

Features

- 1/1.8" Progressive scan CMOS imager
- 1.05 mm, 180° fixed fisheye lens
- In-camera (front end) dewarping capabilities
- 6 MP resolution
- Real-time 6 MP streaming @25/30 fps
- Day/Night with IR-cut filter
- Built-in IR illuminator; effective distance: 5 m
- 12 Vdc / 24 Vdc / 24 Vac / 802.3af PoE
- ONVIF Profile S conformant



FD360IR

High-definition 6 MP fisheye camera with D/N and IR

Description

The Siqura® FD360IR is a 3072 x 2048 (6 MP) fisheye dome network camera for indoor applications. The camera combines an overview covering the entire area, with dewarped, rectangular pictures of regions of interest.

Multistream high-definition and dewarping

The FD360IR camera has multistream capabilities for simultaneously streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured.

In front end (in-camera) dewarping mode, a variety of resolutions and image modes can be selected. Depending on the selected resolution for the streams, the full 360° view, the dewarped panoramic view (2x 180°), the dewarped single view or the dewarped quad view are available. The single-view and quad-view image can be moved by controls in the webpage (ePTZ function).

In back end dewarping mode, the dewarping relies on the viewing application and thus on the processing power of the viewing application platform. In this mode, the camera only streams the fisheye source image. The viewing application in the webpage of the FD360IR is an embedded example of back end dewarping.

Open standards

Multiple options are available to easily integrate the FD360IR to a video management system. In support of open standards, the FD360IR is compliant with both the ONVIF specification and Siqura's Open Streaming Architecture (OSA) HTTP API.

Day/Night, BLC, and WDR

The FD360IR provides automatic day/night functionality for use in low-light situations. Backlight compensation (BLC) enhances image visibility in difficult lighting situations. This ensures quality pictures at all times. Wide dynamic range (WDR) solves the problem of overlit images by applying dynamic gain.

Power source choices

The FD360IR can be powered by 12 Vdc, 24 Vdc or 24 Vac (terminal block) or over the network with 802.3af-compliant PoE sources.

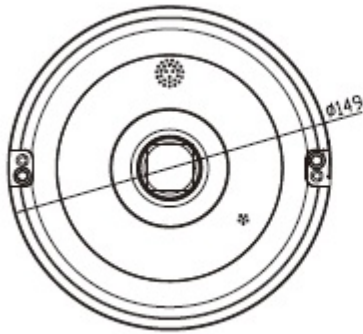
Privacy masks

Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.



Technical Specifications

FD360IR



Camera

Image sensor	1/1.8" Progressive scan CMOS
Pixel count	3072 x 2048
Shutter speed	1 - 1/10000 s
Lens	1.05 mm, F2.8
Lens type	Fixed 180° fisheye
Minimum scene illumination (30 IRE)	0.04 lux (colour), 0.002 lux b/w
Horizontal field of view	180°

Functions

Privacy masks	5
Video motion detection	On, off, by schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Tamper monitoring	On, off, by schedule
Tamper monitoring alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On, off, by schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Image rotation	Normal / Flip / Mirror / 90° Rotate (clockwise, counterclockwise) / 180° Rotate
On-screen display	Image corners can hold one of the following OSD items: - Time / date / time & date - Text: one row of 15 characters - Subtitle: five rows of 16 characters
Recording	On, off, by schedule

Technical Specifications

FD360IR

Image control

Backlight compensation	On/Off
Wide dynamic range	Off/low/mid/hi
Contrast	Manual
Brightness	Manual
Saturation	Manual
Hue	Manual
Sharpness	Manual
White balance	Auto/manual/ATW/one-push
Noise reduction	Off, 3D (off, low, medium, high), 2D (off, on), ColorNR (off, low, medium, high)
Exposure	Auto/manual
Day/Night (IR-cut filter) and IR light	Auto/night/day/sensor/on/off/smart
Automatic gain control	Max. level configurable
Image dewarping	In-camera / webpage application

Video

Compression algorithm(s)	H.264 (ISO/IEC 14496-10); MJPEG
Output stream format	
In-camera image dewarping	2x 180° panoramic view 1x rectangular view (1x ePTZ) 1x quad rectangular view (4x ePTZ)
Back end dewarping	360° fisheye image
Number of compression instances	
In-camera dewarping	Dual streams: 2x H.264 / H.264 + MJPEG
Back end dewarping	Quad streams: Up to 4x H.264 or 3x H.264 + MJPEG
Supported resolutions	
In-camera dewarping	H.264: 2048x2048; 1920x1080 (1080p); 1600x1200; 1408x1408; 960x960; 960x720; 960x554 MJPEG: 1920x1080 (1080p); 1600x1200; 1408x1408; 960x960; 960x720; 960x554
Back end dewarping	H.264: 3072x2048; 1920x1080 (1080p); 1280x1024; 1280x720 (720p); 1024x768; 800x600; 720x480 (D1); 640x480; 352x240
Compression capabilities	
In-camera dewarping	H.264 in 2048x2048 or MJPEG in 1080p (25/30fps) H.264 in 2048x2048 (20fps) + H.264 or MJPEG in 1080p (20fps)
Back end dewarping	H.264 in 3072x2048 or MJPEG in 1080p (25/30fps) H.264 in 3072x2048 + H.264 or MJPEG in 720p (25/30fps) H.264 in 1080p (50/60fps) + H.264 in 1280x1024 (25/30fps) + H.264 or MJPEG in 720p (25/30fps) H.264 in 1080p (50/60fps) + H.264 in 1280x1024 (25/30fps) + H.264 in 720p (25/30fps) + H.264 or MJPEG D1 (25/30fps)
Compression bit rate control	Constant bit rate (CBR), variable bit rate (VBR)
Output bit rate (per H.264 stream)	Up to 20480 kbit/s
Number of video output streams	Up to 20 (RTSP)
Total output data rate	Up to 50000 Kbps
Video frame rate	1 to 30 fps / 1 to 25 fps

Technical Specifications

FD360IR

Audio

Type	Built-in speaker & Microphone or line-in/line-out
Level control	Input gain, output gain
Compression	G.726, Sampling 8 kHz, Bit rates 16 kbit/s, 24 kbit/s, 32 kbit/s, 40 kbit/s μ-law, Sampling 8 kHz, Bit rate 64 kbit/s A-law, Sampling 8 kHz, Bit rate 64 kbit/s AAC, Sampling 48 kHz, Bit rate 128 kbit/s PCM, Bit rates 128 kbit/s, 256 kbit/s, 384 kbit/s, 768 kbit/s
Connector type	Female stereo phone jack, ø 3.5 mm (2x) on multi-function cable

Contact closures

Input	5 V 10 kΩ pull-up
Output	Photocoupler transistor output
Connector type	4-Pin terminal block on multifunction cable

Storage

Storage options	Micro SD card, 64 GB
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Network

Interface(s)	10/100/1000 Ethernet
Network protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, IGMP, PnAC (IEEE 802.1x), QoS, ARP
Connector type	RJ-45

Management

Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	HTTPS, IP Filter, PnAC (IEEE 802.1x)
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20

Powering

Power consumption	Max. 10.6 W
Power	12 Vdc / 24 Vdc / 24 Vac / 802.3af PoE
Power connector	2-pin terminal block

Environmental

Operating temperature	-10 °C to +50 °C (+14 °F to +122 °F)
Relative humidity	10% to 90%, no condensation

Technical Specifications

FD360IR

Mechanical

Dimensions	Ø149 x 51 mm (Ø5.9 x 2.0 in)
Weight	355 g (0.78 lbs)
Colour	RAL 9003 (Signal white)
Built-in IR illuminator	
Working distance	Up to 5 m
Wavelength	850 nm
Number of LEDs	6
Multifunction cable	45 cm (for audio and contact closures)

Ordering information

Models	Description
FD360IR	Network fisheye camera 6 MP real time, multiple dewarped H.264/MJPEG, IR



The quality management system used in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.

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