

# DHI-NVR5232-16P-EI

### 32 Channels 1U 16PoE 2HDD 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**

#### **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.

#### **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.

- · Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format.
- · 32-channel 1080p self-adaptive decoding capability.
- · Max. 384 Mbps incoming/recording/outgoing bandwidth.
- · AI by recorder: 2-channel face detection and recognition, 4-channel perimeter protection, and 8-channel SMD Plus.
- · Al by camera: Face detection and recognition, perimeter protection, SMD Plus, metadata, ANPR, and people counting.
- · Security baseline 2.3.



#### **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.



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Technical Specification		Vehicle License Plate Comparison		
System		ANPR by Camera (Number		
Main Processor	Industrial-grade processor	of Channels)	8 channels	
	Embedded Linux	License Plate Database	Create up to 20,000 plate numbers.     Blocklist and allowlist	
Operating System Operating Interface	Web, Local GUI	Capacity	2. BIOCKIIST ATIA AIIOWIIST	
Al	,	Audio and Video		
	Face detection; face recognition; perimeter protection;	Access Channel	32	
Al by Recorder  Al by Camera	SMD Plus  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 and 200 Mbps outgoing	
		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; 4-channel 16 MP@30 fps; 6-channel 12 MP@30 fps; 8-channel 5 MP@30 fps; 12-channel 5 MP@30 fps; 12-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; 4-channel 8 MP@30 fps; 8-channel 5 MP@30 fps; 12-channel 4 MP@30 fps; 24-channel 1080p@30 fps;	
Perimeter Performance AI by Recorder (Number of Channels)	4 channels, 10 IVS rules for each channel	Decoding Capability		
Perimeter Performance of Al by Camera (Number of Channels)	16 channels			
Face Detection Face Attributes	Gender; age group; glasses; expressions; face mask;	Video Output	1-channel VGA, 1-channel HDMI video output. Heterogeneous video source output for HDMI and VGA Supports 4K display	
Face Detection	beard	Multi-screen Display	Main screen: 1/4/8/9/16/25/36 Sub screen: 1/4/8/9/16	
Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s each channel)	Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung	
Face Detection	16 channels	Compression Standar	Compression Standard	
Performance of AI by Camera (Number of Channels)		Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG	
Face Recognition		Audio Compression	G.711a; G.711u; PCM; G726	
Up to 20 face databases with 20,000 images, with a		Network	Network	
Face Database Capacity	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.	Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; RTSP; 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	
Face Recognition Performance of AI by Recorder (Number of Channels)	1. 16-channel FD (by camera) + FR (by recorder), image stream: 16 face images/s     2. 2-channe FD (by recorder) + FR (by recorder), video stream: 12 face images/s	Mobile Phone Access	iOS; Android	
		Interoperability	ONVIF 21.12(Profile T; Profile S; Profile G); CGI; SDK	
Face Recognition Performance of AI by Camera (Number of	16 channels	Browser	Chrome IE 9 or later Firefox	
Channels)		Recording Playback		
SMD Plus		Multi-channel Playback	Up to 16 channels	
SMD Plus by Recorder	8 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change	Record Mode	General, motion detection; intelligent; alarm; POS	
SMD Plus by Camera	16 channels	Backup Method	USB device and network	
Video Metadata		Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)	
Metadata Performance of	8 channels	Storage		
Al by Camera (Number of Channels)		Disk Group	Yes	
Human Attributes	Top color, top type, bottom color, bottom type, hat, bag, age, gender and umbrella	Alarm		
Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle	General Alarm	Motion detection; privacy masking; local alarm	
Non-motor Vehicle Attributes	registration location.  Vehicle model, vehicle color, number of persons, helmet.	Anomaly Alarm	Camera offline; storage error; disk full; IP conflict; MAC conflict; login lock; abnormal behavior of fan; cybersecurity exception	



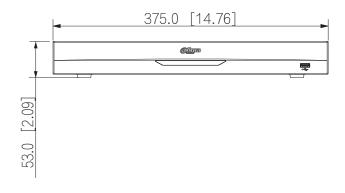
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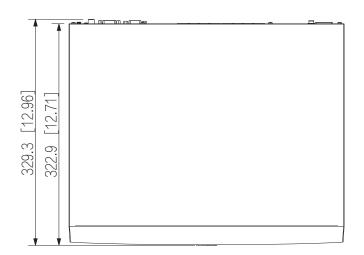
Intelligent Alarm	Face detection; perimeter protection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat map		
Alarm Linkage	Record; snapshot (panoramic); local alarm output; IPC external alarm output; access controller; audio; buzzer; log, preset; email		
Port			
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.		
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	1(10/100/1000 Mbps Ethernet port, RJ-45)		
PoE Port	16 ports, 10/100 Mbps, IEEE 802.3 af/at, 1-8 ports support ePoE		
General			
Power Supply	100–240 VAC, 47-63 Hz		
Power Consumption	Total output of NVR is $\leq$ 10 W (without HDD) Total output power of PoE is 130 W, the maximum output power of a single port is 25.5 W		
Net Weight	2.66 kg (5.86 lb)		
Gross Weight	3.82 kg (8.42 lb)		
Product Dimensions	375.0 mm × 329.3 mm × 53.0mm (14.76" × 12.96" × 2.09") (W × D × H)		
Packaging Dimensions	449.0 mm $\times$ 170.0 mm $\times$ 421.0 mm (17.68" $\times$ 6.69" $\times$ 16.57") (W $\times$ D $\times$ 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		

Ordering Information				
Туре	Model	Description		
32 Channels WizSense NVR	DHI-NVR5232- 16P-EI	32 Channels 1U 16PoE 2HDD WizSense Network Video Recorder		

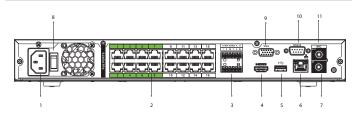
CE-LVD: EN 62368-1: 2014

## Dimensions (mm[inch])





### **Panels**



- 1 Power Input 3 Alarm In/Out
- 5 USB Port 7 MIC IN, RCA Connector 9 VGA Port
- 11 MIC OUT, RCA Connector

- 4 HDMI Port 6 Nerwork Port 8 Power Switch 10 RS-232 Port



