FEATURES

- ✓ Highest immunity to false sources
- ✓ Increased environmental protection
- ✓ Solar blind
- ✓ Tolerant of fumes, vapours, dust and mist
- ✓ Suitable for indoor and outdoor areas
- ✓ Unaffected by convection currents, draughts or wind
- ✓ Proven response to multiple fuel types
- ✓ Multi-spectrum detection
- ✓ Selectable output options
- ✓ Selectable response speed
- ✓ Selectable sensitivity levels
- ✓ Built-in auto and manual test
- ✓ Low current consumption
- ✓ Fast response to fire

PRODUCT DESCRIPTION

The flameproof Ultra-Violet, dual Infra-Red (UV/IR²) Flame Detector is designed to protect specialist hazardous areas where open fires may be expected and detects almost all flames, including hydrocarbon fires with 4.3µm emissions through to invisible fires such as hydrogen.

The UV/IR Flame Detector is sensitive to flickering, low frequency (1-15Hz) infra-red radiation emitted by flames during combustion.

This detector has a UV sensor and two IR sensors which respond to different wavelengths of both the ultra-violet and the infra-red spectrum. The signals from these sensors are processed by the detector and checked for characteristics of a flame. The simultaneous detection of both the UV and the IR light by the sensors will signal an alarm. False alarms from flickering sunlight, arc welding and lightning are eliminated by a combination of UV and dual IR signal processing techniques. The UV/IR² detector has selectable output options of relay contacts or 4-20mA signal, as standard.

Note: This is an indent item, lead times of up to 4-6 weeks may apply.

APPLICATIONS

- ✓ Chemical plants
- ✓ Refineries
- ✓ Nuclear power sites
- ✓ Pharmaceutical production
- ✓ Military applications
- ✓ Fuel loading racks
- ✓ Engine rooms
- ✓ Printing
- ✓ Marine industry
- ✓ Storage tanks
- ✓ Aircraft hangars
- ✓ Spray booths

NSW
18-20 Brookhollow Ave
NORWEST 2153
02 8850 2888
sales@firesense.com.au

VIC
Unit 4, 297 Ingles St
PORT MELBOURNE 3207
03 9646 4557
salesvic@firesense.com.au

QLD
Unit 2, 225 Queensport Rd North
MURARRIE 4172
07 3890 8842
salesqld@firesense.com.au

www.**firesense**.com.au

TECHNICAL SPECIFICATIONS

MECHANICAL

Housing material	Stainless steel
Housing colour	Natural
Dimensions	150mm H x 146mm W x 137mm D
Weight	6kg
Cable Gland Entries	3 x 20mm
Wiring	1.0 to 4.0mm²

ELECTRICAL

Sensor supply	14 to 30Vdc
Quiescent current	8mA, RL2 energised 4mA, current loop, RL2 off 3mA, RL2 off
Alarm current	28mA, RL1 & RL2 energised 20mA, current loop, RL1 & 2 off 9mA, RL1 energised
Power up time	2 seconds max
Test signal voltage	14 to 30Vdc
Relay outputs Programmable Ratings: current Voltage Power	Normally open or normally closed. Latching or non-latching 1.0A max. 50Vdc max. 30W max. (Note: resistive loads only)

PERFORMANCE

Range	- Class 1:	0.1m² n-heptane at 25m
	- Class 3:	0.1m² n-heptane at 12m (see EN54:10 for sensitivity settings)
Field of View		90º min. cone
Operating wavelength		
	- IR	1.0 to 2.7µm
	- UV	185 to 260nm

ENVIRONMENTAL

Operating temperature	-10ºC to +55ºC
Storage temperature	-20ºC to +65ºC
Relative humidity	95% non-condensing
IP rating	IP66

RESPONSE CHARACTERISTICS - HIGH SENSITIVITY

| Fuel	Flame Size (m)	Certified distance (m)	Average response time (seconds)
n-Heptane (yellow flame)	0.3 x 0.3	25	12
Methylated spirit (clear flame)	0.5 x 0.5	25	25
Hydrogen (non-visible flame)	0.1 x 0.5	12	8

ACCESSORIES

✓ **INT-AM:** Adjustable mount (required for all flame detectors)
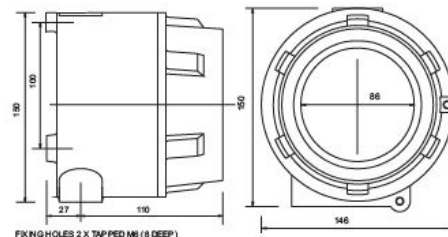✓ **INT-DET-TESTER:** Portable flame detector testing unit

APPROVALS

✓ ISSeP ATEX - ISSeP03ATEX012X
✓ SIL 2 - C127_CT003_(2.0)

Field of View
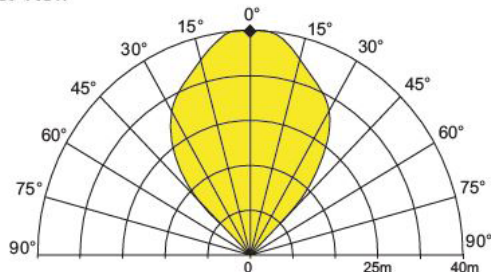
To meet the requirements of EN54:10 clause 5.4, where the ratio of the response points Dmax: Dmin should not exceed 1.41, the horizontal and vertical viewing angles max should not exceed ±30°.

Flame Detector

FIXING HOLES 2 X TAPPED M6 (8 DEEP)

Mounting Bracket

Dimensions mm

2 x Fixing holes 14 Dia