

# Intelligent IR<sup>3</sup> 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.

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

## Product Overview

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

## Approvals



## Product Information

The Intelligent Triple Infra-Red (IR<sup>3</sup>) 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 IR<sup>3</sup> Flame Detector is sensitive to low-frequency, flickering IR radiation emitted by flames during combustion. Since it responds to flickering radiation the IR<sup>3</sup> Flame Detector can operate even if the lens is contaminated by a layer of oil, dust, water-vapour or ice.

The Intelligent IR<sup>3</sup> 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

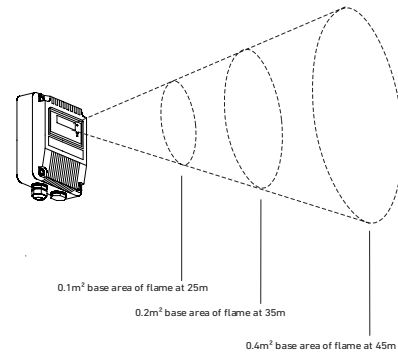
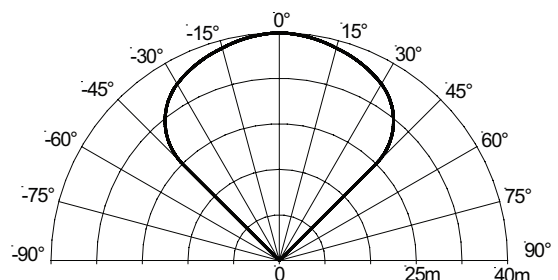


Figure 2: Flame detector field of view



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