



DHI-NVR5232-EI

32 Channels 1U 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.
- · Al 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.



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		Vehicle License Plate Comparison	
System		ANPR by Camera (Number	8 channels
Main Processor	Industrial-grade processor	of Channels) License Plate Database Capacity	Create up to 20,000 plate numbers. Blocklist and allowlist
Operating System	Embedded Linux		
Operating Interface	Web, Local GUI	Audio and Video	
Al		Access Channel	32
Al by Recorder	Face detection; face recognition; perimeter protection; SMD Plus Face detection; face recognition; video metadata	Network Bandwidth	Al disabled: 384 Mbps incoming, 384 Mbps recording and 384 Mbps outgoing Al enabled: 200 Mbps incoming, 200 Mbps recording and
Al by Camera	(human, motor vehicles, and non-motor vehicles); perimeter protection; SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat map	Resolution	200 Mbps outgoing 32 MP; 24 MP; 16 MP; 12 MP; 8 MP; 5 MP; 4 MP; 1080p; 720p; D1; CIF; QCIF
Perimeter Protection	1		Al disabled: 2-channel 32 MP@20 fps; 2-channel 24 MP@20 fps; 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@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	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
Performance of AI by Recorder (Number of Channels)		Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung
Face Detection	16 channels	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
J	Up to 20 face databases with 20,000 images, with a	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 AI by Camera (Number of Channels)	8 channels	Storage	
		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





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	2SATA 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)		
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)		

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

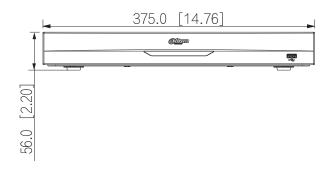
CE-LVD: EN 62368-1: 2014

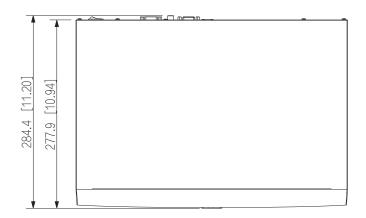
Rack or desktop

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;

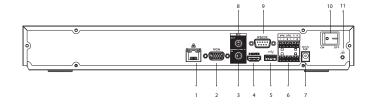
EN 55035: 2017+A11: 2020; EN 50130-4: 2011+A1: 2014

Dimensions (mm[inch])





Panels



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



Installation

Certifications

