separation. Automatic frequency and channel changing through channel monitoring guarantees robust communications between the module and devices.

The Gateway's range is 300m in free air, but is reduced by signal attenuation caused by walls, floors, pillars and other physical characteristics of the building.

The M400REE-AS can be powered from an external 24Vdc power supply.

SYSTEM SENSOR®

Architect/Engineer Specifications

CONVENTIONAL RADIO PANEL

Electrical Specifications

Operating Voltage	240Vac
Standby Current	150mA typical

Environmental Specifications

Application Temperature Range	-0°C to +40°C
Humidity	10 to 93% (non-condensing)
IP rating	IP34

Mechanical Information

Height	400mm
Width	130mm
Depth	400mm
Weight	6Kg (excluding batteries)
Cable Entry Diameter	7-13mm^2
Max Wire Gauge For Terminals	0.8mm^2 to 2.5mm^2

Radio Properties

Frequenmcy Band	434MHz & 868MHz
Max Transmitted Power	10mW
Maximum Linear Range	300m in free air
Channel Width	75kHz
Channel Seperation	75kHz in 434 band & 150kHz in 868 band
Number of Channels	20 in 434MHz band & 4 in 868MHz band

Product Range

M400RFE-AS	Conventional Panel
M500RFE-AS	Analogue Gateway
MCPRFE-AS	European style manual call point
M400DKMR-AS	Double Action German Call Point - Red
M400DKMB-AS	Double Action German Call Point – Blue

Installation Recommendations

Installation should be undertaken in accordance with recognised national or international standards and codes of practice.

We would also recommend that simulated fire tests are conducted to ensure that the desired response time for a given installation are met.