

KX-CAi2002FN2-AB

2MP IR Fixed-focal Dome 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.



- 2 MP 1/2.8" CMOS image sensor, excellent low luminance performance and high definition of images.
- Outputs max. 2 MP (1920 × 1080) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, max. IR distance: 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 detection: Intrusion, tripwire (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; max. 256 G Micro SD card. built-in Mic.
- 12 VDC/PoE power supply facilitates installation.
- IP67, IK10 protection.
- SMD 4.0, AI SSA.



Camera	
Image Sensor	1/2.8" CMOS
Max. Resolution	1920 (H) × 1080 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.002 lux@F1.4 (Color, 30 IRE) 0.0002 lux@F1.4 (B/W, 30 IRE) 0.005 lux@F2.0 (Color, 30 IRE) 0.0005 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–355°; Tilt: -20°–70°; Rotation: 0°–355°
Lens	
Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.1 mm; 2.8 mm; 3.6 mm; 6 mm
Max. Aperture	2.1 mm: F2.0; 2.8 mm; 3.6 mm; 6 mm: F1.4
Field of View	2.1 mm: Horizontal: 137°; vertical: 70°; diagonal: 142°

	2.8 mm: Horizontal: 107°; vertical: 56°; diagonal: 127° 3.6 mm: Horizontal: 88°; vertical: 44°; diagonal: 105° 6 mm: Horizontal: 54°; vertical: 29°; diagonal: 63°																									
Iris Control	Fixed																									
Close Focus Distance	2.1 mm: 0.4 m (1.31 ft) 2.8 mm: 0.7 m (2.30 ft) 3.6 mm: 1.3 m (4.27 ft) 6 mm: 2.6 m (8.53 ft)																									
DORI Distance	<table border="1"> <thead> <tr> <th>Lens</th> <th>Detect</th> <th>Observe</th> <th>Recognize</th> <th>Identify</th> </tr> </thead> <tbody> <tr> <td>2.1 mm</td> <td>34.9 m (114.50 ft)</td> <td>14.0 m (45.93 ft)</td> <td>7.0 m (23.00 ft)</td> <td>3.5 m (11.48 ft)</td> </tr> <tr> <td>2.8 mm</td> <td>43.9 m (144.03 ft)</td> <td>17.5 m (57.41 ft)</td> <td>8.8 m (28.87 ft)</td> <td>4.4 m (14.44 ft)</td> </tr> <tr> <td>3.6 mm</td> <td>58.9 m (193.24 ft)</td> <td>23.6 m (77.43 ft)</td> <td>11.8 m (38.71 ft)</td> <td>5.9 m (19.36 ft)</td> </tr> <tr> <td>6 mm</td> <td>85.5 m (280.51 ft)</td> <td>34.2m (112.20 ft)</td> <td>17.1 m (56.10 ft)</td> <td>8.6 m (28.22 ft)</td> </tr> </tbody> </table>	Lens	Detect	Observe	Recognize	Identify	2.1 mm	34.9 m (114.50 ft)	14.0 m (45.93 ft)	7.0 m (23.00 ft)	3.5 m (11.48 ft)	2.8 mm	43.9 m (144.03 ft)	17.5 m (57.41 ft)	8.8 m (28.87 ft)	4.4 m (14.44 ft)	3.6 mm	58.9 m (193.24 ft)	23.6 m (77.43 ft)	11.8 m (38.71 ft)	5.9 m (19.36 ft)	6 mm	85.5 m (280.51 ft)	34.2m (112.20 ft)	17.1 m (56.10 ft)	8.6 m (28.22 ft)
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Intelligence																										
IVS (Perimeter Protection)	Tripwire, intrusion (support the classification and accurate detection of vehicle and human)																									
AI SSA	Yes																									
Quick Pick	With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events																									
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)																									

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Smart Codec	Smart H.265+ Smart H.264+
AI Coding	AI H.265 AI H.264
Video Frame Rate	Main stream: 1920 × 1080 @ (1–25/30) fps Sub stream 1: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps) Sub stream 2: 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	1080p (1920 × 1080); 1.3M(1280 × 960); 720p (1280 × 720); D1 (704 × 576/704×480); CIF (352 × 288/352 × 240); VGA (640 × 480)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 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)
Defog	Yes
AFSA	Yes
Image Rotation	0°/90°/180°/270° (support 90°/270° with 1920 × 1080 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas
Audio	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
Alarm	
Alarm Event	No SD card; SD card full; SD card error; service life warning (only supported by KBVISION card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio

	detection; voltage detection; external alarm; SMD; safety exception
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; SAMBA; PPPoE; SNMP
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
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE11 Chrome Firefox
Management Software	KBiVMS, KBView Plus
Mobile Client	IOS; Android
Port	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5 mA 3–5 VDC
Alarm Output	1 channel out: 300 mA 12 VDC
Power	
Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 3.8 W (12 VDC); 4.6 W (PoE) Max. (WDR + IR intensity + Intelligence): 5.9 W (12 VDC); 7.2 W (PoE)
Environment	
Operating Temperature	–40 °C to +60 °C (–40 °F to 140 °F) /Less than 95% RH
Storage Temperature	–40 °C to +60 °C (–40 °F to 140 °F)
Protection	IP67, IK10
Structure	
Casing	Metal
Product Dimensions	64.8 mm × Φ111.0 mm (2.55" × Φ4.37")
Net Weight	423 g (0.93 lb)
Gross Weight	530 g (1.17 lb)