

CONVENTIONAL MULTI CRITERIA DETECTOR

MODEL NO- C-MD01



The Conventional Multi-Criteria Detector is a microprocessor-based fire sensing device engineered to deliver accurate, stable, and early fire detection in conventional fire alarm systems. The detector integrates infrared photoelectric smoke sensing technology with a fixed temperature and rate-of-rise thermistor-based heat sensing element, enabling intelligent evaluation of multiple fire signatures to ensure fast response to real fire conditions while minimizing nuisance and false alarms caused by dust, airflow, or ambient light interference.

Designed for seamless compatibility with all standard conventional fire alarm control panels and zone monitor modules, the detector operates with low standby current consumption and incorporates advanced signal processing algorithms for enhanced detection reliability and environmental stability. Its dust-resistant optical chamber, anti-light interference shielding, and thermally stable sensing components ensure consistent performance across a wide range of installation environments including commercial buildings, institutional facilities, industrial areas, and public infrastructure.

The detector features a 360° bi-color LED status indication system providing clear visual annunciation of operational states—periodic blinking in normal standby condition and steady illumination during alarm—facilitating rapid identification during inspection or emergency response. Housed in a sleek, low-profile, flame-retardant enclosure optimized for ease of installation and maintenance, the device is manufactured in accordance with relevant fire safety and performance standards, ensuring dependable long-term operation within modern fire detection networks.

KEY FEATURES:

- Sleek, Low-Profile Housing Design for modern aesthetic and easy ceiling integration.
- Highly Reliable Operation with reduced false alarm occurrences.
- Simple and Quick Installation for efficient system deployment.
- Dual LED Indicators with 360° Visibility for clear status monitoring from all directions.
- Green LED Blinking in Normal Condition and Steady Red LED during Fire Alarm.
- Network Relay Output for Remote Indicator (RI) connectivity.
- Advanced Detection Technology combining Infrared Photoelectric Sensor and Thermistor-based Heat Sensing.
- Dustproof and Anti-Light Interference Design ensuring stable performance in challenging environments.
- Low Standby Current Consumption for energy-efficient operation.
- Compatible with All Makes of Conventional Fire Alarm Panels and Zone Monitor Modules.
- Bi-Color LED Status Indication for clear operational feedback.
- **Remote Indicator Blinking in Normal Mode for visual system assurance.**
- Recommended Installation Coverage: Up to 5 meters mounting height.
- If you'd like, I can also design this in a datasheet layout, brochure format, or image-style product feature sheet.

APPLICATIONS:

The Conventional Multi-Criteria Detector is designed for reliable fire detection across a wide range of commercial, institutional, and industrial environments where early warning, stability, and reduced false alarms are critical. Typical applications include:

- **Commercial Buildings:** Offices, retail outlets, shopping complexes, banks, and business centers.
- **Residential & Hospitality:** Apartments, hotels, guest houses, and serviced accommodations.
- **Institutional Facilities:** Hospitals, clinics, educational institutions, libraries, and government buildings.
- **Industrial Premises:** Light manufacturing units, warehouses, assembly areas, and storage facilities with controlled environmental conditions.
- **Public Infrastructure:** Airports, railway stations, metro stations, auditoriums, and community halls.
- **IT & Communication Areas:** Server rooms, control rooms, data centers, and telecom facilities where stable and early detection is essential.

Its multi-sensor detection capability, environmental immunity, and compatibility with conventional fire alarm systems make it suitable for installations requiring dependable performance, minimal nuisance alarms, and long-term operational reliability.

TECHNICAL SPECIFICATION:

Product Design	2 Wire
Operating Voltage	16-30 V DC
Standby Current	75 mA.
Current Consumption at Alarm Condition	25 mA
LED Indication	Present
Sensor	Photoelectric & Thermistor
Quiescent Current	≤ 75uA
Blinking Cycle	12 sec.
Installation Method	Ceiling Mounted

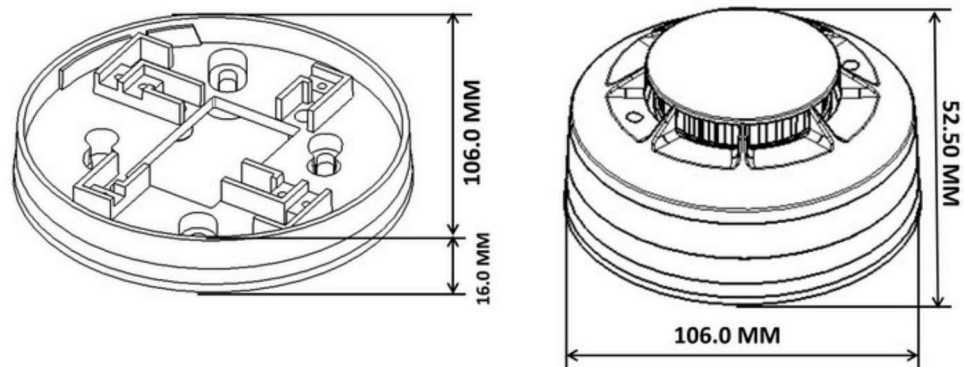
ENVIRONMENTAL INFORMATION:

Operating Temperature	0° C to + 65° C
Operating Humidity	5 to 95% Relative Humidity (noncondensing)

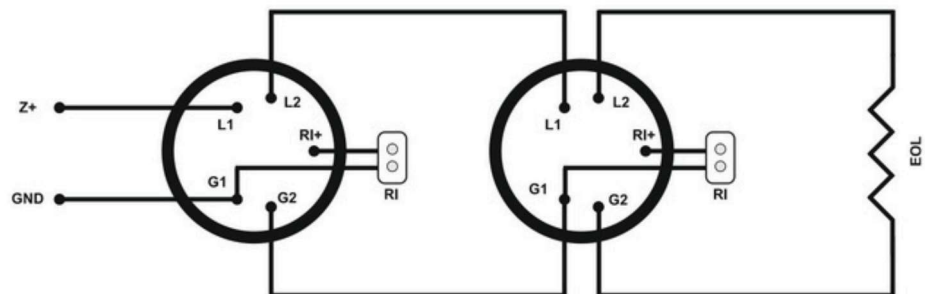
MECHANICAL SPECIFICATION:

Hight	52.4 mm
Diameter	106 mm
Colour	White
Weight	150 gm
Housing	ABS/Polymer

MECHANICAL DESIGN:



WIRING DIAGRAMS:



WIRING GUIDLINES:

- All the wire installation must accord with National and local effective laws and criteria.
- All wires must have the suitable size and must have colour coding to avoid connection errors. And unsuitable connection will lead to alarm error when Fire happens.
- The product should not be installed in the extreme hot or cold, high wind speed surroundings and in the conditions where there is often a lot of smoke or dust.
- The detector needs to be tested every 2 months.
- The product can reduce the possibility of accidents, but it cannot guarantee absolute safety. Besides using this product correctly.
- The dust cover cannot be removed until the project has been plunged into usage. Otherwise, it can't alarm normally.
- Clean the detector at least once a year to ensure normal operation of the system.

ORDERING INFORMATION:

MODEL NO	PACK QTY.	DIMESION IN MM	WEIGHT
C-MD01	1	106	150 gm

