

# KX-CAiF4004UN-TiF-A

4MP Smart Dual Light Active Deterrence Fixed-focal Eyeball Network Camera



- 4-MP 1/1.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in multi-core light, the max. IR distance is 30 m and the max. warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two function support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 512 G Micro SD card; built-in dual Mic; 1-ch speaker; support two-way talk.
- 12 VDC/PoE power supply.
- IP67 protection.
- Sound and light alarm (red and blue lights).
- SMD 4.0.
- Supports AI SSA and one-tap arming and disarming.
- SMD area can be set in warm light areas that support triggering alarms.

## Technical Specification

### Camera

Image Sensor	1/1.8" CMOS
Max. Resolution	2688 (H) × 1520 (V)
ROM	256 MB
RAM	1 G
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.0005 Lux@F1.0 (Color, 30IRE) 0.0004 Lux@F1.0 (B/W, 30IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 30 m (98.43 ft) (IR) Up to 30 m (98.43 ft) (Warm light)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (Multi-core (IR + warm) light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°



### Lens

Lens Type	Fixed-focal				
Lens Mount	M16				
Focal Length	2.8 mm; 3.6 mm				
Max. Aperture	F1.0				
Field of View	2.8 mm: H: 111°; V: 60°; D: 135° 3.6 mm: H: 95°; V: 51°; D: 114°				
Iris Control	Fixed				
Close Focus Distance	2.8 mm: 1.7 m (5.58 ft) 3.6 mm: 3.5 m (11.48 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	56.6 m (185.70 ft)	22.6 m (74.75 ft)	11.3 m (37.07 ft)	5.7 m (18.70 ft)
	3.6 mm	69.0 m (226.38 ft)	27.6 m (90.55 ft)	13.8 m (45.28 ft)	6.9 m (22.64 ft)

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## Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
SMD	SMD 4.0
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets.
AI SSA	Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos

## Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265 (Compression rate ≥25%) AI H.264 (Compression rate ≥25%)
Video Frame Rate	Main stream: 2688 × 1520@(1 fps~25/30 fps) Sub stream: 1920 × 1080@(1~25/30 fps) Third stream: 1920 × 1080@(1~25/30 fps) *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	4M (2688 × 1520/2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR/ABR
Video Bit Rate	H.264: 3 kbps~16384 kbps; H.265: 3 kbps~16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
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)

Smart Illumination	Yes
Smart Dual Light	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	8 areas
LDC	Yes

## Audio

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

## Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; intensity change; voltage detection; external alarm; SMD; security exception
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## Network

Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
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; PPPoE; SNMP; P2P
Interoperability	ONVIF (Profile S; Profile G; Profile T); CGI
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP;SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE11 Chrome Firefox
Mobile Client	iOS;Android
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

## Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: wet contact, 5 mA 3~5 VDC
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC

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## Power

Power Supply	12 VDC; PoE
Dual Power Backup	When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.
Power Consumption	Basic: 3.3 W (12 VDC); 4.5 W (PoE) Max. (H.265 + WDR+ warm light + siren and light active deterrence + intelligence on): 7.4 W (12 VDC); 8.7 W (PoE)

## Environment

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤95%
Protection	IP67

## Structure

Casing Material	Metal
Product Dimensions	Φ122.0 mm × 116.1 mm (4.80" × Φ4.57")
Net Weight	0.8 kg (1.76 lb)
Gross Weight	1.0 kg (2.20 lb)

## Dimensions (mm[inch])

