

DHI-NVR5864-EI

64 Channels 2U 8HDD 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.
- · Support Raid0/1/5/6/10.
- · 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.
- Al 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.



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VIDM/

Technical Specification		Vehicle License Plate Comparison	
System		ANPR by Camera (Number of Channels)	8 channels
Main Processor	Industrial-grade processor	License Plate Database	1. Create up to 20,000 plate numbers.
Operating System	Embedded Linux	Capacity	2. Blocklist and allowlist
Operating Interface	Web, Local GUI	Audio and Video	
AI		Access Channel 64	
AI by Recorder	Face detection; face recognition; perimeter protection; SMD Plus Face detection; face recognition; video metadata	Network Bandwidth	AI disabled: 384 Mbps incoming, 384 Mbps recording and 384 Mbps outgoing AI enabled: 200 Mbps incoming, 200 Mbps recording and
AI 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			AI disabled: 2-channel 32 MP@20 fps; 2-channel 24 MP@20 fps;
Perimeter Performance AI by Recorder (Number of Channels)	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 5 MP@30 fps; 16-channel 4 MP@30 fps; 32-channel 1080p@30 fps AI enabled:
Perimeter Performance of AI by Camera (Number of Channels)	16 channels		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
Face Detection			2-channel VGA, 2-channel HDMI video output. Heterogeneous video source output for HDMI1 and
Face Attributes Face Detection	Gender; age group; glasses; expressions; face mask; beard	Video Output	HDMI2 Simultaneous video source output for VGA1 and HDMI1 Simultaneous video source output for VGA2 and HDMI2
Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s each channel)	Multi-screen Display	Supports 4K display Main screen: 1/4/8/9/16/25/36/64 Sub screen: 1/4/8/9/16
Face Detection Performance of AI by	16 channels	Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung
Camera (Number of Channels)	10 channels	Compression Standard	
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 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.	Audio Compression	G.711a; G.711u; PCM; G726
Face Database Capacity		Network	HTTP; HTTPS; TCP/IP; IPv4/IPv6; RTSP; UDP; SNMP; NTP;
Face Recognition Performance of AI by Recorder (Number of	 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 	Network Protocol	Alarm Server; IP Sarch (Supports Dahua IP camera, DVR, NVS, etc.); Multicast; P2P; Auto Registration
Channels)	Stream. 12 lace integes/s	Mobile Phone Access	iOS; Android
Face Recognition Performance of AI by	16 channels	Interoperability	ONVIF 21.12(Profile T; Profile S; Profile G); CGI; SDK
Camera (Number of Channels)		Browser	Chrome IE 9 or later Firefox
SMD Plus	8 channels: Secondary filtering for human and motor	Network Mode	Multi-address mode, load balance, fault tolerance and other network port binding modes
SMD Plus by Recorder	vehicle , reducing false alarms caused by leaves, rain and lighting condition change	Recording Playback	
SMD Plus by Camera	16 channels	Multi-channel Playback	Up to 16 channels
Video Metadata		Record Mode	General, motion detection; intelligent; alarm; POS
Metadata Performance of AI by Camera (Number of	8 channels	Backup Method	USB device and network
Channels) Human Attributes	Top color, top type, bottom color, bottom type, hat, bag, age, gender and umbrella	Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)
Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle	Storage Disk Group	Yes
Non-motor Vehicle	registration location.	RAID	RAID 0/1/5/6/10
Attributes	Vehicle model, vehicle color, number of persons, helmet.		

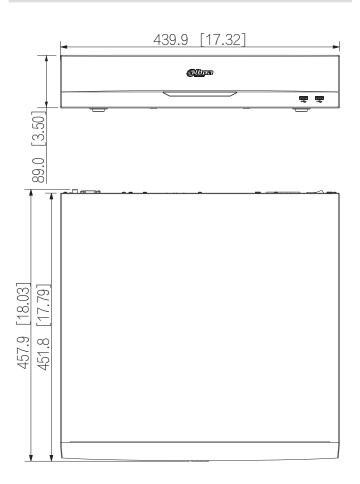
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Alarm				
General Alarm	Motion detection; privacy masking; local alarm			
Anomaly Alarm	Camera offline; storage error; disk full; IP conflict; MAC conflict; login lock; abnormal behavior of fan; cybersecurity exception			
Intelligent Alarm	Face detection; 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				
Audio Input	1-channel RCA			
Audio Output	2-channel RCA			
Alarm Input	16 channels			
Alarm Output	8 channels (1-channel 12 V 1 A output)			
HDD Interface	8 SATA ports, up to 16 TB.The maximum HDD capacity varies with environment temperature.			
eSATA	1			
RS-232	1			
RS-485	2 (1 port for half-duplex serial communication, 1 port for full-duplex serial communication)			
USB	4 (2 front USB 2.0 ports, 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	6.4 kg (14.11 lb)			
Gross Weight	9.01 kg (19.86 lb)			
Product Dimensions	439.9 mm × 457.9 mm x 89.0 mm (17.32" × 18.03" × 3.50") (W ×D × H)			
Packaging Dimensions	570.0 mm × 570.0 mm x 226.0 mm (22.44" × 22.44" × 8.90") (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			

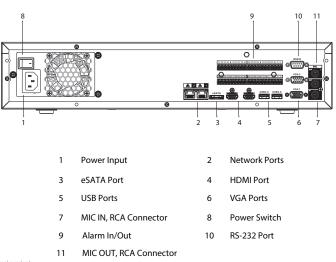
Ordering Information

Туре	Model	Description
64 Channels WizSense NVR	DHI-NVR5864-EI	64 Channels 2U 8HDD WizSense Network Video Recorder

Dimensions (mm[inch])



Panels



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