

KX-CAi4002SN-A

4MP IR Fixed-focal Eyeball 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.



- 4-MP 1/2.9" CMOS image sensor, low luminance, and high-definition image.
- Outputs max. 4 MP (2688 × 1520)@20 fps, and supports 2560 × 1440@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 30 m.
- ROI, SMART 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 functions support the classification and accurate detection of vehicle and human) · Supports max. 256 G Micro SD card; built in MIC.
- 12 VDC/PoE power supply.
- IP67 protection.
- SMD Plus.



| Camera | |
|----------------------------|---|
| Image Sensor | 1/2.9" CMOS |
| Max. Resolution | 2688 (H) × 1520 (V) |
| ROM | 128 MB |
| RAM | 128 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.006 lux@F1.6 (Color, 30IRE) 0.0006 lux@F1.6 (B/W, 30IRE) 0 lux (Illuminator on) |
| S/N Ratio | >56 dB |
| Illumination Distance | 30 m (98.43 ft) (IR LED) |
| Illuminator On/Off Control | Auto; manual |
| Illuminator Number | 1 (IR LED) |
| Pan/Tilt/Rotation Range | Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360° |
| Lens | |
| Lens Type | Fixed-focal |
| Lens Mount | M12 |
| Focal Length | 2.8 mm; 3.6 mm |
| Max. Aperture | F1.6 |
| Field of View | 2.8 mm: H: 95°; V: 52°; D: 114° 3.6 mm: H: 78°; V: 41°; D: 94° |
| Iris Control | Fixed |
| Close Focus Distance | 2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.6 m (5.25 ft) |

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|----------------------------|--|-----------------------|-----------------------|----------------------|---------------------|
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 2.8 mm | 63.6 m (208.66 ft) | 25.4 m (83.33 ft) | 12.7 m (41.67 ft) | 6.4 m (20.99 ft) |
| | 3.6 mm | 85.4 m (280.18 ft) | 34.2 m (112.20 ft) | 17.1 m (56.10 ft) | 8.5 m (27.89 ft) |
| Intelligence | | | | | |
| IVS (Perimeter Protection) | Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human) | | | | |
| Smart Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | | | | |
| Video | | | | | |
| Video Compression | H.264H; H.265; H.264; H.264B; MJPEG (Only supported by the sub stream) | | | | |
| Smart Codec | Smart H.265+; Smart H.264+ | | | | |
| Video Frame Rate | Main stream: 2688 × 1520@ (1–20 fps)/2560 × 1440@(1–25/30 fps) Sub stream: 704 × 576@ (1–25 fps)/704 × 480@ (1–30 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 | 2 streams | | | | |
| Resolution | 4M (2688 × 1520); 4M (2560 × 1440); 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–6144 kbps H.265: 12 kbps–6144 kbps | | | | |
| Day/Night | Auto (ICR)/Color/B/W | | | | |
| BLC | Yes | | | | |
| HLC | Yes | | | | |
| WDR | 120 dB | | | | |

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|--------------------------|--|
| White Balance | Auto; natural; street lamp; outdoor; manual; regional custom |
| Gain Control | Auto; manual |
| Noise Reduction | 3D NR |
| Motion Detection | OFF/ON (4 areas, rectangular) |
| Region of Interest (RoI) | Yes (4 areas) |
| Image Rotation | 0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower) |
| Mirror | Yes |
| Privacy Masking | 4 areas |
| Audio | |
| Built-in MIC | Yes |
| Audio Compression | G.711a; G.711Mu; PCM; G.726 |
| Alarm | |
| Alarm Event | No SD card; SD card full; SD card error; network disconnect; IP conflict; illegal access; motion detect; video tampering; tripwire; intrusion; SMD; voltage detect; security 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; NTP; Multicast; ICMP; IGMP |
| Interoperability | ONVIF (Profile S/Profile T); CGI; P2P; Milestone |
| User/Host | 6 (Total bandwidth: 36 M) |
| Storage | FTP; SFTP; Micro SD card (support max. 256 GB) |
| Browser | IE; Chrome; Firefox |
| Management Software | KBiVMS, KBView Plus |
| Mobile Client | iOS; Android |

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|------------------------------|--|
| 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; Generation and importing of X.509 certification |
| Power | |
| Power Supply | 12 VDC/PoE (802.3af) |
| Power Consumption | Basic: 2.5 W (12 VDC); 3.3 W (PoE); Max. (ICR + H.265 + max. resolution + main stream + IR intensity + WDR + IVS): 4.2 W (12 VDC); 5.1 W (PoE) |
| Environment | |
| 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) |
| Protection | IP67 |
| Structure | |
| Casing Material | Inner core: Metal Cover: Plastic |
| Product Dimensions | 100.9 mm × Φ109.9 mm (3.97" × Φ4.33") |
| Net Weight | 0.37 kg (0.82 lb) |
| Gross Weight | 0.56 kg (1.23 lb) |
| Dimensions (mm[inch]) | |

