

2435-01

Brief description

The ZP730-2 is an analogue optical smoke sensor that provides reliable sensing for most fire alarm applications. The sensor is even effective in areas affected by air movement associated with air conditioning systems.

Installed as part of the ZP3 analogue addressable system, up to 127 sensing devices can be connected to each of the ZP3 control panel loops. All loop devices incorporate switch settings enabling them to be given a unique address, which is polled by the ZP3 panel every two seconds.

Specifications

General information

Designation	Analogue Optical Smoke Sensor
Specification	EN54 Part 7
Model number	ZP730-2
Part number	0104
Sensitivity	0.12 dB/m (standard sensitivity)
Compatibility	All ZP analogue systems
Mounting	Plugs into surface or semi-recessed base
Area coverage	100 m ² , subject to local codes
Wiring	2-core loop or spur
Monitoring	Open and short circuit fault. Sensor removal and device type.
Indication	Alarm LED (red)
Detection principle	Photo electric light scatter
Addressing method	7-way Dipswitches in head

Primary supply

Operating voltage Address line pulsed 20 V (19.5 to 20.5 V). Max line less 4 V

Current (quiescent) 600 µA

Current (alarm) 700 µA

Environmental

Application Indoor use

Environmental rating IP32

Temperature range -10 to +75°C

Humidity range 20% to 95% RH (non condensing)

Mechanical details

Construction Moulded ABS

Colour White

Dimensions (D x H) 106 x 52 mm (excluding base)

Height (from ceiling with base) ZP7-SB1 surface base – 60 mm
ZP7-RB1 recessed base – 38 mm

Weight 105 g

Manufacturer traceability

A barcode label is affixed to each product (see example below). This label reflects, amongst other things, the date of manufacture of the product in the form YYDDD.



These numbers are interpreted as follows:

YY = year of manufacture

DDD = day of manufacture

For example the numbers 07134 would indicate that the product was manufactured on the 134th day of the year 2007, that is 14th May 2007.



Installation instructions

Note: No wiring is required during sensor installation. Refer to base datasheet for line wiring installation. All installation should be in accordance with the requirements of the authority having jurisdiction.

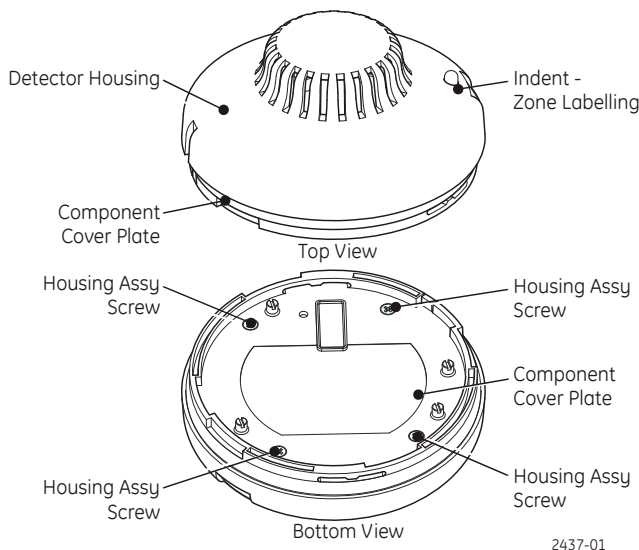
Refer to Figure 1. The sensor attaches to compatible bases with a plug-and-twist action as follows:

1. Align the sensor with the base and turn it slowly until the location lugs and grooves mate, allowing the sensor to slide completely into the base.
2. Rotate the sensor clockwise until it locks. To remove the unit from the base, perform these steps in reverse order.

Note: To prevent unauthorized removal, a plastic breakout tab is provided in the sensor housing. Once the breakout tab is removed the sensor can only be released by use of a special tool.

3. Prior to initial testing remove the yellow plastic dust cover from the sensor and notify the proper authorities that the fire alarm system is undergoing maintenance and will be temporarily out of service.
4. An indent is provided on the sensor exterior for application of Zone number labelling to allow easy zone identification.

Figure 1: Installing the sensor



Setting the address

Each sensor contains a 7-way dipswitch. The switch is used to set the device address in binary code. The codes for each switch are marked on the plastic housing. The switch may be set to represent any address from 1 to 127.

A switch only represents its coded value (i.e. 1st switch = 1, 2nd switch = 2, 4th switch = 8 etc) when it is in the ON position. In the OFF position it represents a zero.

To arrive at the address number of a device, add the representative numbers of all switches that are in the ON position: for example $2+4+32=38$.