



ZR420

Radio thermal sensor

Thermistor controlled

Designed to provide heat detection on ZP3 systems, where the installation of hard wiring is not an option, the ZR420 wireless thermal sensor is a thermistor-controlled device, which responds to changes in its ambient temperature.

The unit is controlled directly from the main fire detection panel, via a loop wired radio interface module. This arrangement allows both wireless and hardwired devices to be seamlessly located on the same loop wiring. The device provides a reliable response to fires in areas where environmental conditions may prohibit the use of smoke sensors

EN54 Part 5 (grade 1) approvals

The sensitivity of each sensor is set by the main control panel and can be adjusted between four levels - from 58°C to 75°C, either manually or on a timed basis. At sensitivity level two the ZR420 fully meets the requirements of European Standard EN54 Part 5 (grade 1) and is approved by several international approval bodies.

Installed as part of the ZP3 analogue addressable system, up to 127 devices can be connected to each of the control panel loops.

Each wireless device, controlled through the ZR470 loop interface is assigned its own IDENT address, with which the main control panel communicates, providing the same system facilities as directly wired devices.

Automatic calibration and self-test

Temperature levels are continuously sensed by the unit and transmitted to the radio loop module, which in turn relays the data to the main control panel.

Four levels of sensitivity can be set and calibration and self-test are carried out automatically. Removal or replacement of an incorrect sensing device is identified by the system and details displayed at the main control panel.

For ease of removal sensors plug into the ZR400 radio base by a simple twist and lock action. Bases are installed using a matching fixing plate. A site selectable option is provided to lock the sensor into its base. Once applied the unit can only be removed by means of a special tool.



Standard Features

- No external aerials
- Dual battery supply
- Full device status monitoring – power sources, head removal and device tamper
- Automatic sensitivity adjustment, alarm verification and self test

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Specifications

Model No	ZR420
Specification	EN54 Pt5
Description	Radio thermal sensor
Approval	R&TTE to ETS300-220
Operating frequency	VHF173.245 MHz
Compatibility	All ZP3 analogue systems via ZR740 loop module
Performance	Grade 1 (at sensitivity level 2)
Sensitivity settings	Level 1 58°C fixed temperature Level 2 58°C rate compensated Level 3 75°C rate of rise Level 4 75°C fixed temperature
Mounting	Plugs into surface base
Area Coverage	50m ² , subject to local codes
Monitoring	Continuously self-checking
Indication	Alarm LED (red)
Detection principle	Thermistor
Operating voltage	3.2 Volts dc (Alkaline batteries)
Power supply	In base (see PS1492)
Addressing method	Unique address embedded in firmware
Application	Indoor installation
EN60529 rating	IP32
Temperature range	-10°C to +70°C
Humidity range	20% to 95% RH (non condensing)
EMC	CE marked (IEEC89/336)
Material	Moulded ABS
Dimensions	106mm (Dia) x 52mm (H) (excluding base)
Height - with ZR401 base	82.7mm
Colour	White
Weight	85g (excluding base)
Publication No	PS1488

Ordering Information

Part No.	Description
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