

# DC-M9101

## Conventional Combination Heat Photoelectric Smoke Detector



### Description

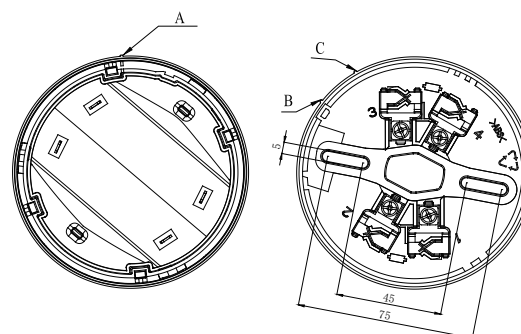
DC-M9101 Conventional Combination Heat and Photoelectric Smoke Detector integrates photoelectric detection, fixed temperature and rate of rise detection technology. The smoke sensor and heat sensor are integrated in mechanism and circuitry structure, provide wide range of application, to detect more types of fire conditions like black smoke with small particles and alcohol flame. Connected with compatible control panel or interface module, the detector will build up fire detection system.

### Features and Benefits

- Strong environmental adaptability due to drift compensation
- Self-diagnostic
- Reed switch test
- Dirty chamber checking
- Fire LED allows 360° viewing
- LED indication for both fire and normal status
- LED indication for normal status can be turned off by handheld programmer
- Remote indicator output
- 2 levels smoke sensitivities programmable, complies with UL268
- Heat part is fixed temperature, complies with UL521

### Terminals and Installation Holes

Below figures show the detector bottom and terminals of the base.



There are four terminals with marks on the base.

- 1: positive IN
- 2: positive OUT
- 3: negative IN and OUT
- 2: Positive terminal of remote indicator
- 4: Negative terminal of remote indicator

### Recommended Cabling

17AWG ~ 14AWG fire cable is recommended, but subject to local codes.

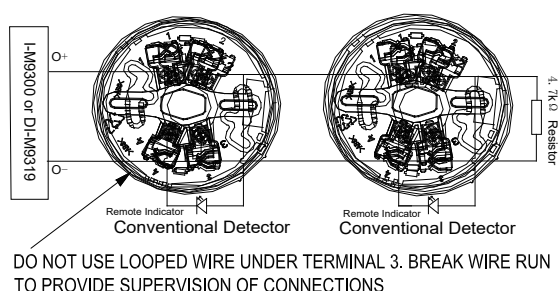
## Application

### Warning:

The detector should be connected with fire alarm control panel or other devices with current limit function. Otherwise the detector may be damaged by too heavy alarm current.

The alarm current depends on the current limit of the control panel or interface unit.

The detector is compatible with I-M9300 and DI-M9319 interface module. The typical connection is shown below.



Below table shows relative setting codes for sensitivity levels and working modes. Factory defaults at Level 2 + Fixed Temperature + Normal LED.

Detector Code	Smoke Sensitivity	Heat Detection	Polling LED
1	1	Fixed Temperature	Normal
2	2	Fixed Temperature	Normal
129	1	Fixed Temperature	OFF
130	2	Fixed Temperature	OFF

## Certificates and Compliance

- Standards: UL 268 / UL521
- Listed by UL
- WEEE & RoHS Compliant

## Order Information

Part No.	DC-M9101
Device Name	Conventional Combination Heat Photoelectric Smoke Detector
Product No.	10104836
Compatible Products	DI-M9319 Zone Monitor Module

## Technical Specification

Operating Voltage	24VDC
Standby Current	≤ 60μA
Alarm Current	≤ 55mA
LED Indicator	Red, periodically flash once in polling when the status is set to "ON"; don't illuminate when the status is set to "OFF". Periodically flash twice in fault or sensing chamber dirty; illuminate in alarming.
Remote Indicator Output	Polarized output. Directly connect to remote indicator (built in 10k resistor in series, output current is 2mA); Flash in alarming and do not illuminate in normal.
Maximum Ripple Voltage	2V ( peak-to-peak)
Alarm Reset	Instantaneous power down (Min.10sn, Max. 1.0VDC)
Setting of sensitivity and range	Level 1: 1.23%~2.7% per ft Level 2: 2.0%~3.89% per ft
Maximum spacing (When Used as a Heat Detector only)	50 ft. (15.2 m)
Action Temperature	135°F (57.2°C)
Environment Temperature	32°F (0°C) ~ 100°F(+37.8°C)
UL Temperature Range	32°F (0°C) - 100°F (37.8°C)
Operating Temperature	14°F (-10°C) - 122°F (+50°C)
Relative Humidity	≤ 95%, non-condensing
Material of Enclosure	ABS White (RAL 9016)
Ingress Protection Rating	IP2X
Dimensions	Diameter: 100mm Height: 54.5mm (with base)
Mounting Hole Distance	45mm-75mm
Weight	110g

## Accessories and Tools



Part No.: DC-M9402  
Device name: Conventional Sounder Base  
Product No.: 10106029



Part No.: DB-M01  
Device name: Common Detector Base  
Product No.: 30205767



Part No.: C-9314P  
Device name: Remote Indicator  
Product No.: 10102339



Part No.: P-9910B  
Device name: Handheld Programmer  
Product No.: 10104894