FF756N

16521 UV/IR² Flame Detector in Eexd - IIC T6 Flame Proof Housing

General

The FF756N is a UV / IR² flame detector in a flame proof housing. UV / IR² models have excellent response to flame while providing immunity to extraneous sources. New micro-processor technology makes the detectors independent of flame intensity enabling it to operate through smoke, a layer of oil, dust, or water vapor. A high and low sensitivity setting according to EN54-10 is provided.

Successor of FF756

Operation

The FF756N has a UV sensor and two IR sensors which respond to different wavelengths of both the ultra-violet and the infrared 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 FF756N has selectable output options of relay contacts or 4-20mA signal, as standard.

Installer and maintenance friendly

The units can be wired as conventional 2 wire, 4-20 mA, or relay contacts (fire, fault and pre alarm) in latching or non-latching operation. Remote test inputs are available to activate self-test.

A stainless steel adjustable bracket and weather shield is also available.

The units are tolerant to vibration, and wind does not affect the performance. The IR² unit has excellent tolerance to detector window contamination and can detect flame through glass windows.

A flame sensor test unit is available for accurate testing of the detectors.



Details

- Highest immunity to false sources like arc welding, lightning, and solar blind
- Tolerant of fumes, vapours, dust and mist
- Unaffected by convection currents, draughts or wind
- Suitable for indoor and outdoor areas
- Proven response to multiple fuel types due to multi-spectrum detection
- Proven response to multiple fuel types
- Selectable output options,response speed and sensitivity levels
- Built in auto and manual test
- Low current consumption

FF756N

16521 UV/IR² Flame Detector in Eexd - IIC T6 Flame Proof Housing

Technical specifications

Electrical

Operating voltage	14 to 30 VDC
Current consumption	8 mA (Quiescent - RL2 energised) 4 mA (Quiescent - current loop, RL2 off) 3 mA (Quiescent - RL2 off) 28 mA (Alarm - RL1 & RL2 energised) 20 mA (Alarm - current loop, RL1 & 2 off) 28 mA (Alarm - RL1 energised)
Cable specification	1.0 to 4.0 mm²

Detection

Field of view	< 90° Cone
Range	< 50 m
Lateral detection	< 45°
Optical wave length (all languages)	185 to 260 nm (UV)
	0.75 to 2.7 µm (IR)
Response time (all languages)	8 s @ 25 m (n-Heptane - yellow flame of 0.3 x 0.3 m @ 25 m)
	12 s @ 25 m (Methylated Spirit - clear flame of 0.5 x 0.5 m @ 25 m)
	16 s @ 25 m (Hydrogen - non-visible flame of 0.1 x 0.5 m @ 12 m)

Output

Output quantity	2
Output type and rating	Normally open or Normally closed (< 1 A @ 50 VDC - < 30 W resistive load)
Programmable	Latching or non-latching

Physical

Physical dimensions	150 x 146 x 137 mm (h x w x d)
Net weight	2.5 kg
Colour	Red
Mounting type	Surface mount
Cable entries	3 x 20 mm
Material (body)	Copper free aluminium alloy
Fixing centres	58 mm

Environmental

Vandal proof	No
Operating temperature	-10 to +55°C
Storage temperature	-20 to +65°C
Relative humidity	< 95% noncondensing
Environment	Exd, Indoor, Outdoor
IP rating	IP66

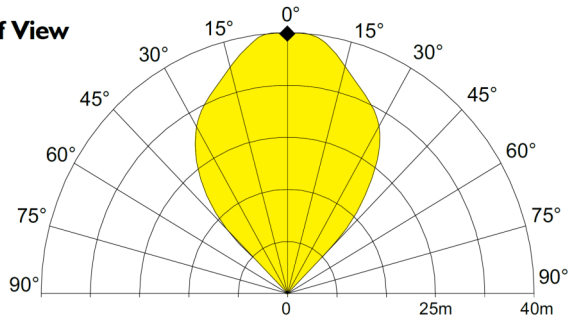
Regulatory

Compliancy	CE, REACH, RoHS 3, WEEE
Certification	CENELEC/ATEX, CPR
Voluntary marks	LPCB, VdS
Standards	EN54-10

IEC marking

	EEx d IIC T6

Field of View



EDWARDS
Built for Resilience

As a company of innovation, Kidde Global Solutions reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.

Last updated on 14 April 2026 - 15:32