



DHI-NVR5208-8P-EI2

8CH 1U 8PoE 2HDDs WizSense Network Video Recorder







Launched by Dahua Technology, WizSense is a series of Al products and solutions that adopt independent Al 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-EI2 delivers superior performance and advanced recording technology for IP surveillance systems. Featuring a powerful processor with high-speed data processing and robust decoding capabilities, it ensures smooth video streaming. The device incorporates an intuitive modular GUI NVR NEXT that simplifies workflows and enhances operational efficiency. Equipped with an integrated AI chip and Dahua's deep learning algorithms, it enables precise detection, efficient analytics, and reduced false alarms. Its AcuPick technology provides industry-leading one-click accuracy search. Supporting seamless integration with third-party devices and Video Management Software (VMS), the NVR5000-EI2 offers a versatile and scalable surveillance solution.

Functions

AcuPick

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

- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max. decoding capability: 40 × 1080p@30 fps or 8 × 8MP@30 fps.
- · Max. 448/448 Mbps incoming/recording/outgoing bandwidth.
- · Supports IP cameras with a resolution up to 32 MP.
- · Supports 8K HDMI output.
- Provides access to remote storage devices via iSCSI to expand storage capacity.
- Al by Recorder supports 4-channel face detection and recognition, up to 20 face databases and 30,000 face images; 4-channel video metadata; 8-channel perimeter protection; 8-channel SMD Plus; 4-channel AcuPick.
- Al by Camera supports face detection and recognition, perimeter protection, SMD, metadata, AcuPick, ANPR, stereo analysis, heat map, people counting, PPE detection, smart object detection and smart sound detection.
- · Supports EPTZ, and one-click arming and disarming.



NVR NEXT

With its enhanced system, the NVR introduces NVR NEXT, a user-friendly GUI featuring a modular design to improve operation efficiency and streamline workflows, catering to the needs of small and medium-sized businesses.

Al Features

Embedded with deep-learning algorithms, the NVR offers advanced AI capabilities, delivering precise detection, efficient analytics, and reduced false alarms.

PPE Detection by Camera

With the PPE Detection function, the camera can detect attributes including face masks, helmets, glasses, safety vests, and the color of tops and bottoms, and determine whether PPE requirements are met. PPE compliance or non-compliance alarms can be triggered according to the alarm settings.

Technical Specification			SMD	
System			SMD Plus by Recorder	8 channels: Secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain
Main Processor	Industrial-grade processor		CMD I C	and lighting condition change
Operating System	Embedded Linux		SMD by Camera	All channels (16 targets/s)
Operating Interface	Web, Local GUI		Video Metadata	
Al			Metadata Performance of AI by Recorder (Number of Channels)	4 channels, 22 attributes extraction.
Al by Recorder	Face detection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); perimeter protection; ANPR; SMD Plus; AcuPick Face detection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); perimeter protection; SMD; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat map; PPE detection; smart object detection; smart sound detection; AcuPick		Metadata Performance of Al by Camera (Number of	All channels (8 targets/s)
Al by Camera AcuPick Performance of			Channels) People Attributes	Top color, top type, bottom color, bottom type, hat, bag, age, gender and umbrella
			Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle registration location
Al by Recorder (1080P) (Number of Channels)	4 channels		Non-motor Vehicle Attributes	Vehicle model, vehicle color, number of persons, helmet
AcuPick Performance of Al by Camera (1080P)	Max. 8-channel, 1 combined event per channel/s		Vehicle License Plate Comparison	
(Number of Channels) Perimeter Protection			ANPR by Camera (Number of Channels)	All channels (8 targets/s)
Perimeter Performance AI			License Plate Database Capacity	Create up to 20,000 plate numbers. Blocklist and allowlist
by Recorder (Number of Channels)	8 channels, 10 IVS rules for each channel		Audio and Video	
Perimeter Performance of Al by Camera (Number of	All about all (O bounds (a)		Access Channel	8 channels
Channels) Face Detection			Network Bandwidth	Al disabled: 448 Mbps incoming, 448 Mbps recording and 448 Mbps outgoing Al enabled: 200 Mbps incoming, 200 Mbps recording
Face Attributes	Gender; age group; glasses; expressions; face mask;			and 200 Mbps outgoing
Face Detection	beard		Resolution	32 MP;24 MP;16 MP;12 MP;8 MP;6 MP;5 MP;4 MP;3 MP;1080p;720p;960p;D1;CIF;QCIF
Performance of AI by Recorder (Number of Channels)	4 channels (up to 12 face images/s each channel)		Decoding Capability	Al disabled: 2-channel 32 MP@25 fps; 2-channel 24 MP@25 fps; 5-channel 16 MP@30 fps; 6-channel 12 MP@30 fps Al enabled: 1-channel 32 MP@25 fps; 2-channel 24
Face Detection Performance of AI by Camera (Number of	rmance of Al by All channels (8 targets/s)			MP@25 fps; 4-channel 16 MP@30 fps; 5-channel 12 MP@30 fps; 8-channel 8 MP@30 fps
Channels)				1 VGA, 1 HDMI VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Face Recognition			Video Output	HDMI: 7680×4320, 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720
Face Database Capacity	Up to 20 face databases with 30,000 images, with a total capacity of 3.75 GB. Name, gender, birthday, address, credential type, credential No., countries & regions and state can be added to each face image.		Multi-screen Display	Heterogeneous video source output for HDMI and VGA Main Screen: 1/4/8/9 Sub Screen: 1/4/8/9
Face Recognition 1. 8-channel FD Performance of Al by stream: 8 face i Recorder (Number of 2. 4-channe FD	1. 8-channel FD (by camera) + FR (by recorder), image		Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha
	stream: 8 face images/s 2. 4-channe FD (by recorder) + FR (by recorder), video stream: 24 face images/s		Compression Standard	
Face Recognition			Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG
Performance of Al by Camera (Number of Channels)	All channels (8 targets/s)		Audio Compression	G.711a; G.711u; PCM; G726

Network				
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; IPv6; UDP; NTP; FTP; SFTP; DHCP; DNS; SMTP; UPnP; DDNS; SMMP; Alarm Server; IP Search (Supports IP camera, DVR, NVS, etc.); Multicast; P2P; Auto Registration; iSCSI			
Mobile Phone Access	iOS; Android			
Interoperability	ONVIF 24.12(Profile T; Profile S; Profile G; Profile M); CGI; SDK			
Browser	Chrome; IE; Safari; Edge; Firefox			
Recording Playback				
Multi-channel Playback	Up to 8 channels			
Record Mode	General, motion detection; intelligent; alarm; POS			
Backup Method	USB device and network			
Playback Mode	Instant playback, general playback, event playback, target Video, video clip, tag playback, smart playback (face and motion detection)			
Storage				
Disk Group	Yes			
Alarm				
General Alarm	Motion detection; local alarm; alarm box; camera external alarm; network alarm; scene changing; PIR alarm; thermal 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; PPE detection; smart object detection; smart sound detection			
Alarm Linkage	Record; snapshot (panoramic); local alarm output; IPC external alarm output; audio; buzzer; log, preset; email			
Port				
Audio Input	1-channel RCA			
Audio Output	1-channel RCA			
Alarm Input	4 channels			
Alarm Output	2 channels			
Disk Interface	2 SATA ports, each disk can contain up to 20TB. 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)			
PoE Port	8 ports, 10/100 Mbps, IEEE 802.3 af/at, 1-8 ports support ePoE			

Power Supply	100–240 VAC, 50/60 Hz	
Power Consumption	Total output of NVR is \le 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	2.50 kg (5.51 lb)	
Gross Weight	3.96 kg (8.73 lb)	
Product Dimensions	375.0 mm \times 329.6 mm \times 53.0 mm (14.76" \times 12.98" \times 2.09") (W \times D \times H)	
Packaging Dimensions	451.0 mm × 147.0 mm × 425.0 mm (17.76" × 5.79" × 16.73") (W × D × H)	

 $-10~^{\circ}\text{C}$ to +55 $^{\circ}\text{C}$ (+14 $^{\circ}\text{F}$ to +131 $^{\circ}\text{F})$

 $-20~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (–4 $^{\circ}\text{F}$ to +140 $^{\circ}\text{F})$

10%–93% (RH), non-condensing 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

General

Operating Temperature
Storage Temperature

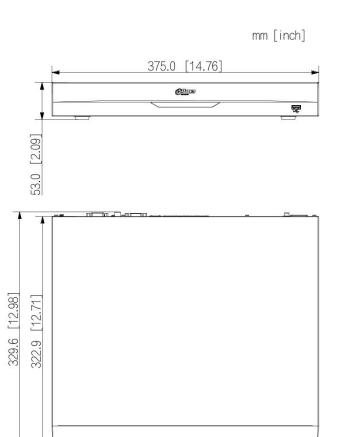
Operating Humidity

Certifications

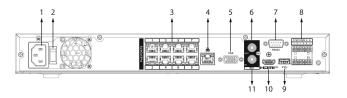
Ordering Information						
Туре	Model	Description				
NETWORK VIDEO RECORDER	DHI-NVR5208-8P-EI2	8CH 1U 8PoE 2HDDs WizSense Network Video Recorder				

CE-LVD: EN 62368-1:2014

Dimensions (mm[inch])



Panels



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