

Fire detection and evacuation solutions that save lives.

## Series 65 Conventional Base Mounted UV Flame Detector

### Description

The Series 65 Base Mounted Ultraviolet (UV) Flame Detector is designed to protect internal areas where flaming fires may be expected.

The detector is sensitive to ultraviolet radiation emitted by flames during combustion. Since it requires only UV radiation, the Flame Detector also responds to stationary flames with no flicker such as cigarette lighters and blue gas flames.

The detector is set to respond to ultraviolet radiation (185 to 260nm) emitted by almost all flames, including those invisible to the naked eye, e.g. hydrogen fires.

The detector has a single UV sensor with a narrow spectra response in order to discriminate between flames and most spurious sources of radiation and is designed for internal fully enclosed areas.

Caution: The detector will also detect electrical discharges from lightning or arc welding.

Note: When using the detector the following must be avoided; outside viewing, UV lamps, electrical sparking, welding and sources of radiation, UV light sources, prolonged ambient temperatures above 60°C and obstructions to the field of view.

### Applications for UV Flame Detectors

UV Flame detectors are designed for use in enclosed spaces and require clear line of sight within the area to be protected. They are unaffected by draughts or convection currents.

They are fast reacting and respond to a flame more than 25m away (refer Fig.1.)

### Installation Note

When fitting to the Ampac Zone Monitor (4210-0058/59) do not fit more than two Flame Detectors to each unit.

If fitting to ZoneSense conventional control panel or fitting to the 8 Zone Conventional board located in a LoopSense or FireFinder PLUS, do not fit more than seven Flame Detectors.

If fitting to an XP95 Zone Monitor do not fit more than one device per zone.



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### Specifications

Supply Voltage	12-33V DC
Quiescent Current	550µA
Alarm Current	61mA at 28V
Range of View	0.1m² n-heptane at 25m
Sensitivity	Class 1 (EN54-10)
Field of View	90° cone
Spectral response	UV 185 to 260nm
Operating Temperature	-40°C to +70°C (no condensation or icing)
Storage temperature	-40°C to +85°C
Relative humidity	0-95%, non-condensing
IP rating	66
Dimensions (mm)	100 Ø x 40 (detector) 100 Ø x 48 (detector & base)
Weight	150g (detector) 210g (detector & base)

### Item Numbers

4108-1001	Series 65 UV Flame Detector
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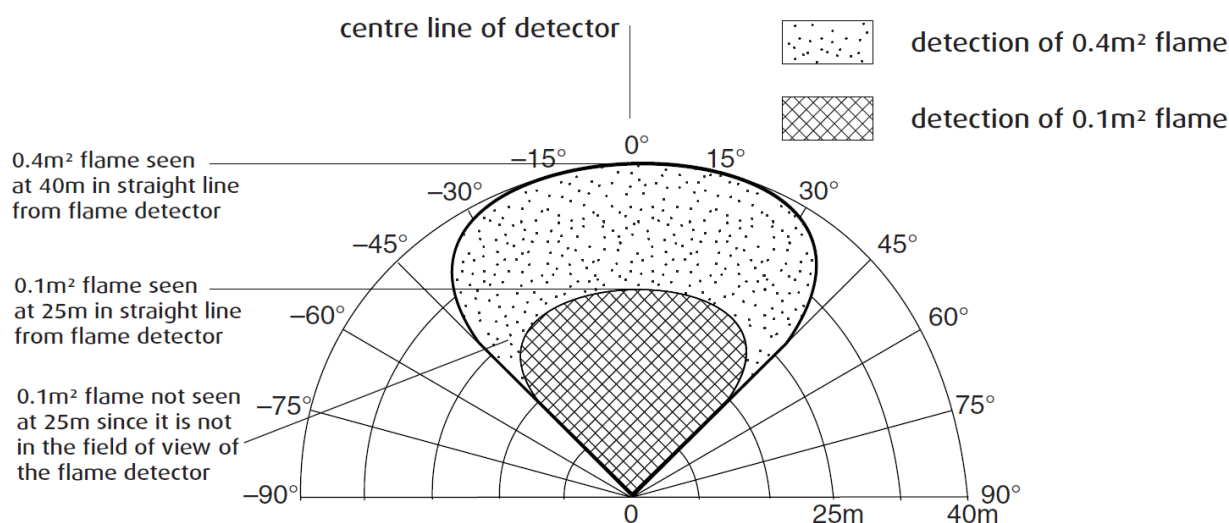


Fig.1 Field of view

The field of view of the flame detectors is shown in Fig.1. This also provides information on the size of the fire detectable at various distances.

The Flame Detectors can also be ceiling mounted, positioned above the anticipated flame source or at the centre of the area to be protected, perpendicular to the floor below. If the detector cannot see the whole of the area to be protected, one or more additional detectors may be required. Refer to the angle of view diagram Fig. 2 to establish the detector performance. The area of detection is dependent on the detectors height above the likely source of flame. The detector has 90° conical field of view or 45° either side of the viewing axis centre line. The maximum ceiling height is 20m. If the detector is

Perpendicular to floor and at a height of 10m then the detector will view a circular floor area below with a 10m radius (20m diameter circle).

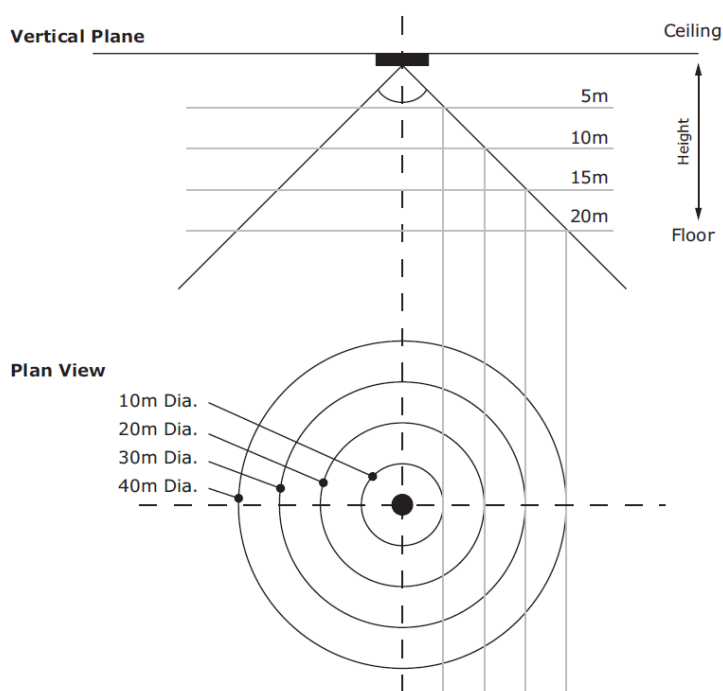


Fig.2 Ceiling mounting example