

Analogue Gateway Module Model M500RFE-AS

Overview

Features

- Communications gateway module enabling devices to have their own unique address to be added to an addressable system
- Communicates with up to 99 radio detectors and 98 radio call points
- Compatible with Series 500 protocol
- 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.
- Automatic frequency and channel changing through channel monitoring
- Sequentially interrogates radio detectors and radio call points every 90 seconds
- Power, Alarm and Fault status LEDs
- Stores real-time status information about any connected device
- Signal strength reporting per device
- 300m range in free air
- Externally powered
- Uses 1 module address on the loop
- 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)



Pending

Description

The Gateway module forms part of the Series 200/500 family of addressable products. It occupies one module address with the other 98 available for radio call points or hard-wired modules as required.

Subject to the normal overall limit of 99 detectors and 98 modules per loop, the Gateway module co-exists alongside hard wired devices to provide the total interconnectivity of hard wired and radio devices across the analogue loop. The Gateway module is externally powered and should ideally be sited in the geographic centre of the area to be protected.

The translator module 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 guarantees robust communications between the module and devices. The status of each radio device can be viewed in the LCD display. When the device changes state it communicates immediately to the Gateway and will continue transmitting this status until it is acknowledged.

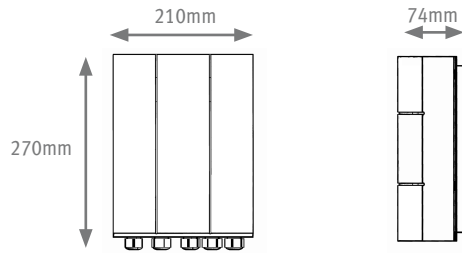
The Gateway is powered through a separate 24VDC supply with the loop interface electrically isolated from this supply.

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. It has built in English, French and German language options and LEDs that indicate Power, Alarm and Fault status.

The M500RFE-AS is powered by an external 24Vdc Power Supply.

Architect/Engineer Specifications

CONVENTIONAL RADIO PANEL



Electrical Specifications

Operating Voltage Range	10-30Vdc (external supply)
Standby Current	300µA

Environmental Specifications

Application Temperature Range	-10°C to +55°C
Humidity	10 to 93% (non-condensing)
IP rating	IP34

Mechanical Information

Height	400mm
Width	130mm
Depth	400mm
Weight	930g (excluding batteries)
Cable Entry Diameter	7-13mm ²
Max Wire Gauge For Terminals	0.8mm ² to 2.5mm ²

Radio Properties

Frequency Band	434MHz & 868MHz
Max Transmitted Power	10mW
Maximum Linear Range	300m in free air
Channel Width	75kHz
Channel Separation	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
MCPRE-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.