



## XCR FP Corrosion Resistant Video Flame Detector

The XCR FP is a dual spectrum video flame detector which simultaneously processes visual and infrared feeds to recognise and detect fire. It is part of the Ciqurix CORE system, and uses the Ciqurix QLS protocol.

Housed entirely in electropolished and passivated AISI 316L stainless steel, and with IP66/67/68/69 ingress ratings, it is suitable for installation in highly corrosive areas and those with a high chlorine salt content, with complete protection against bad weather and water immersion. All connections are made inside the housing, with entry via a nickel-plated brass PG13.5 cable gland.

Designed to be used with a CORE Hub, it has punchdown cable termination suitable for "FP" fire resistant Cat 5e or Cat 6 data cable. Each XCR FP detector receives data and power through a single cable connected directly to the nearest CORE Hub.

### FC-XCR FP-106



**46°V**  
horizontal  
NARROW 6mm LENS



**IP66 IP67 IP68 IP69**  
USE IN WET & CORROSIVE AREAS  
316L PASSIVATED STAINLESS STEEL

When used with a CORE hub and wired in suitable fire-resistant cable, the FC-XCRFP-106 is designed to enable the installation to meet the requirements of BS5839-1:2017 and can be used as primary or sole means of fire detection.

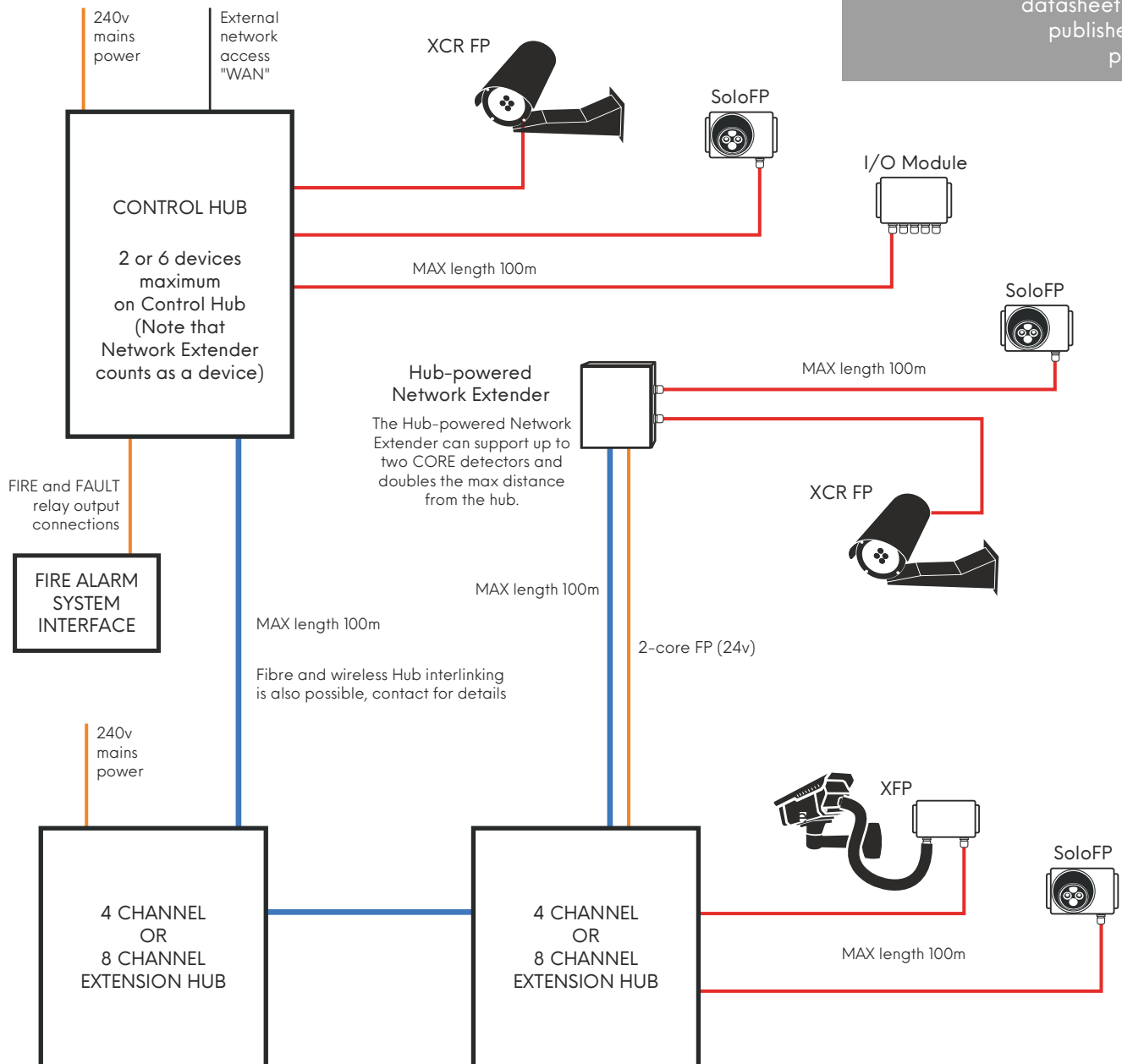
This data sheet is for the FC-XCRFP-106 which has a long range 46° 1-100m lens. Alternatively for the wide area 65° 1-65m lens see FC-XCRFP-104.

E&OE. Ciqurix operates a program of continuous product development. Specifications, product availability and part codes may be subject to change without notice. Any images provided in this sheet are representative samples. Please always check with Ciqurix for the latest information.

# Layout

This is an indicative layout for guidance only. Every site is different; please contact Ciqurix for advice.

- Hublink - fire rated cat6 - data
- QLS - fire rated cat5e or cat6 - data/power
- - - Ancillary connections - standard "FP" 2 core



4 or 8 additional devices maximum per Ext Hub (depending on model).  
Hubs can be connected directly to Control Hub or daisy-chained.

Each QLS field device is connected directly to a Hub using a fire rated 4-pair cat5e or cat6 data cable. Hubs are linked together using fire rated 4-pair cat6 data cable (fibre-optic and wireless linking is also possible). Hub-powered Network Extenders also require a fire rated 2-core dc power cable from a Hub.

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# OPA-S Dual Lens Technology



The XCR FP Video Flame Detector uses the Ciqurix OPA-S Dual Lens Optical Processing Technology Unit to detect flame at an early stage.

The OPA-S simultaneously processes live video and infrared video to look for fire. All the analytics and processing are done onboard the OPA-S in real time. At the same time as processing the live video stream, a separate high definition near-infrared video sensor provides an infrared video stream to a separate analytics engine, also onboard the OPA-S unit.

The analytics look at the colour, brightness, shape, flicker, movement and edge behaviour of potential flame, and compare this with previous images to spot developing fire.

Because a visible fire also has to look like flame in the infrared spectrum, the OPA-S can be extremely sensitive to fire and yet reject common causes of false alarms. The use of infra-red analytics means that the OPA-S can detect flame in the dark, through smoke, and in fog - because the infrared feed is largely unaffected by these conditions.



Visual feed

IR feed



## Alarm Output

- 4 x alarm output relays plus a global fault relay built-in to Control Hub
- Unlimited I/O Modules per system, each with 4 relay outputs
- Up to 8 zonal alarm areas per detector
- Advanced cause and effect options



## Video Feed

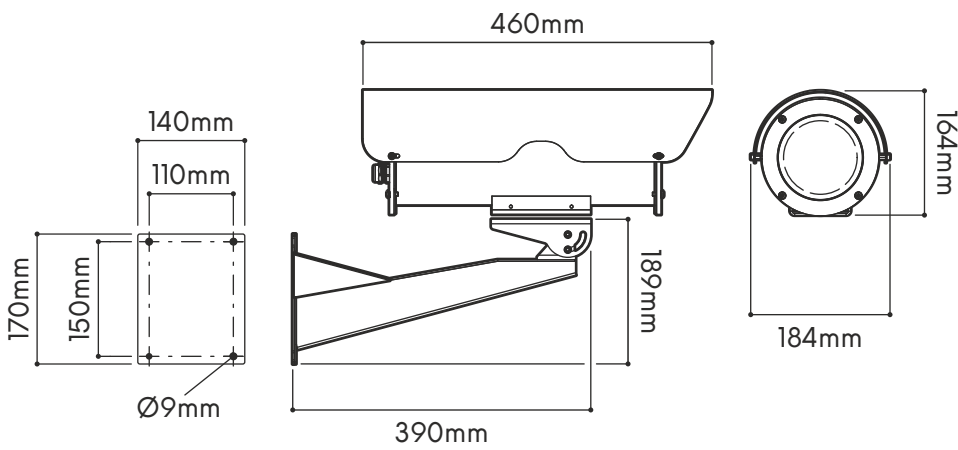
As a secondary function the XCR FP provides a live video feed in RTSP format, which can be recorded and viewed via an optional Network Video Recorder (NVR) fitted in the Control Hub. The NVR can be remotely viewed on a PC or phone across the client's network or internet. We also offer dedicated hardware for remote viewing.

Each XCR FP Video Flame Detector will appear to the NVR as an IP camera, providing a high-resolution main stream at 30fps and a low-resolution sub stream at 5fps. The alarm crosshairs and location information are burned into the video stream by the OPA-S unit at source, so will appear on the live view and recorded footage.

The CORE system is designed so the outputs can be easily connected to anything - fire alarm system, suppression, alarm sounder, remote communicator, etc.

The Control Hub has a global fault output and 4 alarm relay outputs. Each CORE Input/Output Module has a further 4 relay outputs. Every relay is volt-free changeover and is independently programmable. Each XFP detector can have up to 8 zonal areas drawn in the view, each of which can each be linked to a different relay output. Relays can be set to operate from one or more zones (including across different detectors), a single detector, a group of detectors, or all detectors (global).

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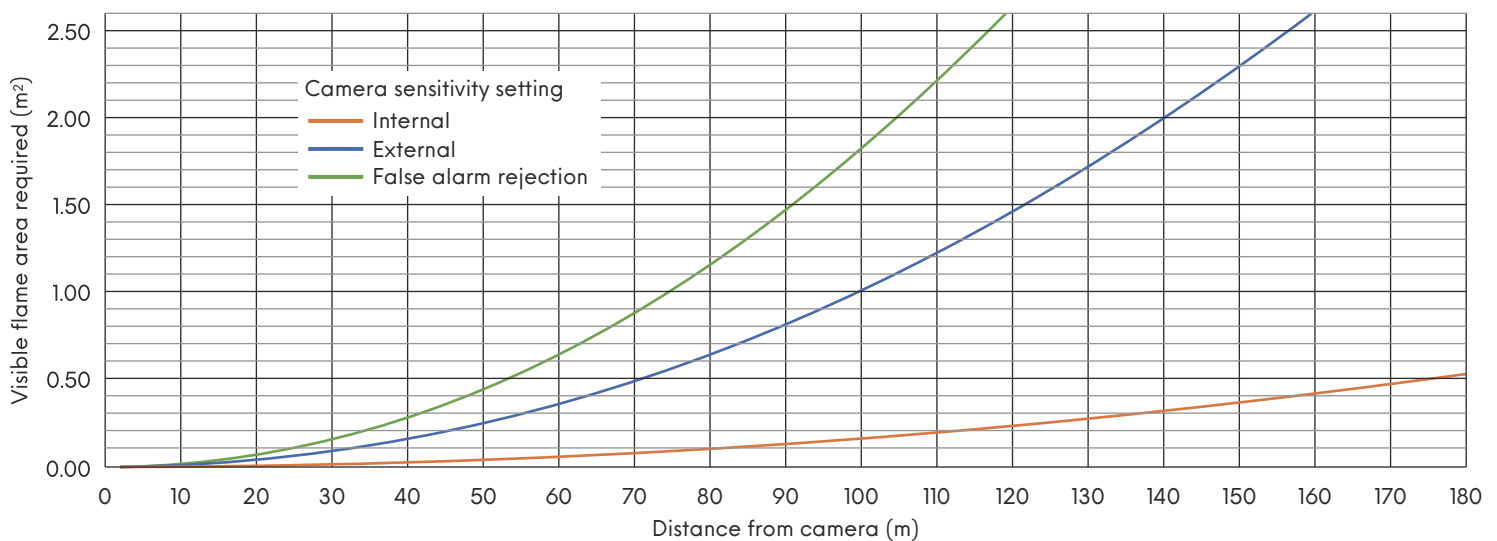


## Specification

FC-XCRFP-106	
<b>Detection distance:</b>	1 - 100m
<b>Viewing angle:</b>	46°(h) 25°(v)
<b>Temperature:</b>	-10°C to +50°C
<b>Detection time:</b>	10 seconds (typical)
<b>Environmental:</b>	IP66/IP67/IP68/IP69 - electropolished passivated 316L stainless steel housing
<b>Power:</b>	9-36Vdc 4W (supplied in QLS connection from CORE Control Hub or Extension Hub)
<b>Cabling requirement:</b>	1 x fire-resistant Cat5e/6 data cable from CORE Control Hub or Ext Hub (carries data & power) Maximum distance from Hub depends on cable spec, typically 80m (Cat5e), 100m (Cat6) Inline network extender available, see CT-NEFP-102
<b>Dimensions:</b>	540mm (l) x 184mm (w) x 353mm (h) - including bracket
<b>Weight:</b>	8.2 Kg
<b>Alarm output:</b>	Programmable fire and fault contacts located on CORE Control Hub or I/O Module
<b>Video format:</b>	RTSP H.264 1280x720@30fps (Main) 320x240@5fps (Sub)

## Sensitivity

Indicative flame size values; real-world sensitivity can be affected by multiple factors



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