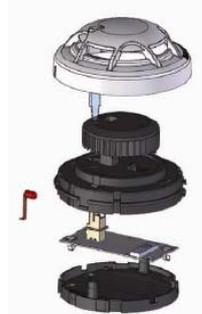




www.gst.uk.com
info@gst.uk.com

Digital Optical Smoke Detector

DI-9102



Features and Benefits

1. Advance digital sensing technique
2. Built in 8 bit microprocessor
3. Algorithm maps for faster response and false alarm rejection
4. Secure and speedy communication
5. Intelligent Drift compensation
6. Self diagnosis and history log
7. Electronic addressing
8. Duplicated address report
9. Sensing chamber for exceptional dust proof ability and LED for 360° vision
10. Built in remote indicator output
11. Unique Low profile design
12. EN54 compliance

Description

The DI-9102 Digital Optical Smoke Detector is the ideal device for most application due to its excellent digital response to a wide variety of different type of smoke patterns. The unit meets the sensitivity requirement of EN 54 part 7, European Standard

Unique and pleasing with a low profile design, unobtrusive to complement modern building designs. The unit incorporates an intelligent processor that provides Algorithm map, Digital signaling, Drift compensation, Self Diagnosis and history log.

The integral microprocessor analyses the signal according to integrated algorithm of analyzing fire, 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 and sending data to the panel within a second, 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-9102 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 and sensitivity adjustment can be done through Handhold Programming device (P-9910B), purchased separately and can be modified in the panel

Technical Specifications

- Standard: EN54-part7
- Approval: CE
- Protection rating: IP 32
- Operating voltage: 24Vdc Loop voltage
- Operating Current:
Standby current 0.6mA
Alarm Current 1.8mA
- Operating temperature: -10°C to +50°C
- Relative humidity: 95%
- Application: Indoor use
- Detecting range: 100 sqm
- Field Programmable sensitivity: 0.10dB/m to 0.56dB/m – 3 levels
- Address setting: Electronic addressing within 1 to 241, engage one address
- Visual Indicator: LED, Red (lit steady when alarm, flash in polling)
- Material and colour: ABS, traffic-white
- Wiring: 1 pair non polarized
- Dimensions: diameter 10cm; height 4.45cm

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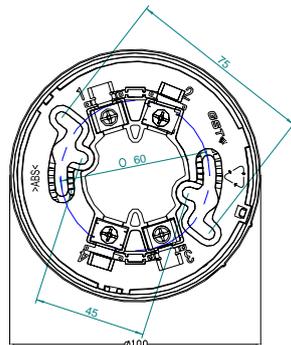
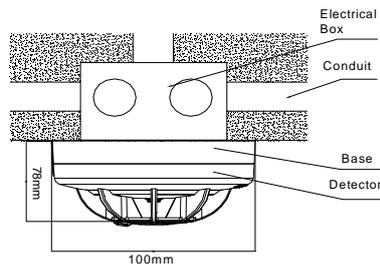
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Digital Optical Smoke Detector

DI-9102

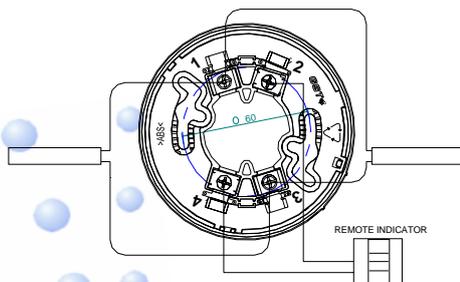
Mounting Standard Base

The digital detector should be installed in compliance with all local codes or NFPA 72 National Fire Alarm Code, NFPA 70 National Electrical Codes, BS 5389 and EN54. The detector is mounted using our standard base DB-01 allows easy adjustment. Suitable for surface mount only, mount on standard 1gang electrical back box with a mounting hole of 45mm to 75mm spacing.



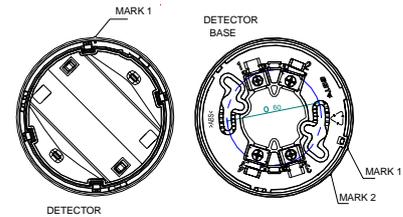
Wiring and Connection

Connect the wires to the required terminal according to the wiring diagram. Detector loop are connected on terminals 1 and 3 while for the remote indicator output, connect the wire on terminals 2 and 4. The cable must be fire rated type and the size depends on the wiring distance. Minimum size gauge 1.0mm²(18 AWG).



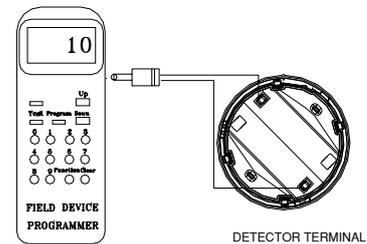
Detector Installation

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.



Programming

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



FIELD DEVICE PROGRAMMER

Selection of compatible Control Panels

Compatible with all GST Intelligent Fire Alarm Panels GST100, GST200, GST5000, GST IFP8.

Ordering Information:

Part No	Description	Weight /Kg	Pack Qty per Box
DI-9102	Digital Optical Smoke Detector with Remote Indicator	0.110	120
DB-01	Detector Base	0.049	360



Note: Specifications are subject to change without notice.

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