CORE by CIQURIX

FC-XFPA-104
FC-XFPA-106

datasheet version 1.0
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(Camera bracket not included, see page 4 for options)

FCAM XFPA

FCam XFPA is the CORE version of the popular FCam X flame detection camera with the addition of air cleaning capabilities. Once provided with a compressed air feed to the included filter-regulator, the XFPA blows a steady low-volume curtain of air across its dual lenses to help prevent dust and other contaminants from landing. As part of regular planned maintenance the regulator can be turned up to provide a brief high-pressure jet to purge any dust which has built up.

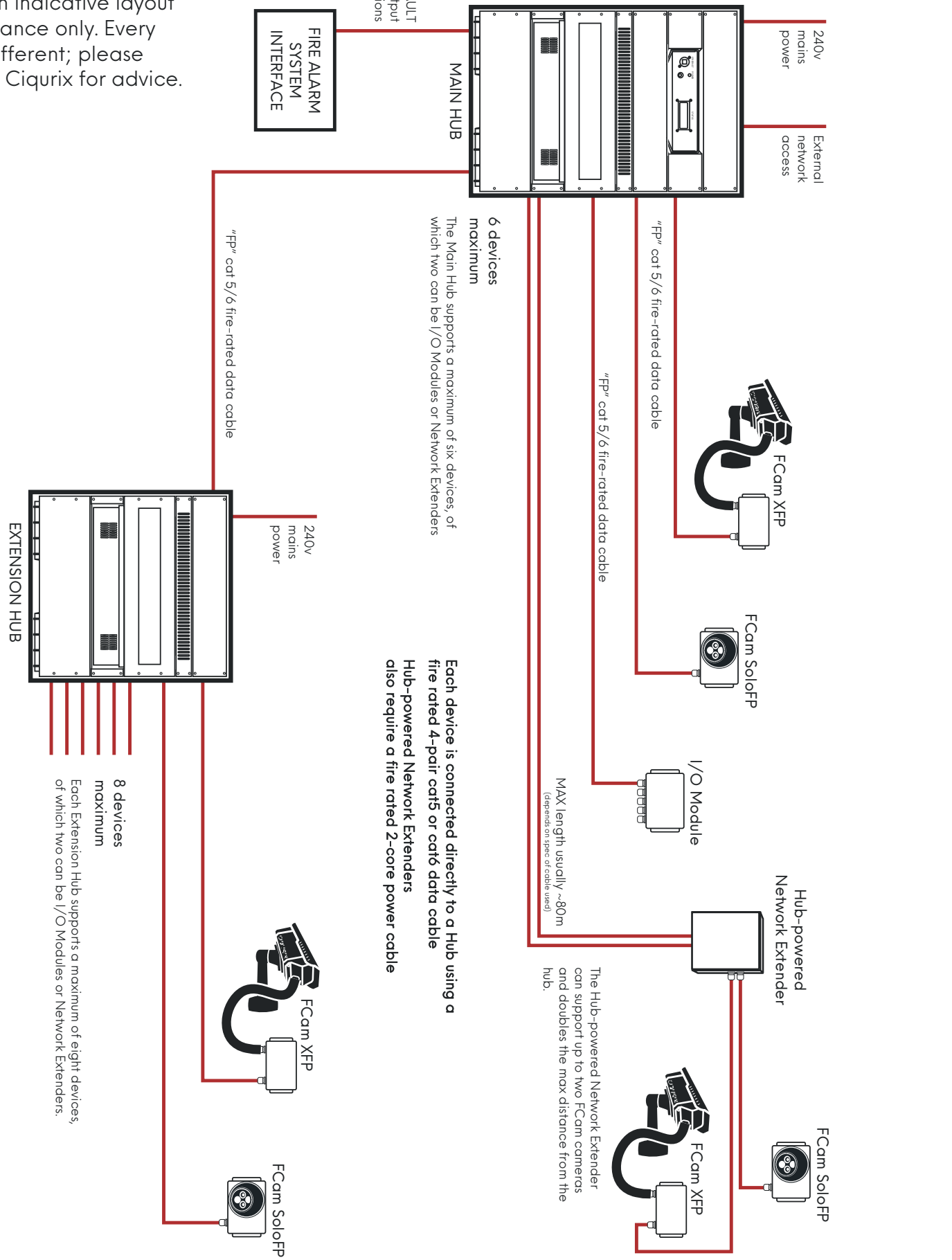
Like the XFP on which it is based, the XFPA has an integral wall-mounted connection box with cable entry gland and punchdown termination, designed specifically to facilitate simple installation as part of the CORE system using FP-type data cabling and 24v battery-backed power supplies.

FC-XFPA-104	FC-XFPA-106
80m FIRE DETECTION	180m FIRE DETECTION
65° horizontal WIDE 4mm LENS	46° horizontal NARROW 6mm LENS
IP66 OUTDOOR USE	IP66 OUTDOOR USE

When used with the MHBB / EHBB CORE hubs and wired in fire-rated cable, the FC-XFPA is designed to meet the requirements of BS5839-1:2017 and can be used as primary or sole means of detection.

Layout

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



Dual Lens Technology

All Ciqurix FCam cameras use Dual Lens Technology to detect flame at an early stage.

Visual analytics onboard the camera continually analyse the live video feed seeking flame. The analytics look at the colour, brightness, shape, flicker, movement and edge behaviour of potential flame, and compares this with previous images to spot developing fire.

At the same time, a separate high definition near-infrared video sensor provides an infrared video stream to a separate analytics engine, also onboard the camera. This operates in a specific spectrum associated with flame, and again is looking for brightness, shape, flicker, movement and edge behaviour over time.

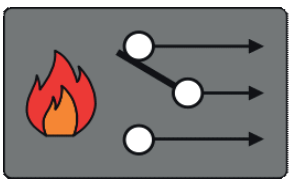
Only when an incident looks like fire visually *and* looks like fire in the infrared spectrum does the FCam signal an alarm condition. This allows the FCam to be extremely sensitive to fire and yet reject almost all false alarms.

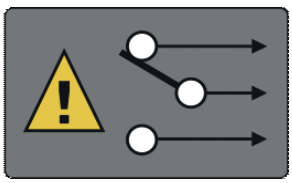
The FCam knows what flame looks like in the dark, through smoke, and in fog - and can intelligently place more emphasis on the infrared feed in these conditions.

Alarm Output

The Main Hub has a global fail-safe fault output and 4 programmable relay outputs. Each CORE Input/Output (I/O) Module has a further 4 programmable relay outputs. Every relay is volt-free and changeover, and each can be linked to one camera, all cameras, or a group of cameras.

The FCam system is designed so the outputs can be easily connected to anything - fire alarm system, suppression, alarm sounder, remote communicator, etc. For example: when connecting the FCam CORE to a fire alarm system you can program it to have all cameras on the same fire zone, or two cameras per zone, or a zone for each camera, simply by using more I/O Modules.





Video Feed

Each FCam camera will appear to a Network Video Recorder (NVR) or Video Management System (VMS) as a standard IP cctv camera in RTSP format. This is almost universally compatible, and will work with every major manufacturer of video equipment. The FCam provides a full-res main stream at 30fps and a low-res sub stream at 5fps. Because all the analytics are done onboard the camera, the alarm crosshairs and location information is burned into the stream at source.

There is space in the Main Hub for an NVR to be added, and/or an NVR or VMS can be connected remotely via the FCam network.

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Brackets

Bracket not included, available separately

Horizontal surface
BR-XH

Vertical surface
BR-XV

Ceiling mount
BR-XC

CORE by CIQURIX

FC-XFPA-104
FC-XFPA-106

Specification

	FC-XFPA-104	FC-XFPA-106
Detection distance:	1 - 80m	1 - 180m
Viewing angle:	65°(h) 36°(v)	46°(h) 25°(v)
Temperature:	-10°C to +70°C	-10°C to +70°C

Compressed air:	Permanent supply required at max 15bar to regulator
Air flow rate:	Adjustable from curtain (to prevent dust) up to purge (to clean dust)
Detection time:	10 seconds (typical)
Environmental:	IP66 96%RH
Power:	9-36Vdc 4W (supplied from CORE Main Hub or Extension Hub)
Cabling requirement:	1 x fire rated Cat5/5e/6 data cable from Main Hub or Extension Hub (carries data and power) Maximum distance from Hub depends on cable spec, typically 80m (Cat5), 100m (Cat6) Inline network extender available, see CT-NEFP-102
Dimensions (FCam):	250mm (l) x 110mm (w) x 100mm (h)
Dimensions (Box):	252mm (l) x 146mm (w) x 56mm (d)
Weight:	2.1 Kg
Alarm output:	Programmable fire and fault contacts located on CORE Main Hub
Video output:	RTSP H.264 1280x720@30fps (Main) 320x240@5fps (Sub)
Minimum light:	0 lux (20m IR provided for visual feed). Fire detection operates in 0 lux to max specified distance.