

Thermally assisted radio Photo smoke detector Model 2100RFE-AS

Overview

Features

- Interfaced to the loop via the Analogue Gateway module, compatible with Series 500 protocol
- Up to 99 radio detectors, each with their own unique address, can be added to an addressable system
- Fixed 2.25%/ft sensitivity optical detector
- 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.
- Independent 58°C fixed temperature sensing
- 300m range in free air
- Internally powered by 2 x 3V CR123 lithium batteries
- 1.5 year battery life, annual change recommended
- Fault, tamper and low battery warning signals
- Low battery alert gives 90 days normal operation before the batteries need to be changed
- 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)



G204105

Description

The 2100RFE-AS is a plugin photo-electric sensor approved to EN54-5; it consists of a fixed sensitivity optical chamber and independent 58°C fixed temperature sensing.

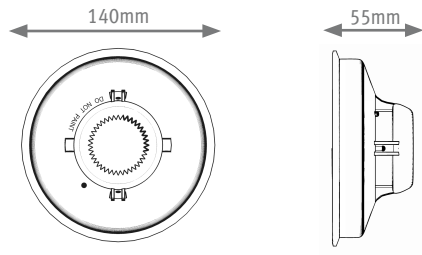
It sends a status indication every 90 seconds to the translator module; in alarm condition, it immediately transmits its alarm status to the module, repeating every 10 seconds until acknowledged, the alarm LED on the detector will flash red until reset from the control panel. The 2100RFE-AS will signal a fault condition if the tamper activation sensor is activated and, when the

battery voltage falls below 5.1V, a "low battery" alert is transmitted. When it changes state it continues to transmit until it is acknowledged by the gateway. Up to 99 detectors can be managed by a translator module.

Communicating 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. The system complies to the R+TTE directive 199/5/EC. Automatic frequency and channel changing through channel monitoring guarantees robust communications between the module and devices.

Architect/Engineer Specifications

THERMALLY ASSISTED RADIO PHOTO SMOKE DETECTOR



Electrical Specifications

Operating Voltage Range	3.6Vdc (internal batteries)
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Environmental Specifications

Application Temperature Range	-0°C to +40°C
Humidity	10 to 93% (non-condensing)
Max Air Velocity	20m/s

Mechanical Information

Height	55mm installed in B501 base
Diameter	140mm with mounting ring
Weight	187g (excluding batteries)

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.