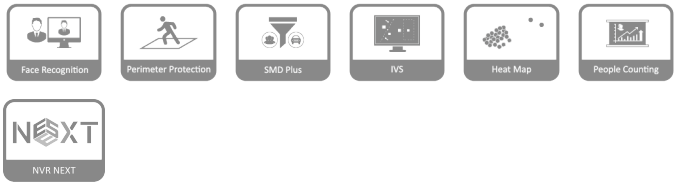
DHI-NVR4216-EI-V2

16CH 1U 2-Bay WizSense Network Video Recorder



- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max decoding capability: 16 × 1080p@30 fps.
- Max 256/256/256 Mbps incoming/recording/outgoing bandwidth.
- Supports IP cameras with a resolution up to 16 MP.
- AI by Recorder supports 1-channel face detection and recognition, up to 5 face databases and 5,000 face images; 2-channel perimeter protection; 16-channel SMD Plus.
- AI by Camera supports face detection and recognition, perimeter protection, SMD, people counting, stereo analysis, and heat map.
- Supports EPTZ, and one-click arming and disarming.



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 NVR4000-EI-V2 series is a next-generation network video recorder. Combining powerful decoding and high bandwidth with lightweight AIoT capabilities, it enables seamless device connection and instant event response. Equipped with high-precision face recognition, perimeter protection, and Smart Motion Detection (SMD), it distinguishes humans and vehicles in real time. Cost-effective and highly compatible with third-party devices, it is an ideal security solution for small and medium-sized businesses.

Functions

Face Recognition

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database.

Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improves alarm accuracy.

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.

AI Search

With AI search, operators can search for videos by the attributes of targets and event types, which helps them to quickly and efficiently investigate where and when targets appeared and events took place.

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.

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.

Technical Specification

System

Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operating Interface	Web; Local GUI

AI

AI by Recorder	Face detection; face recognition; perimeter protection; SMD Plus
AI by Camera	Face detection; face recognition; perimeter protection; SMD; people counting; stereo analysis; heat map

Perimeter Protection

Perimeter Performance AI by Recorder (Number of Channels)	2 channels, 10 IVS rules for each channel
Perimeter Performance of AI by Camera (Number of Channels)	All channels (8 targets/s)

Face Detection

Face Attributes	6 attributes
Face Detection Performance of AI by Recorder (Number of Channels)	1 channel (up to 12 face images/s each channel)
Face Detection Performance of AI by Camera (Number of Channels)	All channels (8 targets/s)

Face Recognition

Face Database Capacity	Up to 5 face databases with 5,000 images, with a total capacity of 1 G. Name, gender, birthday, address, credential type, credential No., countries & regions and state can be added to each face image
Face Recognition Performance of AI by Recorder (Number of Channels)	8-channel FD (by camera) + FR (by recorder),image stream: 12 face images/s 1-channel FD (by recorder) + FR (by recorder), video stream: 12 face images/s
Face Recognition Performance of AI by Camera (Number of Channels)	All channels (8 targets/s)

SMD

SMD Plus by Recorder	16 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change
SMD by Camera	All channels (16 targets/s)

Audio and Video

Access Channel	16 channels
Network Bandwidth	AI disabled: 256 Mbps incoming, 256 Mbps recording and 256 Mbps outgoing AI enabled: 180 Mbps incoming, 180 Mbps recording and 180 Mbps outgoing
Resolution	16 MP;12 MP;8 MP;6 MP;5 MP;4 MP;3 MP;1080p;720p;960p;D1;CIF
Decoding Capability	AI disabled: 2-channel 16 MP@30 fps; 2-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 4-channel 6 MP@30 fps; 6-channel 5 MP@30 fps; 8-channel 4 MP@30 fps; 16-channel 1080p@30 fps AI enabled: 1-channel 16 MP@30 fps; 2-channel 12 MP@30 fps; 3-channel 8 MP@30 fps; 3-channel 6 MP@30 fps; 4-channel 5 MP@30 fps; 6-channel 4 MP@30 fps; 12-channel 1080p@30 fps; 16-channel 720p@30 fps
Video Output	1 HDMI, 1 VGA HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 *Simultaneous/heterogeneous video sources output for VGA and HDMI is configurable
Multi-screen Display	Main Screen: 1/4/8/9/16 Sub Screen: 1/4/8/9/16
Third-party Camera Access	ONVIF;RTSP;Panasonic;Sony;Axis;Arecont;Pelco;Canon; Hanwha

Compression Standard

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264;MJPEG
Audio Compression	G.711a;G.711u;PCM;G726

Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; IPv6; RTSP; UPnP; SNMP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; PPPoE; DDNS; FTP; Alarm Server; IP Search (Support Dahua IP camera, DVR, NVS, etc.); P2P; Auto Registration; RTMP
Mobile Phone Access	iOS;Android
Interoperability	ONVIF 26.06 (Profile T; Profile S; Profile G; Profile M); CGI; SDK
Browser	Chrome;firefox;IE;Safari;Edge

Recording Playback

Multi-channel Playback	Up to 16 channels
Record Mode	General, motion detection; intelligent; alarm
Backup Method	USB device and network
Playback Mode	Instant playback; general playback; event playback; tag playback; smart playback

Storage

Disk Group	Yes

Alarm

General Alarm	Motion detection; privacy masking; video loss; scene changing; PIR alarm; IPC external alarm; alarm box
Anomaly Alarm	Error (no disk; disk error; low space; low quota space; abnormal disk health; network disconnection; IP conflict; MAC conflict); video loss; video tampering; camera offline; audio detection
Intelligent Alarm	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map
Alarm Linkage	Record; snapshot; 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, up to 26 TB.The maximum HDD capacity varies with environment temperature
USB	2 (1 front USB 2.0 port, 1 rear USB 2.0 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	<10 W (without HDD)
Net Weight	1.52 kg (3.35 lb)
Gross Weight	2.75 kg (6.06 lb)
Product Dimensions	375.0 mm × 284.4 mm × 53.0 mm (14.76" × 11.20" × 2.09") (W × D × H)
Packaging Dimensions	427.0 mm × 137.0 mm × 356.0 mm (16.81" × 5.39" × 14.02") (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), non-condensing
Certifications	CE-EMC: EN 55032:2015+A1:2020, EN 55035:2017+A11:2020, EN 61000-3-2:2019+A1:2021+A2:2024, EN 61000-3-3:2013+A1:2019+A2:2021 CE-LVD: IEC 62368-1:2023

Ordering Information

Type	Model	Description
NETWORK VIDEO RECORDER	DHI-NVR4216-EI-V2	16CH 1U 2-Bay WizSense Network Video Recorder
Accessories (Optional)	PFH101	PFH101-DH920C1(5 pieces per pack)

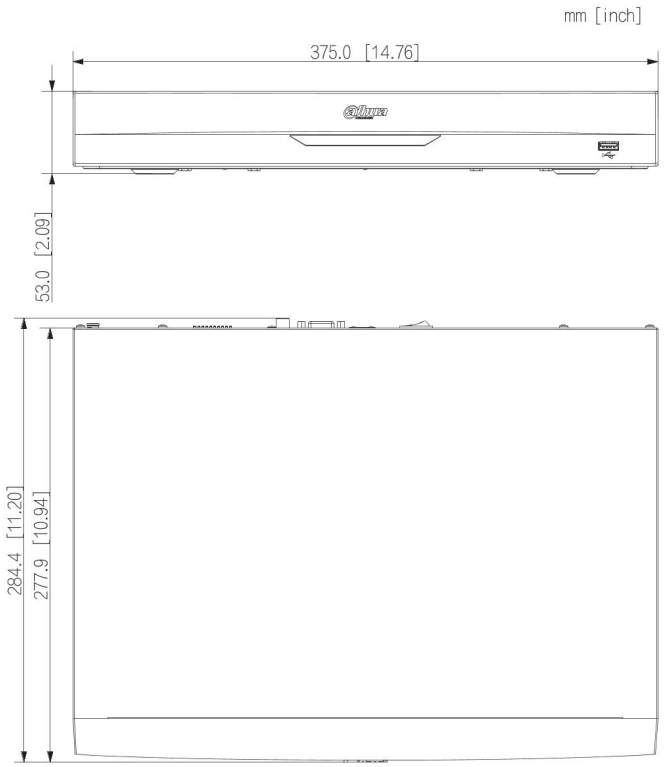
Accessories

Optional:

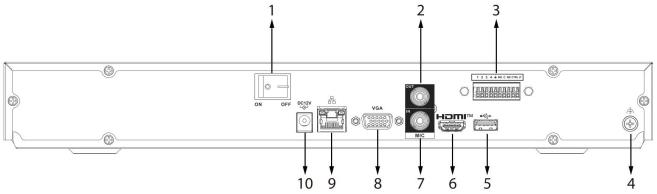


PFH101
PFH101-DH920C1(5 pieces per pack)

Dimensions (mm[inch])



Panels



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

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