

Videoregistrator NVR4416-EI

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- 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; ANPR; people counting; stereo analysis; heat map
- Connected to the third-party network cameras
- Security baseline 2.3

Number of channels	16 channel
Type	NVR
Megapixel	16 MP
Max HDD count	4 HDD
Max HDD capacity	16 TB



Detailed

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; ANPR; 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)	All channels (8 targets/s)
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)	All channels (8 targets/s)
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 Recorder (Number of Channels)	8-channel FD (by camera) + FR (by recorder), image stream: 12 face images/s 1-channel FD (by recorder) + FR (by recorder), video stream: 12 face images/s
Face Recognition Performance of AI by Camera (Number of Channels)	All channels (8 targets/s)
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	All channels (16 targets/s)
Vehicle License Plate Comparison	
ANPR by Camera (Number of Channels)	All channels (4 targets/s)
License Plate Database Capacity	<ol style="list-style-type: none"> 1. Create up to 20,000 plate numbers. 2. Blocklist and allowlist
Audio and Video	
Access Channel	16 channels
Network Bandwidth	<p>AI disabled: 256 Mbps incoming, 256 Mbps recording and 256 Mbps outgoing</p> <p>AI enabled: 180 Mbps incoming, 180 Mbps recording and 180 Mbps outgoing</p>
Resolution	16 MP; 12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; D1; CIF
Decoding Capability	<p>AI disabled: 2-channel 16 MP@30 fps; 2-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 4-channel 6 MP@30 fps; 6-channel 5 MP@30 fps; 8-channel 4 MP@30 fps; 16-channel 1080p@30 fps</p> <p>AI enabled: 1-channel 16 MP@30 fps; 2-channel 12 MP@30 fps; 3-channel 8 MP@30 fps; 3-channel 6 MP@30 fps; 4-channel 5 MP@30 fps; 6-channel 4 MP@30 fps; 12-channel 1080p@30 fps; 16-channel 720p@30 fps</p>
Video Output	<p>1 HDMI, 1 VGA</p> <p>HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720</p> <p>VGA: 1920 × 1080, 1280 × 1024, 1280 × 720</p> <p>*Simultaneous/heterogeneous video sources output for VGA and HDMI is configurable.</p>
Multi-screen Display	<p>1st Screen: 1/4/8/9/16</p> <p>2nd Screen: 1/4/8/9/16</p>
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
Audio Compression	G.711a; G.711u; PCM; G726
Network	
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; PPPoE; DDNS; FTP; Alarm Server; IP Search (Support Dahua 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	16 channels
Alarm Output	4 channels
Disk Interface	4 SATA ports, up to 16 TB. The maximum HDD capacity varies with environment temperature.
RS-232	1
RS-485	1
USB	2 (1 front USB 2.0 port, 1 rear USB 3.0 port)
HDMI	1
VGA	

	1
Network Port	2 (10/100/1000 Mbps Ethernet port, RJ-45)
General	
Power Supply	100-240 VAC, 50-60Hz
Power Consumption	
Net Weight	4.25 kg (10.63 lb)
Gross Weight	6.35 kg (14.00 lb)
Product Dimensions	440.0 mm × 415.6 mm × 76.0 mm (17.32" × 16.36" × 2.99") (W × D × H)
Packaging Dimensions	529.0 mm × 499.0 mm × 211.0 mm (20.83" × 19.65" × 8.31") (W × D × 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), non-condensing
Installation	Rack or desktop
Certifications	<p>FCC: 47 CFR FCC Part15, SubpartB, Class A</p> <p>CE-EMC: EN 55032:2015+A1:2020; EN IEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A1:2019+A2:2021; EN 55035:2017+A11:2020; EN 50130-4:2011+A1:2014</p> <p>CE-LVD: EN 62368-1:2014</p>

