

## Addressable Multisensor Detector with Speaker

Model – **AA105MDS**



### Features:

- ✓ Real time smoke and temperature info
- ✓ Built-in smoke sensor, thermal sensor and speaker
- ✓ Soft addressing
- ✓ Electrical supervision
- ✓ Corrosion protection
- ✓ Contamination alarm
- ✓ Sensitivity alteration from the panel

### Complied with:

**UL** 268-6th Edition  
521-7th Edition

**EN** 54-Part 5  
54-Part 7

**IS** 11360 & 2175

### Overview:

This digitally controlled addressable speaker unit with multisensor detector designed to be used for automatic fire detection and voice evacuation, public address system by complying with fire safety standard and National Building Code NBC2016. The unit is aesthetically designed compact and detachable unit from base having white polycarbonate housing.

This unit delivers dual function as PA speaker, smoke and heat detection. It benefits reduction of additional speaker, cables, control panel and cost.

Every unit is controllable using its ID, which enables targeted area speaker for voice paging and leaving other area undisturbed.

Control panel routes power, audio signal and transmit/receive control signal using 2 core cables to this unit.

Multisensor detector in this device is intended to be used for addressable automatic fire detection system to detect presence of smoke, smoke density and abnormal temperature for

fire alarm. This combined function of smoke and heat sensor (Multisensor detector) detects abnormal level smoke & heat and raises an alarm which continuously interacts with control panel to update the real time smoke and temperature exists at reported location. This sensor measures the smoke/temperature level in protected areas and analyses the level of smoke/temperature and verify with alarm level setting. When smoke/temperature level crosses the set level, it communicates to fire warning system control panel along with its ID. This smoke sensor works on photoelectric principle. It consists of special LED to illuminate the smoke chamber. This LED illumination level gets reduced due to its aging. Hence its sensitivity may go out of sensitivity range. Therefore it requires a periodical calibration to ensure its functional objective. Refer IS 2189 for more details. The unit is aesthetically designed compact and detachable unit from base having white polycarbonate housing.

## Specifications

### Electrical specifications

Operating voltage	17-24V DC
Quiescent current	850uA
Alarm current	20mA

### Indication

Normal	Green LED (Blinks during scan)
Alarm	Red LED (Glows steady)

### Mechanical specifications

Dimensions (DxH)		Weight (g)	
Without base	100x53mm	Without base	90g
With base	100x72mm	With base	140g

### General specifications

Smoke sensitivity	0.5 - 3.5 %obs/foot
Thermal sensitivity	20°C to 60°C
Operating temperature	0°C to 49°C
Storage temperature	5°C to 40°C
Sound Level	80dB at 1m
Humidity	0-95% RH (Non-condensing)
Colour	White
Housing	Polycarbonate
Compatibility	AU101X Protocol
Contact Clamp	Stainless steel

### Termination diagram:

