



The development of the ZTFD101 ultra violet flame detector is based on over 10 years experience in the field of flame detection.

The ZTFD101 is particularly suited in applications where flame can be expected to develop initially rather than smoke, due to the nature of the combustible materials such as camera films, video/audio/computer tapes, and petrochemical products (such as oil or petrol).

The detector should be installed indoors, either on a ceiling or a wall. For maximum sensitivity the detector should see the side of the flame, but this is not always possible. Also avoid obstructions (including glass), as the detector is a line of sight device.

Calculate the area of coverage of each device based on the height (or distance from risk area if wall mounted) and the cone of vision (120°).

This detector works best when fed from a clean supply with minimal ripple.

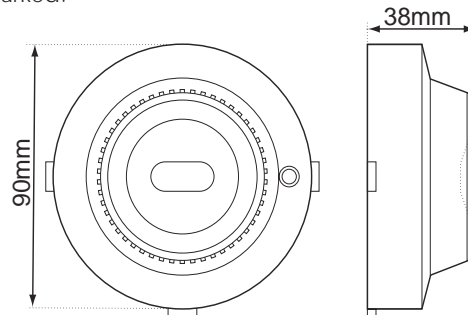
Maintenance consists of ensuring the quartz sensor tube is kept clean and free from silicon, oil and grease. The detector should be functionally tested at regular intervals.

Please note that this detector can give false alarms if exposed to spurious sources of UV, such as sparks, uncovered quartz halogen lights, or lightning.

ELECTRICAL SPECIFICATION

Model	ZTFD101
Part No	47-001
Supply Voltage	12-30V DC
Average quiescent current at 24V	3mA
Operating Temperature	-10°C - 50°C
Max Humidity	95%RH N/C
Max Wind Speed	Not affected
Storage Temperature	-25°C - 80°C
Alarm current	45 mA
Detection Angle	120°
UV Sensitivity Range	185 - 260nm
Construction	Off White FR ABS
Response time	3 sec for 25mm flame @ 6 metres
Detector size	90mm diameter x 40mm deep
Weight	98g (146g)
Detector base	ZT110

- Low profile shape for UV detector
- The detector is solar blind and incorporates an electronic filter to eliminate unwanted alarms from naturally occurring phenomena.
- High immunity to Electrical noise & RF Interference.
- Fast response time.
- Supplied with its own base.
- Typically detects 25mm gas flame at 6 metres within 3 seconds.
- 120° cone of vision.
- Low Cost.
- CE Marked.



Limitations of Use of Flame Detectors

1. Because the flame detector is a very fast reacting device, if several of these detectors are connected on the same zone, covering the same area, it is possible that they could all go into alarm at the same time, which the FACP could see as a short circuit (High current drawn). Check with the FACP manufacturers. If in doubt, use only one detector per zone.
2. Due to its nature of operation, the flame detector takes a high quiescent current. On some panels (with Resistor end of line), connecting more than 2 of these may prevent open circuit monitoring. Again, if in doubt, use only one detector per zone.

At 3 metres, the detector can be set off by the flame from a candle.

At 8 metres, the detector can be set off can be set off from the flame from a wad of burning paper.

The Response time depends on the flame size (as seen by the detector) and the distance from the flame.

The UV flame detector is a line of sight device, and cannot see past obstructions, such as storage racks.

