KX-E1224FN2-AB
12 MP IR Fisheye Network Camera

Design and specifications are subject to change without notice.
Pictures in the document are for reference only, and the actual product shall prevail.

- 12 MP 1/1.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 12M (4000 × 3000)@25 fps; supports 8M (3280 × 2480)@25/30 fps.
- Built-in IR LED, and the max. illumination distance is 10 m.
- Intelligent monitoring: Intrusion, tripwire, heat map, and people counting.
- SMART H.264 +/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Alarm: 2 in, 2 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card; built-in dual-array Mic and speaker.
- 12 VDC/PoE power supply.
- IP67 and IK10 protection.

| 12Mp | Fisheye VR | Perimeter Protection | People Counting | Heat Map | IP67&IK10 | Queue Management |

Technical Specification

Camera

Image Sensor	1/1.7" CMOS
Max. Resolution	4000 (H) × 3000 (V)
ROM	4 GB
RAM	2 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.01 Lux@F2.0 (Color, 30 IRE) 0.001 Lux@F2.0 (B/W, 30 IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	up to 10 m (32.81 ft) (IR)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	1.85mm
Max. Aperture	F2.0
Field of View	Horizontal: 185°; Vertical: 180°
Iris Control	Fixed

Close Focus Distance	0.4 m (1.31 ft)			
DORI Distance	Detect	Observe	Recognize	Identify
	40.0 m (131.23 ft)	16.0 m (52.49 ft)	8.0 m (26.2 ft)	4.0 m (13.12 ft)

Smart Event

Heat Map	Yes

Professional, intelligent

IVS (Perimeter Protection)	Intrusion; tripwire
People Counting	Supports 4 rules to count the number of people entering, exiting, and staying separately. It will trigger alarm linkage when the number of people who entering, exiting or staying exceeds the threshold. It can display and export reports based on year, month, week, day or custom time. Supports 4 rules to count the number of people in area and will trigger alarm linkage when the average strand time or people number in the area exceeds the threshold. It can display and export reports based on month, week, day or custom time. Supports 4 queue management rules to count number of people queuing and queue time in real time, and it will trigger alarm linkage when the number of people queued or queue time exceeds the threshold. It can display and export reports based on month, week, day or custom time
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos

Fisheye

Installation	Ceiling mount; wall mount; ground mount
Decoding Mode	Front-dewarp; Back-dewarp; Front-dewarp+Back-dewarp

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Display Mode	Front-dewarp (hardware decoding):1O; 1P; 2P; 1R; 2R; 4R; 1O+ 3R *O: Fisheye image view; P: Panoramic image view; R: Region image view Back-dewarp (software decoding): fisheye view; 360° panoramic view + PTZ; dual-channel 180° panoramic view; fisheye + 2PTZ; fisheye + 3PTZ; fisheye + 4PTZ; 360° panoramic view + 6PTZ; fisheye + 8PTZ; 180° panoramic view; 180° panoramic view + 3PTZ; 180° panoramic view + 4PTZ; 180° panoramic view + 8PTZ; VR mode (panorama; semi-circle; cylinder; asteroid)

Video

Video Compression	H.265; H.264; H.264H; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
Video Frame Rate	Main stream: 4000 × 3000@(1–25/25 fps) sub stream: 704 × 576@(1–25/30 fps) third stream: 1280 × 960@(1–17/17 fps) Fisheye mode: 1O (4000 × 3000) 1P (4096 × 1024) 2P (2432 × 2432) 1R (1216 × 1216) 2R (2432 × 2432) 4R (2432 × 2432) 1O + 3R (2432 × 2432) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	3 streams
Resolution	4000 × 3000; 3280 × 2480; 2880 × 2160; (3M) 2048 × 1536; 1.3M (1280 × 960); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 8 kbps–16384 kbps H265: 3 kbps–16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Defog	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes, built-in dual Mic
Audio Compression	PCM; G.711A; G.711Mu; G.726; G.723

Alarm

Alarm Event	No SD card; SD card full; SD card durability warning; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; people counting in area; stay detection; people counting; security exception

Network

Network Port	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P (Only supported by general version)
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE11, IE10 Chrome: 48.0.2564.116 Firefox: 48.0.2 Edge: 42.17134.1.0

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channel in: wet contact,5mA 3V–5 VDC
Alarm Output	2 channels out: dry contact,1,000mA 30 VDC/500mA 50 VDC

Power

Power Supply	12 VDC/PoE+
Power Consumption	Basic: 6.5 W (12 VDC); 6.1 W (PoE) Max. (ICR + IR intensity): 13 W (12 VDC); 13.9 W (PoE) Heating: 3 W (12 VDC); 3 W (PoE)

Environment

Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	−30 °C to +70 °C (−22 °F to +158 °F)
Protection	IP67; IK10

Structure

Casing	Metal
Product Dimensions	59.8 mm × Φ149.8 mm (2.35" × Φ5.90")
Net Weight	0.79 kg (1.74 lb)
Gross Weight	1.21 kg (2.67 lb)

Dimensions (mm[inch])

∅149.8 [∅5.90]
∅130.9 [∅5.15]
59.8 [2.35]
3-∅5.0 [∅0.20]