

# TRIPLE IR (IR<sup>3</sup>) FLAME DETECTOR

 **NOTIFIER**<sup>®</sup>  
by Honeywell

Flame Detection

## General

The Triple Infra-red (IR<sup>3</sup>) Flame Detector is designed to protect areas where open fires may be expected.

The IR<sup>3</sup> Flame Detector is sensitive to low frequency, flickering infra-red radiation emitted by flames during combustion.

Since it responds to flickering radiation the IR<sup>3</sup> Flame Detector can operate even if the lens is contaminated by a layer of oil, dust water-vapour or ice.

## Features

- Response range of 0.75 to 2.7µm radiation at 1 to 15 Hz
- Detects almost all flames
- Triple IR sensors respond to different IR wavelengths
- Discriminates between flames and spurious sources of radiation.
- False alarms are avoided by a combination of filters and signal processing techniques.
- Intrinsically safe & Exd models for use in hazardous areas
- Fire/Fault, Pre-alarm clean contact, latching or non-latching relays
- Integral alarm LED
- To reset after an event, interrupt power to the detector for minimum of 1 second
- Front or rear viewing models
- Class 1 Sensitivity to EN54-10  
Detects 0.1m<sup>2</sup> fire @ 25m




- High optical interference immunity
- Selectable response speed
- Optical self test
- Low power consumption

## Approvals

**Flameproof (Ex d)**  
(Zones 1, 21, 2 and 22)

- **ATEX**


 II 2GD

- **IECEX**

Ex d IIC T4 Gb  
Ex d IIIC T135° C Db IP66 A21

**Intrinsically Safe (IS)**  
(Zones 0, 1 and 2)

- **ATEX**

 III G

**LPCB & CPD Approved to EN54-10**

## IR<sup>3</sup> Flame Detector Housings



**Front Viewing  
Die Cast Zinc Alloy  
Intrinsically Safe Model Available**



**Exd Flameproof Front Viewing  
Copper Free Aluminium Alloy**



**Exd Flameproof Front Viewing  
Stainless Steel (316)**

## Specifications

<b>Supply Voltage:</b>	14 - 30 VDC
<b>Quiescent Current:</b>	8mA maximum
<b>Alarm Current:</b>	28mA maximum
<b>Alarm Indicator:</b>	Red LED
<b>Power Up Time:</b>	2 Seconds
<b>Range of View:</b>	0.1m <sup>2</sup> n-heptane @ 25m
<b>Sensitivity:</b>	Class 1 (EN54-10)
<b>Field of View:</b>	90° cone
<b>Spectral Response:</b>	IR 0.75 to 2.7µm
<b>Temperature Range:</b>	-10° to +55° C (no condensation or icing)
<b>Relative Humidity:</b>	95% (non-condensing)
<b>IP Ratings:</b>	IP65 IP66 for Exd models

### Note:

When using IR<sup>3</sup> flame detectors, please avoid, direct or reflected sunlight on the optics, prolonged ambient temperatures above 55° C and obstructions in the field of view.

### Accessories:

Stainless steel adjustable mount  
Stainless steel weathershield

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