



## Digital Intelligent Multi Sensor

DI-9101

### Description

Combining all the features of the DI-9102 Optical and the DI-9103 Dual Heat Detectors the unit provides an ideal solution for life and safety systems. Ideally suitable for application in data processing area including telephone exchange, conference rooms, indoor markets or shops, dining area, factory, recording studio and libraries etc.

Aesthetically pleasing with a low profile design, unobtrusive to complement modern building designs. The unit incorporates an intelligent processor that provides Algorithm map, Built-in A/D converter, Drift compensation, Self Diagnosis and history log.

The integral microprocessor analyses the signal according to the factors such as signal strength and rate of increase, then confirms these pattern with the pre-programmed fire scenarios and smoke patterns for a faster and safer response. By intelligent analysis, the smoke detection sensitivity will be automatically adjusted according to temperature change, providing a rapid response.

Secure and speedy communication through the on board processor enables the detector to make its own decision, resulting in greater automation. The sensor and the panels utilized fuzzy logic providing an almost limitless cause and effect scenarios.

Drift compensation, to monitor for the long term changes caused by aging, humidity, temperature, dust, etc. constant monitoring and self adjusting, the DI-9101 updates sensitivity base line for its sensing element. Even when the detector raises a warning advising that it requires cleaning, the sensitivity remains the same as the day it was installed.

Electronic addressing can be done through Handheld Programming device (P-9910), purchased separately.

### Features and Benefits

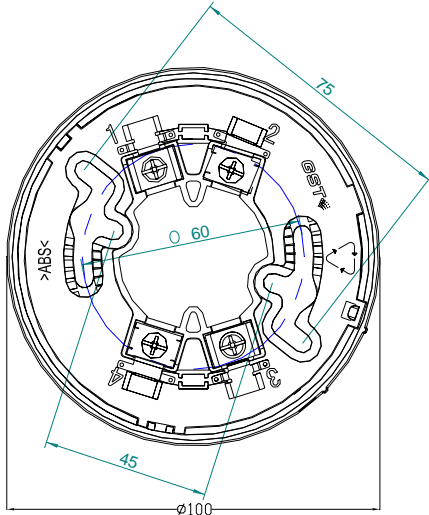
- Advance Digital Sensing Technique
- Built in 8 bit microprocessor
- Algorithm maps for faster response and false alarm rejection
- Analogue sensing
- Remote Indicator Output
- Secure and speedy communication
- Patented Linear Drift compensation
- Self diagnosis and history log
- Electronic addressing
- Sensing chamber for exceptional dust proof ability
- Twin LED for 360° vision
- Low profile design
- Ideal alternative to Ionization detector

### Technical Specifications

- Standard: EN54-part 5 and Part 7
- Protection rating: IP 32
- Operating voltage: 24Vdc Loop voltage
- Operating Current: Standby current 0.6mA  
Alarm Current 2mA
- Operating temperature: -10°C to +50°C
- Relative humidity: 95%
- Application: Indoor use
- Detecting range recommended: 30 Sq. m. for normal area; and 20 sqm for high risk
- Programmable sensitivity: 3 levels
- Visual Indicator: twin LED, Red ( lit steady when alarm, 3 sec interval blinking at normal state)
- Material and colour: ABS, off-white
- Wiring: 1 pair non polarized
- Dimensions: diameter 10cm; height 5cm

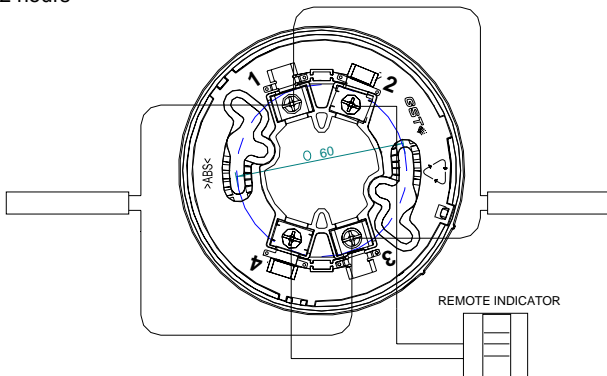
## Detector Installation

The detector is mounted using our standard base DB-01. Multiple-direction design allows easy direction adjustment. Suitable for surface mount only, mount on standard 1gang electrical back box with a mounting hole of 65mm spacing



## Wiring and Connection

Connect the wires to the required terminal according to the wiring diagram below; terminal 1(+) and terminal 3(-) for the loop; connection of remote indicator output is on terminals 2(+) and 4(-). The cable must be fire rated type and the size depends on the distance and application. Recommended cable size 1.5mm<sup>2</sup> fire rated min 2 hours



## Selection of compatible Control Panels

Compatible with all GST Intelligent Fire Alarm Panels GST 100, GST 200/2, GST 5000, GST 9000 and IFP8

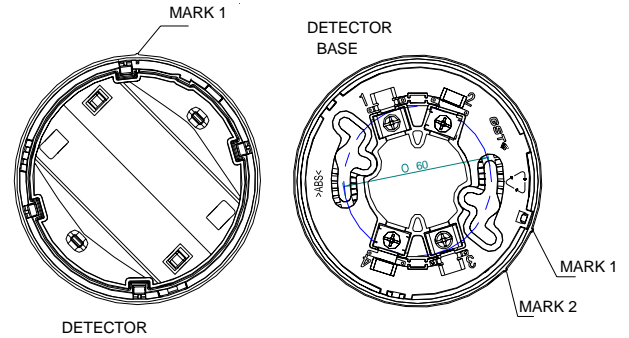
## Accessories



**Part Number:** DB-01  
**Description:** Detector base  
**Weight / Kg.:** 0.049  
**Pack Qty. per Box:** 300

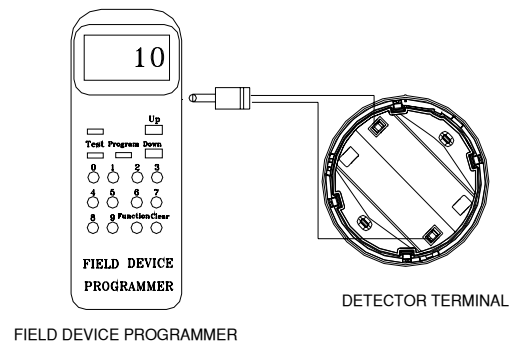
## Detector Installation

The Intelligent multi-sensor smoke detector should be installed in compliance with all local codes having a jurisdiction in your area or BS 5389 Part 1 and EN54. Before installation verify the proper wiring and base are firmly mounted to prevent detector damage before the installation. Point the detector in the base by the mark-line and secure the detector in that position by rotating it clockwise until it reaches the next mark line. Do not remove red plastic dust cover until the final handover is done.



## Programming

The address and sensitivity of the detector can be programmed using GST handheld programmer (P-9910), purchased separately. Connect the two wires of the handheld programmer to any two opposite terminals of the detector.



## Ordering Information



**Part Number:** DI-9101  
**Description:** Digital Intelligent Multi Sensor  
**Weight / Kg.:** 0.110  
**Pack Qty. per Box:** 100

