

KX-CAi4K8216EN2

16CH 1U 2HDDs Network Video Recorder

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



- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format.
- Access, storage or forwarding at 256 Mbps (180 Mbps when AI function enabled).
- Max. decoding capability: 16 × 1080p@30 fps. Supports adaptive decoding.
- AI by NVR: 1-channel face detection and recognition; 2-channel perimeter protection; up to 10 face databases and 20,000 face images; 4-channel SMD Plus.
- AI by Camera: Face detection and recognition, perimeter protection; SMD Plus; people counting; stereo analysis; heat map.
- Connected to the third-party network cameras.
- Security baseline 2.3.



System	
Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operating Interface	Web; Local GUI
AI	
AI by Recorder	Face detection, face recognition, perimeter protection, and SMD Plus
AI by Camera	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map
Perimeter Protection	
Perimeter Performance AI by Recorder (Number of Channels)	2 channels, 10 IVS rules for each channel
Perimeter Performance of AI by Camera (Number of Channels)	8 channels
Face Detection	
Face Attributes	Gender; age group; glasses; expressions; face mask; beard
Face Detection Performance of AI by Recorder (Number of Channels)	1 channel (up to 12 face images/s each channel)
Face Detection Performance of AI by Camera (Number of Channels)	8 channels
Face Recognition	
Face Database Capacity	Up to 10 face databases with 20,000 images, with a total capacity of 2.5 G. Name, gender, birthday, address, credential type, credential No., countries & regions and state can be added to each face image.
Face Recognition Performance of AI by	8-channel FD (by camera) + FR (by recorder), image stream: 12 face images/s

Recorder (Number of Channels)	1-channel FD (by recorder) + FR (by recorder), video stream: 12 face images/s
Face Recognition Performance of AI by Camera (Number of Channels)	8 channels
SMD Plus	
SMD Plus by Recorder	4 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change
SMD Plus by Camera	8 channels
Audio and Video	
Access Channel	16 channels
Network Bandwidth	AI disabled: 256 Mbps incoming, 256 Mbps recording and 256 Mbps outgoing AI enabled: 180 Mbps incoming, 180 Mbps recording and 180 Mbps outgoing
Resolution	16 MP; 12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; D1; CIF
Decoding Capability	AI disabled: 2-channel 16 MP@30 fps; 2-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 6-channel 5 MP@30 fps; 8-channel 4 MP@30 fps; 16-channel 1080p@30 fps AI enabled: 1-channel 16 MP@30 fps; 2-channel 12 MP@30 fps; 3-channel 8 MP@30 fps; 4-channel 5 MP@30 fps; 6-channel 4 MP@30 fps; 12-channel 1080p@30 fps
Video Output	1 HDMI, 1 VGA HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 *Simultaneous/heterogeneous video sources output for VGA and HDMI is configurable.
Multi-screen Display	1st Screen: 1/4/8/9/16 2nd Screen: 1/4/8/9/16
Third-party Camera Access	Panasonic, Sony, Samsung, Axis, Pelco, Arecont, ONVIF, Canon
Compression Standard	
Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG

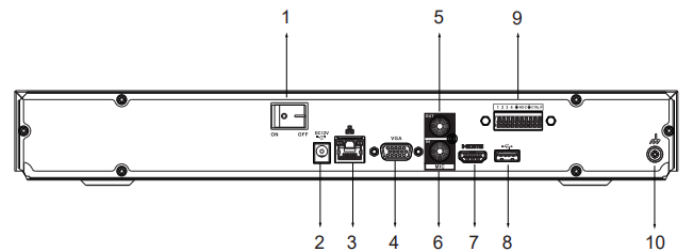
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Audio Compression	G.711a; G.711u; PCM; G726
Network	
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; PPPoE; DDNS; FTP; Alarm Server; IP Search (Support KBVISION IP camera; DVR; NVS; etc.); P2P; auto register
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 22.06(Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome; IE9 and later; Firefox
Recording Playback	
Multi-channel Playback	Up to 16 channels
Record Mode	General, motion detection; intelligent; alarm
Backup Method	USB device and network
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback
Storage	
Disk Group	Yes
Alarm	
General Alarm	Motion detection; privacy masking; video loss; scene changing; PIR alarm; IPC external alarm
Anomaly Alarm	Camera disconnection; storage error; disk full; IP conflict; MAC conflict; login locked; and cybersecurity exception
Intelligent Alarm	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map
Alarm Linkage	Record; snapshot; IPC external alarm output; audio; buzzer; log; preset; email
Port	
Audio Input	1-channel RCA
Audio Output	1-channel RCA
Alarm Input	4 channels
Alarm Output	2 channels
HDD Interface	2 SATA ports, up to 16 TB.The maximum HDD capacity varies with environment temperature.
USB	2 (1 front USB 2.0 port, 1 rear USB 2.0 port)

HDMI	1
VGA	1
Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)
General	
Power Supply	12 VDC, 4 A
Power Consumption	<10 W(without HDD)
Net Weight	1.51 kg (3.33 lb)
Gross Weight	2.76 kg (6.08 lb)
Product Dimensions	375 mm × 284.3 mm × 53 mm (14.76" × 11.19" × 2.09") (W × L × H)
Packaging Dimensions	433 mm × 141 mm × 366 mm (17.05" × 5.55" × 14.41") (W × L × H)
Operating Temperature	−10 °C to +55 °C (14 °F to +131 °F)
Storage Temperature	−20 °C to +60 °C (−4 °F to +140 °F)
Operating Humidity	10%–93% (RH)
Installation	Rack or desktop
Panels	



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|----------------------------|---------------------------|
| 1 Power Switch | 2 Power Input |
| 3 Network Port | 4 VGA Port |
| 5 AUDIO OUT, RCA Connector | 6 AUDIO IN, RCA Connector |
| 7 HDMI Port | 8 USB Port |
| 9 Alarm In/Out | 10 Ground |