

# DI-M9101N Intelligent Multi-criteria Smoke and Heat Detector



## Description

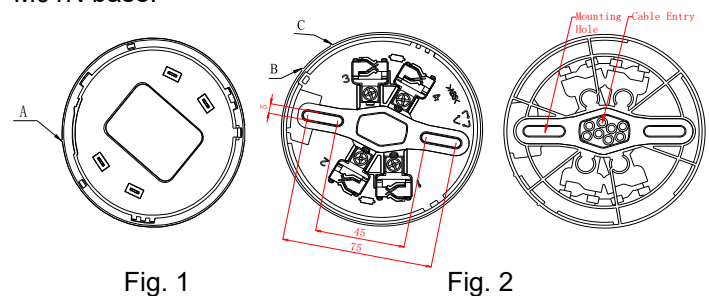
DI-M9101N Intelligent Multi-criteria Smoke and Heat Detector integrates photoelectric detection and fixed temperature detection technology by combining smoke sensor and semi-conductor heat sensor in mechanical and circuit structure. Using Multi-Wave Multi-Angle (MWMA) technology, DI-M9101N detector can identify features of smoke particles from different types of fire, improving sensitivity while reducing unwanted alarms caused by dust. With its heat sensor, the detector can also detect open fire with significant temperature rise such as alcohol flame, thus extending its range of application.

## Features and Benefits

- Address can be programmed in field;
- Strong environmental adaptability due to drift compensation
- Remote indicator output available;
- Reed switch test;
- Self-diagnostic;
- Polling LED can be set to OFF;
- 3 levels of smoke sensitivity programmable, complying to UL268 7th Edition; Fixed temperature feature complies to UL521.

## Terminals and Installation Holes

Fig. 1 shows the detector bottom and Fig. 2 DB-M01N base:



- 1&3: Loop connection (non-polarized)
- 2: Positive terminal of remote indicator
- 4: Negative terminal of remote indicator

Warning: Do not punch mounting holes and cable entry holes bigger than needed. Do not punch more holes than needed.

## Recommended Cabling

1.0mm<sup>2</sup> or above fire cable is recommended, laid through metal or flame-retardant conduit, but subject to local codes. It's suggested to use cables of different color for remote indicator connection to distinct polarity.

## Application

The factory default setting is fixed temperature and smoke sensitivity Level 2. The detector can be addressed, and information be read or written in field using P-9910B programmer. Below is the parameters set using programmer.

Detector Parameter	Smoke Sensitivity	Heat Setting	Polling LED
1	1	Fixed	Normal
2	2	Fixed	Normal
3	3	Fixed	Normal
129	1	Fixed	OFF
130	2	Fixed	OFF
131	3	Fixed	OFF

## Certificates and Compliance

- Standards: UL 268 / UL 521. Listed by UL
- WEEE & RoHS compliant

## Order Information

Part No.	DI-M9101N
Device Name	Intelligent Multi-criteria Smoke and Heat Detector
Product No.	10106110
Compatible Products	GST-M200, GST-IFP4M Intelligent Fire Panel

## Technical Specification

Operating Voltage	loop 24V (16V~28V)
Standby Current	≤0.4mA
Alarm Current	≤1.4mA (without remote indicator) ≤ 3.4mA (with remote indicator)
Fire LED	Red. Flashes in polling, and illuminates in alarm
Fault LED	Yellow. Illuminates steadily in fault.
Remote Indicator Output	Polarity-sensitive output, directly connects to remote indicator (built in 10k resistor in series with max. output current 2mA); Flashes in alarming and does not illuminate in normal state.
Programming Method	Electronically addressed
Address Range	Occupying one address within 1~242
Wiring	Loop: two wire, polarity-insensitive Remote indicator: two-wire, polarity-sensitive
Smoke sensitivity Range	Level 1: 1.38%~3.38%/ft Level 2: 2.25%~4.25%/ft Level 3: 3.12%~5.12%/ft
Max. spacing (when used as heat detector only)	50 ft. (15.2 m)
Action Temperature	135°F(57.2°C)
UL Approved Environment Temperature	32° F (0° C)~120° F (49° C) 0 - 95%, non condensing
Operating Environment Temperature	14° F (-10° C)~122° F (+50° C) 0~95%, non-condensing
Ingress Protection Rating	IP2X
Dimensions	Diameter: 100mm Height: 54.5mm (with base)
Mounting Hole Distance	45mm~75mm
Weight	About 110g

## Accessories and Tools

Model	Name	Product No.
P-9910B	Hand held programmer	10104894
DB-M01N	Common Detector Base	30209761
DI-M9402	Addressable Sounder Base	10105980
DC-M9402	Conventional Sounder Base	10106029
C-9314P	Remote Indicator	10102339
BP-9314P	Back Plate (for remote indicator)	30208096