IH 8221 - FLAME PROOF TRIPLE SENSOR UV-IR FLAME DETECTOR
FOR HAZARDOUS AREA APPLICATIONS

Fladet series IH8221 is an Ultra Violet and Infra Red Combined Flame proof Triple Sensor UV- IR Flame Detector suitable to be used in Hazardous areas. The detector makes use of both Infra Red and Ultra Violet radiations for effective & quick detection of Flame .

IR has a narrow spectral sensitivity of 3000 - 5000nm, insensitive to visible light. The Detector also make use of Ultra Violet Sensitive photo cathode for detection of flame. It has a narrow Spectral sensitivity of 185 - 260nm, insensitive to visible light and Solar Radiation.

It can be connected to any Standard Conventional Fire Alarm Panel or to any Annunciator or PLC or DCS through the Potential Free 'NO' contacts provided. Inbuilt Red LED is also provided for visible indication in case of Fire Situation. Flickering Green LED indicates the normal working condition of the detector.

IH 8221 Flame Detector detects both UV & IR spectra emitted by fire. This Combination ensures to eliminate false alarms such as Sunlight, Lightening, Welding Arcs, Hot Body radiations and Halogen lamps & responds quickly to actual flaming fires.

ADVANTAGES

- Rugged Explosion-Proof enclosure for Hazardous Environment
- ISI Marked & PESO Approved.
- Confirm to IS / ISO 7240-10 & EN54 -10
- Easy to install and operate
- High speed response
- Free from False Alarms
- Visual Indication for Normal & Fire condition
- Low Maintenance.
- Low Standby Current
- Detectors does not require any special type Control Panel.
- Swivel Mounting Base is provided for easy mounting at site.
- The detector can be detected 1 Sq. ft fire at 25-35 metres distance. The response time of the detector is depends on the size of the fire, fuel type, distance and angle of fire. Small fires & greater distances normally require more response time.

IH8221 TRIPLE SENSOR UV - IR FLAME DETECTOR

ISI MARKED

PESO APPROVED

APPLICATIONS

- Flame Detectors are very effective & can be used in a number of applications including,
- High-ceiling, Open spaced buildings such as ware houses and aircraft hangers.
- Outdoor or semi outdoor areas where winds or droughts can prevent smoke from reaching a heat or smoke detectors.
- Areas where rapidly developing flaming fires can occur such as aircraft hangers, petrochemical production areas, storage and transfer areas, Natural gas installations, etc.,
- Paint booths & Paint shop Areas
- Chemical Industries
- Environment that are unsuitable for other type of detectors.
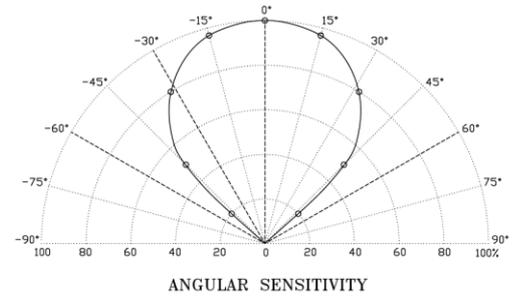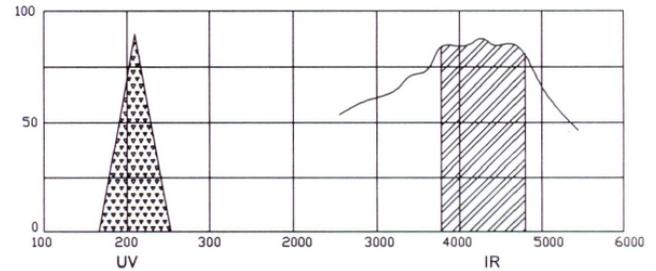

AIR CRAFT HANGERS

HIGH CEILING AREAS

PAINT BOOTHS

PETRO CHEMICAL PRODUCTION AREAS

TECHNICAL SPECIFICATION - PART NO : IH8221

No.	Parameter	Specification
01.	BRAND NAME	fladet Series...
02.	MANUFACTURER	AGNI CONTROLS , CHENNAI
03.	QUIESCENT CURRENT	< 80 mA
04.	ALARM CURRENT	< 150 mA
05.	RELAY CONTACT RATING	1A AT 24VDC, 0.5A at 120VAC
06.	CABLE ENTRY	M25 X 1.5 - 3 Nos
07.	SENSING ELEMENT	UV & IR
08.	RANGE	UV : 185-260nm IR : 3000-5000nm
09.	INDICATION	NORMAL - FLICKERING GREEN LED FIRE - RED LED
10.	OPERATING TEMPERATURE	-40 Deg.C to +60 Deg.C
11.	SUPPLY	24 VDC ± 20% (RESETTABLE)
12.	OUTPUT	1. TWO SET OF 'NO-COM' CONTACT FOR FIRE. 2. ONE SET OF 'NO-COM-NC' CONTACT FOR FAULT.
13.	MATERIAL	CAST ALUMINIUM LM6
14.	FASTENERS	SS 304
15.	EQUIPMENT RATING	Ex d IIC T6 Gb IP66
16.	ZONE CLASSIFICATION	ZONE1 & ZONE2
17.	GAS GROUP	IIC
18.	PERFORMANCE STANDARS	PERFORMANCE CONFIRMING TO IS/ISO 7240-10, EN54-10
19.	FLAMEPROOF STANDARDS	IS/IEC 60079-0:2017, IS/IEC 60079-1:2014
20.	CERTIFICATION	IS/IEC 60079 PART 1 CM/L-6700108610 PESO APPROVED Certificate No. E-5068-M (P609360/1)

ANGULAR SENSITIVITY

TRIPLE SENSOR - UV & IR DETECTOR SPECTRAL RESPONSE

INSTALLATION CONSIDERATION

1. Detector must be installed in such a way that no obstruction is on the way of sight of the detector.
2. Detector to be mounted focusing the possible fire risk area.

MAINTENANCE & INSPECTION

To ensure maximum detector sensitivity, keep the surface of the optical filter (detector eye) free from dirt or other contaminants at all times.

PACKING SIZE   : 305 (L) X 220 (B) X 210 (H)
                               (ALL IN MM)
PACKING WEIGHT   : 4 KG. MAX. APPROX.

ACCESSORIES

1. SWIVEL MOUNTING BASE - IH-MB-03-XY - 1 NO.

2. CABLE GLANDS - 2 NOS.

3. USER MANUAL

Important :

This document is not intended to be used for installation purposes. Specifications are subject to change without prior notice.