

## Addressable intelligent Heat Detector

Model - **AA101HD**



### Features:

- ✓ Real time temperature info
- ✓ Soft addressing
- ✓ Electrical supervision
- ✓ Corrosion protection
- ✓ Contamination alarm
- ✓ Sensitivity alteration from the panel
- ✓ Remote test facility from the panel
- ✓ Dual bi-colour LED indication for 360° viewing angle
- ✓ Transient voltage protection up to 2.4KV

### Complied with:

**UL** 521-7th Edition

**EN** 54-Part 5

**IS** 2175

### Overview:

Addressable point type spot heat detector intended to measure temperature level, wherever temperature monitoring required. This device primarily designed for automatic fire detection system. Fire is sign of abnormal temperature and sudden rise of temperature. Hence this abnormal condition is used for triggering fire warning system.

This device measures the temperature level in protected area and analyses the level of temperature and verify with predetermined alarm level setting. When temperature level crosses the set level, it communicates to fire warning system control panel along with its ID.

Alarm raised by the sensor, continuously interacts with control panel to update the real time temperature exists at reported location. If temperature level rises, action can be taken accordingly. Similarly if it gets reduced, action can be taken for normalcy by rescue staff.

## Temperature level alarm settings

Standard temperature level for alarm is set at factory. According to area of protection, this setting can be changed from control panel by the user.

## Soft addressing:

Based on order, address of the sensor is configured at factory. If alteration in the address is required, it can be changed from control panel. No extra special tools are required.

## Remote testing

The various functional validations manually from remote control panel can be done for maintenance and trouble shooting. If the control panel is connected to the cloud, it can be accessed through internet/mobile app.

## Detachable detector

A detector designed to be easily removed from its normal operating position for maintenance and servicing purposes.

## Insect Mesh

The heat chamber vent covered using anticorrosive metal mesh to prevent entry of insects.

## Environmental type testing

The detector environmental type tested, as per IS 11360, UL 264N with NABL India.

## Heat detector calibration

As per IS 2189/ NBC 2016 heat detector being measuring instrument and the sensitivity is vulnerable to get reduced, hence periodical calibration required. Our factory located at Chennai, India. We undertake calibration services for our make sensors and certify them. The certificate is mandatory to be maintained for the government and third party audit.

## Specifications

### Electrical specifications

Operating voltage	17-27V DC
Quiescent current	200uA
Alarm current	1mA

### Indication

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

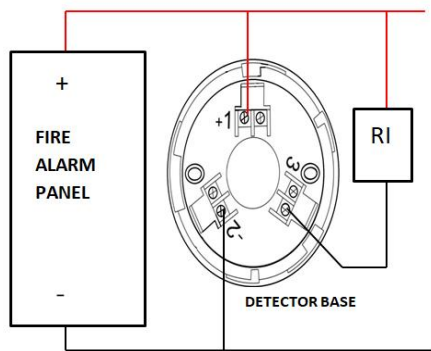
### Mechanical specifications

Dimensions(DxH)		Weight	
Without Base	100x30mm	Without Base	66g
With Base	100x42mm	With Base	106g

### General specifications

Thermal sensitivity	20°C to 60°C
Operating temperature	0°C to 49°C
Storage temperature	5°C to 40°C
Humidity	0-95% RH (Non-condensing)
Colour	White
Housing	Polycarbonate
Compatibility	AU101X Protocol
Contact Clamp	Stainless steel

## Termination diagram:



## Heat detector functional limitations

Objective of installing heat detector to detect abnormal temperature and pass the signal for automatic fire alarm system to alert the occupants and rescue professionals to save life and property against fire. The heat detector may not deliver its function due to various reasons.

Heat may not reach the detector due to inadequate temperature level; ceiling height may be high, wind flow from HVAC system.

Adequate number of detector shall be placed to cover protected area based on height, size, fire load etc. (refer IS 2189 or professional)

Detector may be in isolation/ deactivated mode at control panel. At such condition the detectors do not function.

Detector and control panel works together, if control is defective, the system fails to deliver its function.