



# DHI-NVR5432-EI

## 32 Channels 1.5U 4HDDs WizSense Network Video Recorder





Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

#### **Series Overview**

The NVR5000-EI series offers outstanding performance and high-grade recording technology that make it ideal for IP video surveillance applications. It has a powerful processor, that offers high access and forwarding bandwidth and strong decoding capabilities that together produce unimpeded streams. Thanks to its built-in AI chip and Dahua's advanced deep learning algorithms, the NVR supports a variety of AI functions, such as high-precision face recognition and perimeter protection. They shorten the response time to events and make videos more interactive. This NVR is compatible with numerous third-party devices, making it a great solution for surveillance systems that work with Video Management Software (VMS).

#### **Functions**

#### AcuPick

This industry-leading search technology effectively utilizes both front-end and back-end intelligence to help with searching through massive video data to quickly and conveniently locate targets with greater precision.

#### **Perimeter Protection**

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to perform secondary recognition for the targets. Improving alarm accuracy.

#### **Face Detection**

Face detection is to detect if there is any human face appearing in the video. This technology adopts a deep learning algorithm to support face detection, tracking, optimization and capturing, and then output the best face snapshot.

- · Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format.
- · Max. decoding capability: 32 × 1080p@30 fps or 32 × 2MP@30 fps.
- · Max. 384 Mbps incoming/recording/outgoing bandwidth.
- · Support AcuPick with Max. 16-Channel.
- · Support N+M cluster.
- · AI by recorder: 2-channel face detection and recognition, 4-channel perimeter protection, and 8-channel SMD Plus.
- · AI by camera: Face detection and recognition, perimeter protection, SMD Plus, metadata, ANPR, stereo analysis, heat map, and people counting.
- · Security baseline 2.3.



#### **Face Recognition**

Dahua Face Recognition technology extracts the features of captured faces and compares them with those in face database to recognize the person identity.

#### **Heat Map by Camera**

Dahua heat map technology is used to display the crowd density and people appearance probability. Export and display the crowd status by different colors. Generally, the crowd status is the statistics of people quantity in space and time dimensions.

#### **ANPR by Camera**

With deep learning algorithm, Dahua ANPR technology can recognize the number plate information of vehicles in the image with ANPR cameras. Support blocklist/allowlist mode, searching target vehicles from recorded video.

#### **SMD Plus**

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

Technical Specification		Non-motor Vehicle Attributes	Vehicle model, vehicle color, number of persons, helmet	
System		Vehicle License Plate	Vehicle License Plate Comparison	
Main Processor	Industrial-grade processor	ANPR by Camera (Number	8 channels	
Operating System	Embedded Linux	of Channels)		
Operating Interface	Web, Local GUI	License Plate Database Capacity	Create up to 20,000 plate numbers.     Blocklist and allowlist	
Al		Audio and Video		
Al by Recorder	Face detection; face recognition; perimeter protection; SMD Plus	Access Channel	32	
Al by Camera	Face detection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); perimeter protection; SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat map	Network Bandwidth	Al disabled: 384 Mbps incoming, 384 Mbps recording and 384 Mbps outgoing Al enabled: 200 Mbps incoming, 200 Mbps recording an 200 Mbps outgoing	
AcuPick AI by Camera + Recorder	Max. 16-channel, 1 combined event per channel/s	Resolution	32 MP; 24 MP; 16 MP; 12 MP; 8 MP; 5 MP; 4 MP; 1080p; 720p; D1; CIF; QCIF	
Perimeter Protection			Al disabled: 2-channel 32 MP@20 fps; 2-channel 24 MP@20 fps;	
Perimeter Performance Al by Recorder (Number of Channels) Perimeter Performance of	4 channels, 10 IVS rules for each channel	Decoding Capability	4-channel 16 MP@30 fps; 5-channel 12 MP@30 fps; 8-channel 8 MP@30 fps; 12-channel 12 MP@30 fps; 16-channel 8 MP@30 fps; 32-channel 1080p@30 fps Al enabled: 1-channel 32 MP@20 fps; 1-channel 24 MP@20 fps; 2-channel 16 MP@30 fps; 4-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 8-channel 5 MP@30 fps; 12-channel 4 MP@30 fps; 24-channel 1080p@30 fps	
AI by Camera (Number of Channels)	16 channels			
Face Detection			2 V/GA 2 HDMI	
Face Attributes	Gender; age group; glasses; expressions; face mask; beard		2 VGA, 2 HDMI VGA:1920 × 1080, 1280 × 1024, 1280 × 720 HDMI:3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 ×	
Face Detection Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s each channel)	Video Output	720 Heterogeneous video source output for HDMI1 and HDMI2 Simultaneous video source output for VGA1 and HDMI1 Simultaneous video source output for VGA2 and HDMI2	
Face Detection Performance of AI by Camera (Number of	16 channels	Multi-screen Display	Main screen: 1/4/8/9/16/25/36 Sub screen: 1/4/8/9/16	
Channels) Face Recognition		Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung	
. 466 . 1666 8 . 11.	Up to 20 face databases with 20,000 images, with a	Compression Standa	Compression Standard	
Face Database Capacity	total capacity of 2.5 G. Name, gender, birthday, address, credential type, credential No., countries & regions and	Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG	
	state can be added to each face image.	Audio Compression	G.711a; G.711u; PCM; G726	
Face Recognition Performance of AI by	1. 16-channel FD (by camera) + FR (by recorder), image stream: 16 face images/s	Network		
Recorder (Number of Channels)  Face Recognition Performance of Al by	2. 2-channe FD (by recorder) + FR (by recorder), video stream: 12 face images/s	Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UDP; SNMP; NTP; DHCP DNS; SMTP; UPnP; IP Filter; PPPoE; FTP; DDNS; Alarm Server; IP Search (Supports Dahua IP camera, DVR, NVS, etc.); Multicast; P2P; Auto Registration; iSCSI	
Camera (Number of Channels)	16 channels	Mobile Phone Access	iOS; Android	
SMD Plus		Interoperability	ONVIF 22.06 (Profile T; Profile S; Profile G); CGI; SDK	
CMD Dive by December	8 channels: Secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain and lighting condition change	Browser	Chrome;IE;Safari;Edge;Firefox	
SMD Plus by Recorder		Network Mode	Multi-address mode, load balance, fault tolerance and other network port binding modes	
SMD Plus by Camera	16 channels	Recording Playback	,	
Video Metadata		Multi-channel Playback	Up to 16 channels	
Metadata Performance of Al by Camera (Number of Channels)	8 channels	Record Mode	General, motion detection; intelligent; alarm; POS	
Human Attributes	Top color, top type, bottom color, bottom type, hat, bag, age, gender and umbrella	Backup Method	USB device and network	
Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle registration location.	Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)	

## Wiz Sense | DHI-NVR5432-EI

Storage	
Disk Group	YES
Alarm	
General Alarm	Motion detection; privacy masking; local alarm
Anomaly Alarm	Camera offline; storage error; disk full; IP conflict; MAC conflict; login lock; abnormal behavior of fan; cybersecurity exception
Intelligent Alarm	Face detection; perimeter protection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat map
Alarm Linkage	Record; snapshot (panoramic); local alarm output; IPC external alarm output; access controller; audio; buzzer; log, preset; email
Port	

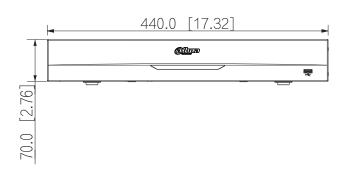
Port		
Audio Input	1-channel RCA	
Audio Output	2-channel RCA	
Alarm Input	16 channels	
Alarm Output	6 channels (1-channel 12 V 1 A output)	
HDD Interface	4 SATA ports, each disk can contain up to 16 TB. This limit varies depending on the environment temperature.	
eSATA	1	
RS-232	1	
RS-485	1 (half-duplex serial communication)	
USB	3(1 front USB 2.0 port, 2 rear USB 3.0 ports)	
HDMI	2	
VGA	2	
Network Port	2 (10/100/1000 Mbps Ethernet port, RJ-45)	

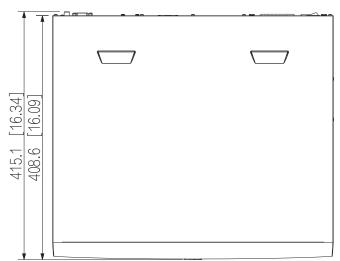
## General

Power Supply	100–240 VAC, 50-60 Hz	
Power Consumption	Total output of NVR is $\leq 13$ W (without HDD)	
Net Weight	4.74 kg (10.45 lb)	
Gross Weight	6.11 kg (13.47 lb)	
Product Dimensions	440.0 mm × 415.1 mm x 70.0 mm (17.32" × 16.34" × 2.76") (W ×D × H)	
Packaging Dimensions	530.0 mm × 500.0 mm × 210.0 mm (20.87" × 19.69" × 8.27")(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)	
Installation	Rack or desktop	
Certifications	FCC: 47 CFR FCC Part15, SubpartB, Class A 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 CE-LVD: EN 62368-1: 2014	

Ordering Information				
Туре	Model	Description		
32 Channels WizSense NVR	DHI-NVR5432-EI	32 Channels 1.5U 4HDDs WizSense Network Video Recorder		

## Dimensions (mm[inch])





#### **Panels**

