



# DHI-NVR5232-EI

## 32 Channels 1U 2HDDs 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.

- · Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- · Max. decoding capability: 32 × 1080p@30 fps or 32 × 2MP@30 fps.
- · Max. 384 Mbps incoming/recording/outgoing bandwidth.
- · Supports IP cameras with a resolution up to 32 MP.
- · Support AcuPick with up to 32 channels.
- · Support N+M cluster.
- · Al 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, stereo analysis, heat map, and people counting.
- · Security baseline 2.4.



#### **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.

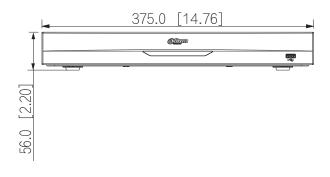
Technical Specification		Non-motor Vehicle Attributes	Vehicle model, vehicle color, number of persons, helmet
System		Vehicle License Plate Comparison	
Main Processor	Industrial-grade processor	ANPR by Camera (Number	8 channels
Operating System	Embedded Linux	of Channels)	
Operating Interface	Web, Local GUI	License Plate Database Capacity	<ol> <li>Create up to 20,000 plate numbers.</li> <li>Blocklist and allowlist</li> </ol>
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 man	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
AcuPick AI by Camera +	heat map  Max. 32-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
Recorder	corder		Al disabled: 2-channel 32 MP@25 fps; 2-channel 24 MP@25 fps;
Perimeter Protection  Perimeter Performance AI by Recorder (Number of Channels)  Perimeter Performance of AI by Camera (Number of Channels)	4 channels, 10 IVS rules for each channel 16 channels	Decoding Capability	4-channel 16 MP@30 fps; 5-channel 12 MP@30 fps; 8-channel 8 MP@30 fps; 12-channel 5 MP@30 fps; 16-channel 4 MP@30 fps; 32-channel 1080p@30 fps Al enabled: 1-channel 32 MP@25 fps; 1-channel 24 MP@25 fps; 2-channel 16 MP@30 fps; 4-channel 12 MP@30 fps; 6-channel 8 MP@30 fps; 8-channel 1080p@30 fps; 12-channel 4 MP@30 fps; 24-channel 1080p@30 fps
Face Detection Face Attributes	Gender; age group; glasses; expressions; face mask; beard	Video Output	1 VGA, 1 HDMI VGA:1920 × 1080, 1280 × 1024, 1280 × 720 HDMI:3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720
Face Detection	beard		Heterogeneous video source output for HDMI and VGA
Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s each channel)	Multi-screen Display	Main screen: 1/4/8/9/16/25/36 Sub screen: 1/4/8/9/16
Face Detection Performance of AI by	16 channels	Third-party Camera Access  Compression Standa	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha
Camera (Number of Channels)	To channels		
Face Recognition		Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG
	Up to 20 face databases with 20,000 images, with a	Audio Compression	G.711a; G.711u; PCM; G726
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	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UDP; SNMP; NTP; DHCP
Face Recognition Performance of AI by	1. 16-channel FD (by camera) + FR (by recorder), image stream: 16 face images/s	Network Protocol	DNS; SMTP; UPnP; IP Filter; PPPoE; FTP; DDNS; Alarm Server; IP Search (Supports Dahua IP camera, DVR, NVS, etc.); Multicast; P2P; Auto Registration; iSCSI
Recorder (Number of Channels)	<ol> <li>2. 2-channe FD (by recorder) + FR (by recorder), video stream: 12 face images/s</li> </ol>	Mobile Phone Access	iOS; Android
Face Recognition Performance of AI by Camera (Number of	16 channels	Interoperability	ONVIF 22.06 (Profile T; Profile S; Profile G); CGI; SDK
		Browser	Chrome;IE;Safari;Edge;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 AI by Camera (Number of	8 channels	Storage	
Channels)	Top color, top type, bottom color, bottom type, hat, bag,	Disk Group	Yes
Human Attributes	age, gender and umbrella	Alarm	
Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle registration location.	General Alarm	Motion detection; privacy masking; local alarm

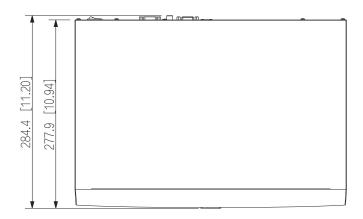
## Wiz Sense | DHI-NVR5232-EI

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		
Audio Input	1-channel RCA	
Audio Output	1-channel RCA	
Alarm Input	4 channels	
Alarm Output	2 channels	
HDD Interface	2 SATA ports, each disk can contain up to 20 TB. This limit varies depending on the 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)	
General		
Power Supply	12 VDC, 4 A	
Power Consumption	Total output of NVR is ≤ 10 W (without HDD)	
Net Weight	1.57 kg (3.46 lb)	
Gross Weight	2.73 kg (6.02 lb)	
Product Dimensions	375.0 mm × 284.4 mm x 56.0mm (14.76" × 11.20" × 2.20") (W × D × H)	
Packaging Dimensions	433.0 mm × 141.0 mm × 366.0 mm (17.04" × 5.55" × 14.41") (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	

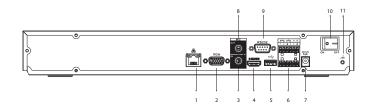
#### **Ordering Information** Type Model Description 32 Channels 32 Channels 1U 2HDDs WizSense DHI-NVR5232-EI Network Video Recorder WizSense NVR

### Dimensions (mm[inch])





#### **Panels**



- 1 Network Port
- 3 MIC IN, RCA Connector
- 5 USB Port
- 7 Power Input
- 9 RS-232 Port 11 Ground
- 2 VGA Port
- 4 HDMI Port 6 Alarm In/Out
- 8 MIC OUT, RCA Connector 10 Power Switch