

## ZX832-2P

### ZP7 Series Addressable Multisensing Fire Detector (POLAR WHITE)

#### General

The ZX832 is a POLAR WHITE, addressable optical/heat multi criteria detector for Ziton ZP compatible fire alarm systems. The ZX832 multisensor represents the next generation of fire detectors giving an earlier warning of fire or smoke with the ability to discriminate against false alarms. Fuzzy logic software using multi-criteria sensing form the basis of this advanced optical and heat detector.

The detector consists of integrated high sensitivity smoke and thermal sensors. The system combines the dynamic results of rates of change patterns and absolute levels of smoke and heat, to identify real fire criteria. Selectable software algorithms allow the response to be matched to each particular hazard. Algorithms can change for day/night operation.



#### Advanced self test facility

Units are of low-profile design and plug into either a surface, or a semi-recessed base. An automatic facility is provided to lock the sensor into its base, requiring a special tool to remove. The sensor contains a built-in LED that illuminates when the detector is in an alarm condition.

An advanced self test facility excites the smoke chamber as though smoke were present, and fully tests the complete sensor as well as communication with the panel.

ZX832 detectors are suited to applications requiring the highest level of alarm integrity. Each sensor can protect up to 100m<sup>2</sup> subject to room and ceiling design and local codes. If the detector is intended to be used in thermal-only mode at certain times, then maximum coverage is 50m<sup>2</sup>.

#### Automatic calibration

The ZX832 is a standard ZP addressable device that uses the ZP addressing system. Up to 127 devices may be connected to each ZP address loop. The system automatically compensates each sensor individually for calibration changes caused by dirt, temperature, humidity, voltage fluctuations and long term contamination.

#### Standard Features

- Multi-criteria fire sensing
- Enhanced detection certainty
- False alarm discrimination
- Fuzzy logic algorithms
- Selectable algorithms
- Microprocessor based
- Smoke element complies with EN54 Pt7
- Heat element complies with EN54 Pt5 class A1

### Specifications

|                     |                                                                              |
|---------------------|------------------------------------------------------------------------------|
| Model No            | ZX832-2P                                                                     |
| Specification       | EN54 Pt5 (Class A1) and EN54 Pt7                                             |
| Description         | Intelligent multisensing fire detector (polar white)                         |
| Sensitivity         | Smoke - $m = 0.13dB/m$<br>Heat - software selectable 58°C or 75°C            |
| Compatibility       | All ZP addressable systems                                                   |
| Mounting            | Plugs into surface or semi recessed base                                     |
| Area Coverage       | Smoke - 100m <sup>2</sup> , heat - 50m <sup>2</sup> , subject to local codes |
| Wiring              | 2 core loop or spur                                                          |
| Monitoring          | Open and short circuit fault. Detector removal and device type.              |
| Indication          | Alarm LED (red)                                                              |
| Operating voltage   | Address line pulsed 20V (19.5 to 20.5V). Max line less 4V                    |
| Current             | 600uA quiescent, 700uA alarm                                                 |
| Detection principle | Smoke - photo electric light scatter, thermal - thermistor                   |
| Application         | Indoor installation                                                          |
| EN60529 rating      | IP32                                                                         |
| Temp range          | -20°C to +75°C                                                               |
| Humidity range      | 20% to 95% RH (non condensing)                                               |
| EMC                 | CE marked (EEC89/336)                                                        |
| Material            | Moulded ABS                                                                  |
| Dimensions          | 106mm (dia) x 59mm (H) (excluding base)                                      |
| Height              | 67mm ZP7-SB1 surface base, 45mm ZP7-RB1 recessed base                        |
| Colour              | Polar White                                                                  |
| Weight              | 105g (excluding base)                                                        |
| Publication No      | PS1110                                                                       |

### Ordering Information

| Part No.  | Description                                                           |
|-----------|-----------------------------------------------------------------------|
| ZX832-2P  | ZP7 Series Addressable Multisensing Fire Detector (POLAR WHITE)       |
| ZP7-IB-P  | ZP7 Series Addressable Detector Isolator Base - POLAR WHITE           |
| ZP7-RB1-P | ZP7 Series Addressable Detector Base, Recessed Mounting - POLAR WHITE |
| ZP7-SB1-P | ZP7 Series Addressable Detector Base, Surface Mounting - POLAR WHITE  |

