# AMX- SFCMS/13-EB



#### **12 MP IR Network Fisheye Camera**



SIPSFCMS/13-EB is a fisheye network camera capable of providing a 360-degree panoramic image of its surveillance scene. The progressive scan CMOS sensor provides highresolution images of up to 4000 × 3000. Up to 18 live view display modes, designed for 3 mount types, meet various user preference. Three independently controlled IR lights offer a range of 15 m and provide good vision in low or even zero-light environment.

- Heatmap: based on deep learning algorithms, the camera counts people and presents an intuitive map
- Multi dewarping modes: the image can be dewarped to normal image for viewing intuitively
- Built-in mic and speaker: the camera supports two-way audio for real-time audio security monitoring and communication
- Built-in IR light: an IR range of 15 meters provides good visibility in low or even zero-light environments
- High resolution 12 MP: capturing clear images even when dewarped into 4-image PTZ mode
- Each image is clear and detailed
- Panomorph lens RPL: 89VVT

# ■ Specification

Camera		
Image Sensor	1/1.7" Progressive Scan CMOS	
Max. Resolution	4000 × 3000	
Min. Illumination	Color: 0.05 Lux @ (F2.2, AGC ON), B/W: 0.01 Lux @ (F2.2, AGC ON), 0 Lux with IR	
Shutter Time	1 s to 1/100,000 s	
Day & Night	IR Cut Filter	
Lens		
Focal Length & FOV	1.29 mm, Horizontal FOV: 180°, vertical FOV: 180°	
Lens Mount	M12	
Aperture	F2.2	
DORI		
DORI	D: 27.9 m, O: 11.1 m, R: 5.6 m, I: 2.8 m	
Illuminator		
Supplement Light Type	3 IR LEDs, each LED is independently controlled	
Supplement Light Range	Up to 15 m	
IR Wavelength	850 nm	
Video		

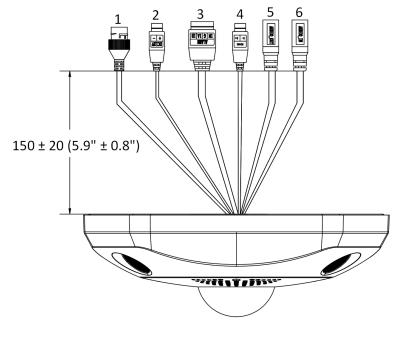
	Fisheye View:
	50 Hz: 20 fps (4000 × 3000), 25 fps (3000 × 3000, 2560 × 2560)
	60 Hz: 20 fps (4000 × 3000), 30 fps (3000 × 3000, 2560 × 2560)
	180 Panorama View:
	50 Hz: 20 fps (3072 × 2304, 3072 × 1152)
	60 Hz: 20 fps (3072 × 2304, 3072 × 1152)
	Panorama View:
	50 Hz: 20 fps (3072 × 2304, 3072 × 1152)
	60 Hz: 20 fps (3072 × 2304, 3072 × 1152)
	4PTZ:
	50 Hz: camera 01: 20 fps (1600 × 1200)
	camera 02: 20 fps (1600 × 1200)
	camera 03: 20 fps (1600 × 1200)
	camera 04: 20 fps (1600 × 1200)
	60 Hz: camera 01: 20 fps (1600 × 1200)
Main Stream	camera 02: 20 fps (1600 × 1200)
	camera 03: 20 fps (1600 × 1200)
	camera 04: 20 fps (1600 × 1200)
	Fisheye + 3PTZ
	50 Hz: camera 01: 10 fps (2560 × 2560, 2048 × 2048, 1280 × 1280)
	camera 02: 10 fps (1600 × 1200)
	camera 03: 10 fps (1600 × 1200)
	camera 04: 10 fps (1600 × 1200)
	60 Hz: camera 01: 10 fps (2560 × 2560, 2048 × 2048, 1280 × 1280) camera 02: 10 fps (1600 × 1200)
	camera 03: 10 fps (1600 × 1200)
	camera 04: 10 fps (1600 × 1200)
	4PTZ Fusion
	50 Hz: 20 fps (3200 × 2400, 1600 × 1200, 1280 × 960, 1024 × 768)
	60 Hz: 20 fps (3200 × 2400, 1600 × 1200, 1280 × 960, 1024 × 768)
	Fisheye View:
Sub-Stream	50 Hz: 20 fps (720 × 720, 640 × 480)
	60 Hz: 20 fps (720 × 720, 640 × 480)
	180 Panorama View:
	50 Hz: 20 fps (640 × 480, 640 × 360, 320 × 240)
	60 Hz: 20 fps (640 × 480, 640 × 360, 320 × 240)
	Panorama View:
	50 Hz: 20 fps (640 × 480, 640 × 360, 320 × 240)
	60 Hz: 20 fps (640 × 480, 640 × 360, 320 × 240)
	Fisheye + 3PTZ:
	50 Hz: camera 01: 10 fps (720 × 720)
	60 Hz: camera 01: 10 fps (720 × 720)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264
	Sub stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 16 Mbps
Н.264 Туре	Baseline Profile/Main Profile/High Profile

Н.265 Туре	Main Profile
Scalable Video Coding (SVC)	H.265 and H.264 encoding
Region of Interest (ROI)	4 fixed regions for main stream and sub-stream
Fisheye Display	
Mount Type	Support table, wall, and ceiling mounting
Decoding Mode	Support hardware decoding and software decoding
Display Mode	<ul> <li>18 display modes in total</li> <li>Software decoding:</li> <li>Ceiling mount: fisheye view, 180 panorama view, 360 panorama view, 360 panorama</li> <li>PTZ, 360 panorama + 3PTZ, 360 panorama + 6PTZ, 360 panorama + 8PTZ, 2PTZ, 4PTZ</li> <li>fisheye + 3PTZ, fisheye + 8PTZ, hemisphere, AR hemisphere, cylinder</li> <li>Wall mount: fisheye view, panorama view, panorama + 3PTZ, panorama + 8PTZ, 4PTZ</li> <li>Table mount: fisheye view, 180 panorama view, 360 panorama view, 360 panorama</li> <li>PTZ, 360 panorama + 3PTZ, 360 panorama view, 360 panorama view, 360 panorama</li> <li>PTZ, 360 panorama + 3PTZ, 360 panorama + 6PTZ, 360 panorama + 8PTZ, 4PTZ, fisheye + 8PTZ, cylinder</li> <li>Hardware decoding:</li> <li>Ceiling mount: fisheye view, 180 panorama view, panorama view, 4PTZ, fisheye + 3PTZ</li> <li>4PTZ fusion</li> <li>Wall mount: fisheye view, 180 panorama view, panorama view, 4PTZ, fisheye + 3PTZ</li> <li>4PTZ fusion</li> <li>Table mount: fisheye view, 180 panorama view, panorama view, 4PTZ, fisheye + 3PTZ</li> </ul>
Audio	4PTZ fusion
Audio Type	Mono sound
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 160 Kbps (MP2L2)
Audio Sampling Rate	8 kHz/16 kHz
Environment Noise Filtering	Yes
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPn SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour
Simultaneous Live View	Up to 20 channels
API	Open Network Video Interface (PROFILE S, PROFILE G), ISAPI
User/Host	Up to 32 users. 3 user levels, administrator, operator and user
Security	Password protection, HTTPS encryption, IEEE 802.1X port-based network access control, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, TLS 1.2
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
Client	iVMS-4200, iVMS-4500, iVMS-5200
Web Browser	Chrome 57+, Firefox 52+, Safari 12+
Image	
Image Settings	Saturation, brightness, contrast, sharpness, AGC and white balance are adjustable b client software or web browser
	Day/Night/Auto/Schedule/Triggered by Alarm In

Wide Dynamic Range (WDR)	Digital WDR	
Image Enhancement	BLC, HLC, defog, 3D DNR	
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format	
Interface		
Ethernet Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port	
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC/TF card, up to 256 GB	
Built-in Microphone	Yes, two built-in microphone(s)	
Built-in Speaker	Yes	
Audio	<ul> <li>1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 vpp, input impedance:</li> <li>4.7 KΩ, interface type: non-equilibrium;</li> <li>1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 vpp, output impedance: 100 Ω, interface type: non-equilibrium</li> </ul>	
Alarm	1 input, max. 12 V; 1 output, max 24 VDC, 1 A	
RS-485	1 RS-485 (Half duplex, Pelco-P, Pelco-D, self-adaptive)	
Reset Key	Yes	
Event		
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflicted, illegal login, HDD full, HDD error)	
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection, audio exception detection	
Linkage	<ul> <li>Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording</li> <li>*For people counting, heat map, and intersection analysis, only notifying surveillance center is supported.</li> </ul>	
Deep Learning Function		
People Counting	Counts people entering, exiting and passing by separately Supports real-time uploading and uploading by statistic cycle Sends email reports on daily, weekly, monthly or annually basis Supports target filtering by height	
Heat Map	A graphic description of visits (calculated by people number or by dwell time) in a configured area. Two heap map report types are available, space heat map and time heat map line chart	
Intersection Analysis	Detects and analyze flow in an intersection-like scene, and generate reports Support one intersection of up to 10 ways	
General		
Power	12 VDC ± 25%, 0.9 A, max. 11 W, two-core terminal block PoE: 802.3af, class 0, 36 to 57 V, 0.34 A to 0.22 A, max. 12.95 W	
Material	Main body: Metal Cover: Plastic	
Dimension	167.4 mm × 152.8 mm × 55 mm (6. 6" × 6" × 2.2")	
Package Dimension	260 mm × 230 mm × 135 mm (10.2" × 9.1" × 5.3")	
Weight	Approx. 720 g (1.6 lb.)	

With Package Weight	Approx. 1.3 kg (2.9 lb.)
Startup and Operating Conditions	-40 °C to +60 °C (-40 °F to +140 °F). Humidity 95% or less (non-condensing)
Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
General Function	One-key reset, anti-flicker, heartbeat, password protection, privacy mask, watermark IP address filter
Heater	Yes
Approval	
EMC	FCC: 47 CFR Part 15, Subpart B, CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7, KC: KN32: 2015, KN35: 2015
Safety	UL: UL 62368-1, CB: IEC 62368-1: 2014+A11, CE-LVD: EN 62368-1: 2014/A11: 2017, BIS: IS 13252 (Part 1): 2010/IEC 60950-1: 2005, LOA: IEC/EN 60950-1
Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation (EC) No 1907/2006
Protection	IP67: IEC 60529-2013, IK10: IEC 62262:2002

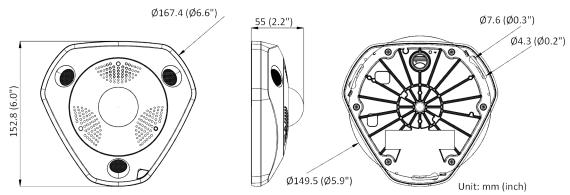
Physical Interface



Unit : mm (inch)

No.	Interface Description
1	Network Interface
2	Power Interface
3	Alarm Interface
4	RS-485
5	Audio Output Interface
6	Audio Input Interface

## Dimension



### Accessory

Optional	
ES1276ZJ-SUS	ES1275ZJ-SUS
Corner Mount	Vertical Pole Mount