

Intelligent IR³ Flame Detector



Technical Data

All data is supplied subject to change without notice. Specifications are typical at 24V, 23°C and 50% RH unless otherwise stated.

Supply voltage	14 - 35 V dc
Digital communication	XP95, Discovery and CoreProtocol compatible
Quiescent current	2.2 mA
Maximum power up time	4 seconds
Remote LED current	Limited to 2 mA
Range of view	0.1 m ² n-heptane at 25 m 0.2 m ² n-heptane at 35 m 0.4 m ² n-heptane at 45 m
Field of view	90° Min. Cone
Spectral response	1.0 to 2.7 μm
Sensitivity	High = Class 1 Low = Class 3
Operating temperature	-10°C to +55°C
Storage temperature	-20°C to +65°C
Relative humidity	0% to 95% RH (no condensation or icing)
IP Rating	IP65
Standards and approvals	EN54-10, CPR, LPCB,
Housing Material	Die Cast Zinc Alloy
Housing Colour	Blue
Dimensions	108 mm x 142 mm x 82 mm
Weight	2kg
Cable Gland Entries	2mm x 20mm

Product Overview

Product Type	Intelligent IR ³ Flame Detector
Part No.	55000-020
Digital communication	XP95, Discovery and CoreProtocol® compatible

Approvals



Product Information

The Intelligent Triple Infra-Red (IR³) Flame Detector is for use in harsh environments in either indoor or outdoor applications. It is sensitive to low frequency, flickering infra-red radiation emitted by flames during combustion.

The Intelligent IR³ Flame Detector is sensitive to low-frequency, flickering IR radiation emitted by flames during combustion. Since it responds to flickering radiation the IR³ Flame Detector can operate even if the lens is contaminated by a layer of oil, dust, water-vapour or ice.

The Intelligent IR³ Flame Detector is set to respond to low-frequency radiation at 1 to 15 Hz (1 to 2.7 μm) in order to detect all flickering flames including those invisible to the naked eye, e.g. those emitted by hydrogen fires.

- Loop powered
- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye.
- False alarms due to lighting or flickering sunlight are minimised
- 90° field of view
- Up to 40 m coverage

Figure 1: Flame size and distance from the detector

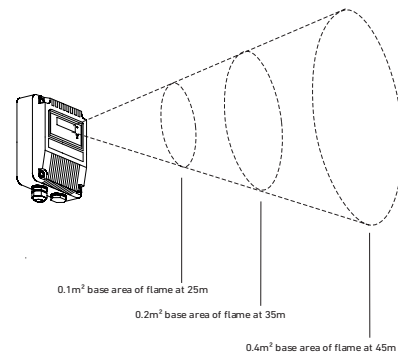
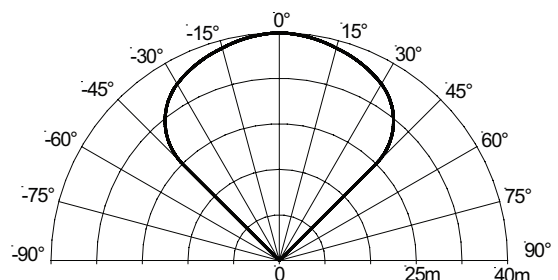


Figure 2: Flame detector field of view



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