

## KX-DAi4224N-EAB

### 4MP IR Fixed-focal Vandal-proof Dome Network

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- 4-MP 1/1.8" CMOS image sensor, low luminance, and high-definition image.
- Outputs max. 4 MP (2688×1520) @25/30fps
- Built-in IR LED, and the max. illumination distance is 50 m.
- ROI, SVC, SMART H.264+/H.265+, AI H.264/H.265, encoding after filter, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- With deep learning algorithm, it supports: video metadata, smart sound detection, IVS, face detection, smart object detection, and people counting, etc.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 512 GB Micro SD card, built-in MIC.
- 12 VDC/PoE power supply; ePoE.
- IP67 and IK10 protection.
- SMD 3.0.



Camera	
Image Sensor	1/1.8" CMOS
Max. Resolution	2688 (H) × 1520 (V)
ROM	4 GB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.0007 lux@F1.6 (Color, 30IRE) 0.0004 lux@F1.6 (B/W, 30IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	50 m (164.04 ft) (IR)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	2 (IR LED)
Angle Adjustment	Pan: 0°–355° Tilt: 0°–80° Rotation: 0°–355°
Lens	
Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 112°; V: 58°; D: 139° 3.6 mm: H: 88°; V: 50°; D: 102° 6 mm: H: 61°; V: 35°; D: 69°
Iris Control	Fixed

Close Focus Distance	2.8 mm: 1.3 m (4.27 ft) 3.6 mm: 1.5 m (4.92 ft) 6 mm: 3.0 m (9.84 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	61.5 m (201.77 ft)	24.6 m (80.71 ft)	12.3 m (40.35 ft)	6.2 m (20.34 ft)
	3.6 mm	67.6 m (221.78 ft)	27.0 m (88.58 ft)	13.5 m (44.29 ft)	6.8 m (22.31 ft)
	6 mm	96.6 m (316.93 ft)	38.6 m (126.64 ft)	19.3 m (63.32 ft)	9.7 m (31.82 ft)
Intelligence					
IVS (Perimeter Protection)	Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection				
Smart Object Detection	Smart abandoned object; smart missing object				
SMD 3.0	Less false alarm, longer detection distance				
AI SSA	Yes				
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes and 8 expressions; face snapshot set as face, one-inch photo or custom; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting.				
People Counting	Tripwire people counting, generating and exporting report (day/week/month/year); people counting in area and queue management, generating and exporting report (day/week/month); 4 rules can be set for tripwire, people counting in area and queue management.				
Heat Map	Yes				
Video Metadata	Motor vehicle, non-motor vehicle, face, human body detection; track; snapshot; snapshot optimization; optimal face snapshot upload.				

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	Motor vehicle attributes: vehicle type, vehicle color, vehicle logo and other attributes : seatbelt, smoking, calling. Non-motor vehicle attributes: type, color, number of people, top type and color, hat. Human body attributes: gender, top/bottom type and color, bag, hat and umbrella. Face attributes: gender, age, expressions, glasses, face mask and beard.
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Smart Sound Detection	Yes
<b>Video</b>	
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; AI H.264
Video Frame Rate	Main stream: 2688 × 1520@(1–25/30 fps) Sub stream: D1@(1–25/30 fps) Third stream: 1080p@(1–25/30 fps) Fourth stream: 720p@(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	4 streams
Resolution	4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1535); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–16384 kbps H.265: 12 kbps–11008 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	140 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
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 4M (2688 × 1520) resolution and lower)
Mirror	Yes

Privacy Masking	8 areas
<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; external alarm; face detection; video metadata; SMD; people counting in area; stay detection; people counting; people number error detection; queue people number alarm; queue time alarm; security exception
<b>Network</b>	
Network Port	RJ-45 (10/100 Enhancement 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; P2P
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE 9 and later Chrome: Chrome 102 and later Firefox: Firefox 88 and later
Management Software	KBiVMS, KBView Plus
Mobile Client	iOS; Android
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification
<b>Port</b>	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: wet contact, 5mA 3V–5V DC
Alarm Output	1 channel out: wet contact, 300mA 12V DC
<b>Power</b>	
Power Supply	12 VDC/PoE (802.3af)/ePoE
Power Consumption	Basic: 4.1 W (12 VDC); 5.2 W (PoE) Max. (H.265 + WDR+ Intelligence on + IR on): 6.8 W (12 VDC); 8.8 W (PoE)
<b>Environment</b>	
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)

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Storage Humidity	10%–95% (RH), non-condensing
Protection	IP67; IK10
Structure	
Casing Material	Metal
Product Dimensions	94.0 mm × Φ122.0 mm (3.70" × Φ4.80")
Net Weight	712.9 g (1.57 lb)
Gross Weight	986 g (2.17 lb)
Dimensions (mm[inch])	

