FD360V2

12MP outdoor fisheye camera H.265/H.264, IR, IP66/IK10

DESCRIPTION

The FD360v2 12 megapixel IP fisheye camera with built-in IR illumination providing clear images under any lighting condition. The camera has multi-stream capabilities for simultaneously streaming of H.265/H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured. Front-end dewarping mode is equipped and a variety of resolutions and image modes like the full 360° view, dewarped panoramic view (2x 180°), dewarped single view, or dewarped quad view can be selected. With its IP66 construction, IK10 vandal-resistant housing, and fixed lens, installation is fast and easy.

FEATURES

Max 4000 x 3000 Resolution

Quad stream H.264, H.265 and MJPEG

On-board dewarping for easy installation, ePTZ Control

Various Dewarp mode Quad View, Double Panoramic View etc

H.265/H.264/MJPEG video compression

Bi-directional Audio

Built-in IR illuminator

ONVIF Profile S, G and T

IP66, IK10 vandal proof

Description

Multi-stream high definition
The camera has the capability to stream simultaneous 4 video streams in H.265, H.264 and MJPEG. Multiple combinations of encoding, resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. Each selected resolution-frame rate combination can be freely set to a stream number. Also, the optimized encoding H.265/HEVC streaming provides clear images with less transmission bandwidth and storage capacity required.

Dewarping Mode
FD360v2 equipped with edge dewarping and backend dewarping. With edge dewarping, the camera dewarps the original 360 view to various image modes and streams dewarped image independently across the network. The dewarped view can be moved by the ePTZ function in the webpage to the desired angle without a blind spot. In back end dewarping mode, the dewarping relies on the viewing application. In this mode, the camera only streams the fisheye source image.

Cybersecurity
The essential protection starts when the camera out of the box. At the first login attempt, it's required to set up a strong password to a certain level. Using HTTPS SSL/TLS 1.2, web browsers and video streaming can be protected within a secured communication channel. The security boundaries are set using multi-level user management and system log records every configuration change as well as login attempts as the track. Network access is protected by IEEE 802.1x port-based authentication with EAP/TLS or EAP/PEAP.

Open standards
Multiple options are available to easily integrate the FD360v2 into a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S, Profile G and Profile T specification, which enables the local recording and secure HTTPS communication.

Camera

Image Sensor	1/1.7" Progressive CMOS 12 MP
Effective pixels	4000(H) x 3000(V)
Minimum scene illumination	Color: 0. 01Lux @ F2.8 30IRE,
	B/W: 0.01 lux @ F2.8 30IRE, 0 lux with IR
Shutter Speed	1 ~ 1/10.000 sec
Lens	1.65 mm, F2.8, Fixed Iris
Field of View	H: 180° / V: 180°
Slow Shutter	Supported
Day/Night	Automatical IR-cut Filter

Video

Video Compression	H.265 (Main Profile) / H.264 (High Profile/Main Profile) / MJPEG			
Video Bitrate	64 Kbps 20 Mbps			
Max. Resolution	4000x3000 20fps, 1080p for MJPEG			
Supported Resolution				
Overview	4000x3000, 2992x2992, 3840x2160, 3200x1800, 1920x1080, 1280x1024, 1280x720,			
	1024x768, 800x600, 720x480, 640x480, 352x240			
Panorama, double panorama, Quad view	2976x2976, 2048x2048, 2048x1536, 1920x1080,			
	1600x1200, 1408x1408, 960x960, 960x720, 960x544, 480x360			
Frame Rate	25/30 fps			
Number of simultaneous streams	Quad Streams			
Max. Streaming				
20fps	4000x3000		1920x1080	
30fps	3840x2160		1920x1080	
30fps (dual shutter WDR)	3840x2160	1280x1024	800x600	352x240
Bitrate Control	Constant bit rate (CBR), variable bit rate (VBR), Low bit rate (LBR)			
Number of video output streams	Up to 20 (RTSP)			
Total Output Data	51.2Mb/s			
Region of interest	1 region per stream			

Image

White Balance	Auto, ATW, Manual, One push
Image Setting	Saturation, Brightness, Contrast, Sharpness, Backlight Compensation,
	Highlight Compensation, WDR
Day/Night Switch	Auto/Scheduled/Triggered by Alarm In
Image Enhancement	2DNR, 3DNR, ColorNR
Image Rotation	90°, 180°, 270° rotation
privacy masks	5x
Text and picture overlay	Date & time, 3x line (54 characters each), Preset title, Image,
	Image transparency

Analytics

Event detections	External Input, Network Failure Detection, Periodical Event, Tampering,

Specs

Analytics

	Audio Detection, Manual Trigger
Event Action	Alarm output, Record video clip to NAS/SD card, Send alarm message and image by E-mail/FTP, Send HTTP notification

Audio

Capability	Two-way stereo audio
Audio Interface	1x 3.5 mm audio in (line in) ; 1x 3.5 mm audio out interface
Compression	G.711, G.726, ACC, LPCM

Alarm

Input	1x, 0 - 5 V, 10 k pull-up
Output	1x, Photo relay output 300 Vdc/ac
Operational modes	Cell-based motion detection, Network Failure Detection, Tampering alarm, IP address conflict, illegal login, disk full, disk error, Alarm I/O

Network

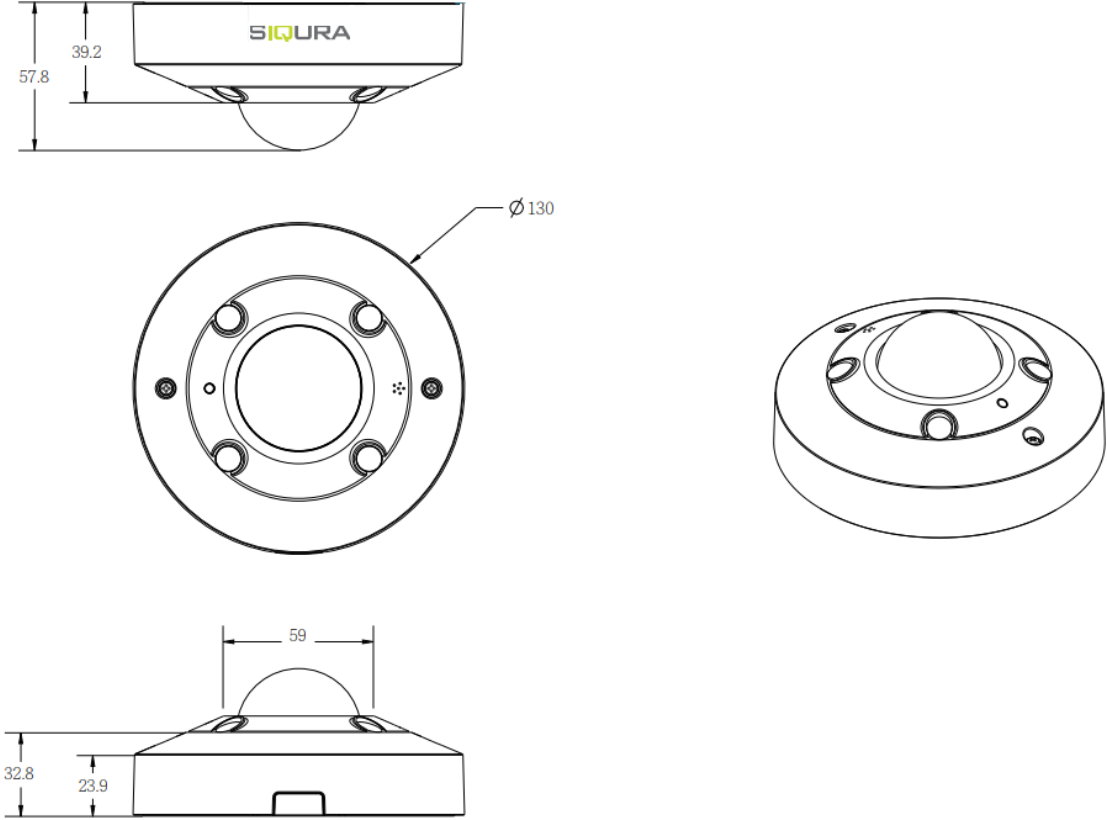|	
Communication Interface	10/100/1000 Mb (RJ45)
Network protocols	IPv4/IPv6, HTTP, HTTPS (TLS1.2), 802.1x, Qos, FTP, SMTP(SSL), UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP/UDP, TCP/IP, IGMP(v2/v3), DHCP, PPPoE, SSL/TLS, ONVIF Profile S/G/T, Siqura Protocol
Security	User authentication, Syslog, Digest authentication (RTSP, HTTP), HTTPS encryption (TLS1.2), IEEE 802.1x port-based network access control, IP filtering
Web Viewer	Internet Exploer 11, Microsoft Edge, Google Chrome, Mozilla Firefox

General

Protection Level	IP66, IK10
Material	Die cast aluminum and Plastic
Edge Storage	Built-in micro SD/SDHC/SDXC slot, up to 512 GB
Power	12 VDC +/- 10% (terminal block); PoE (IEEE 802.3af, max. 9.9W)
IR illumination	850nm IR LEDs, 5m IR Viewable Length
Start-up Temperature	-16°C
Operating temperature	-30°C ~ +60°C (-22F to 144F)
Relative Humidity	10% to 90%, no condensation
Dimensions(camera body)	130 x 57.8 mm (5.11 x 2.27 In)
Weight	0.565 kg (1.24 lbs)
Colour	RAL 9003 (Signal white)

Ordering Information

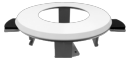|	
FD360v2	12MP fisheye, H.265/H.264, IR, IP66/IK10
WM22	Wall mount for FD360v2, FD910 and FD980
TA03	Tube adapter/pendant mount for FD360v2, FD910 and FD980
CM23	Flush mount kit for FD360v2

DIMENSION IN MM

RELATED

	TKH Security WM22 Wall mount, for FD360v2, FD950, FD980

	TKH Security CM23 In-Ceiling mount for FD360v2

	TKH Security TA27 Tube adapter/pendant mount for FD810, FD820v2, FD910, FD950, FD980, FD360

	TKH Security DC35 Dome cover, transparent, vandal proof, for FD360v2