

# DHI-NVR4416/4432-16P-4KS2

16/32 Channel 1.5U 4HDDs 16PoE 4K & H.265 Lite Network Video Recorder



Dahua's new NVR4000-4KS2 network video recorder delivers excellent performance and high recording quality that is ideally suitable for IP video surveillance applications. This professional NVR adopts powerful processor, providing the capability of 4K resolution processing for applications where image details are highly required. Additionally, the NVR can be served as edge storage, central storage or backup storage with an intuitive shortcut operation menu for remote management and control.

## Series Overview

The NVR is compatible with numerous third-party devices, which make it the perfect solution for surveillance systems that work independently of video management system (VMS). It features an open architecture that supports multi-user access and is compatible with ONVIF 2.4 protocol, enabling interoperability with 4K cameras.

## Functions

### Perimeter Protection by Camera

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

### SMD Plus by Camera

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.

### People Counting by Camera

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs yearly/monthly/weekly/daily reports to meet your requirements.

- 16/32-channel IP video access
- Smart H.265+/Smart H.264+/H.265/H.264; H.265 auto switch
- Max 200 Mbps incoming bandwidth
- Up to 8MP resolution for preview and playback
- 8-channel decoding@1080p (30 fps)
- AI by Camera: Perimeter protection; SMD Plus; people counting; heat map
- Support IPC UPnP, 16 PoE ports



## Smart Codec

With advanced scene-adaptive rate control algorithm, Dahua smart codec technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

## ANR (Automatic Network Replenishment Technology)

Video record in SD card in IP cameras when the network breaks down, and after the network recovered, the video will be transferred to device and then recorded in it.

## DMSS

The DMSS app is available on the iOS App Store and Google Play. It makes surveillance easy and simple, allowing you to remotely access back-end devices, view live video, receive event push notifications, and search for recorded videos from an iPhone, iPad, or Android phone at anytime from virtually anywhere.

### Technical Specification

#### System

Main Processor	Industrial embedded micro-processor
Operating System	Embedded Linux
Operation Interface	Web; local GUI

#### Perimeter Protection by Camera

Performance	16 channels
AI Search	Search for pictures by channel, time and event type

#### SMD Plus by Camera

Performance	16/32 channels
AI Search	Search by target classification (human, vehicle)

#### Video

Access Channel	16/32
Network Bandwidth	200 Mbps for access, 200 Mbps for storage and 96 Mbps for forwarding
Resolution	8MP, 6MP, 5MP, 4MP, 3MP, 1080p, 1.3MP, 720p, D1, and more
Decoding Capability	8 channels@1080p (30 fps)
Video Output	HDMI: 3840 × 2160; 1920 × 1080; 1280 × 1024; 1280 × 720 VGA: 1920 × 1080; 1280 × 1024; 1280 × 720
Multi-screen Display	16-channel: 1/4/8/9/16 32-channel: 1/4/8/9/16/25/36
Third Party Camera Access	Panasonic, Sony, Samsung, Axis, Pelco, Arecont, ONVIF, Canon and more

#### Compression

Video	Smart H.265+; Smart H.264+; H.265; H.264
Audio	PCM; G.711A; G.711U; G.726

#### Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; DDNS; FTP; Alarm Server; IP Search (supports Dahua IP camera, DVR, NVS, and more); P2P
Mobile Phone Access	Android; iOS
Interoperability	ONVIF (profile T/S/G); CGI; SDK
Browser	Chrome; IE9 or later; Firefox

#### Record Playback

Multi-channel Playback	1/4/9/16
Record Mode	Manual; schedule (general; MD; alarm; MD & alarm; intelligent)
Storage Method	Local HDD and network
Backup	USB device
Playback Function	1. Play; pause; stop; fast forward; fast backward; rewind; play by frame 2. Full screen; backup (cut/file); partially enlarge; audio on/off

#### Storage

Disk Group	Yes
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#### Alarm

General Alarm	Motion detection; privacy masking; video loss; PIR alarm; IPC alarm
Anomaly Alarm	Camera offline; storage error; full storage; IP conflict; MAC conflict; login lock; network security anomaly
Intelligent Alarm	Perimeter protection; SMD; people counting; heat map
Alarm Linkage	Record; snapshot; IPC external alarm output; buzzer; log; preset; email

#### External Port

Audio Input	1 channel, RCA connector
Audio Output	1 channel, RCA connector, which support voice intercom output
HDD	4 SATA III ports, up to 10 TB for a single HDD. The maximum HDD capacity varies with environment temperature
Alarm Input	16 channels
Alarm Output	4 channels
RS-232	1 channel, used to debug and pass through serial data
RS-485	1 channel, used to control PTZ, and it supports multiple protocols
USB	1 front USB 2.0 port, 1 rear USB 3.0 port
HDMI	1
VGA	1
Network	1 RJ-45 10/100/1000 Mbps self-adaptive Ethernet port
PoE	16 ports (IEEE802.3at/af)

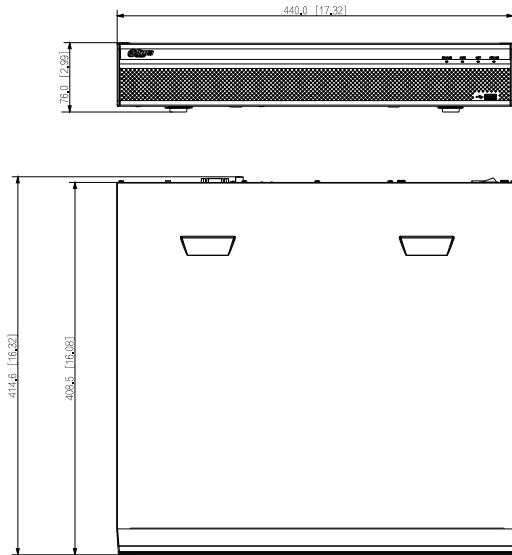
#### General Parameter

Power Supply	Single, 100V–240V AC, 50 Hz–60 Hz
Power Consumption	NVR: < 13.7W (without HDD) PoE: Max 25.5W for single port, 150W in total
Net Weight	4.7 kg (10.4lb) (without HDD)
Gross Weight	7.5 kg (16.5 lb) (without HDD)
Product Dimensions	440.0 mm × 414.6 mm × 76.0 mm (17.3" × 16.3" × 3.0")
Package Dimensions	522 mm × 492 mm × 200 mm (20.6" × 19.4" × 7.9")
Operating Temperature	-10°C to +55°C (+14°F to +131°F)
Storage Temperature	0°C to +40°C (+32°F to +104°F)
Operating Humidity	10%–93% (RH)
Storage Humidity	30%–85% (RH)
Operating Altitude	3,000 m (9,843 ft)
Certifications	CE: EN55032; EN55024; EN50130-4; EN60950-1 FCC: Part 15 Subpart B; ANSI C63.4-2014 UL: UL 60950-1

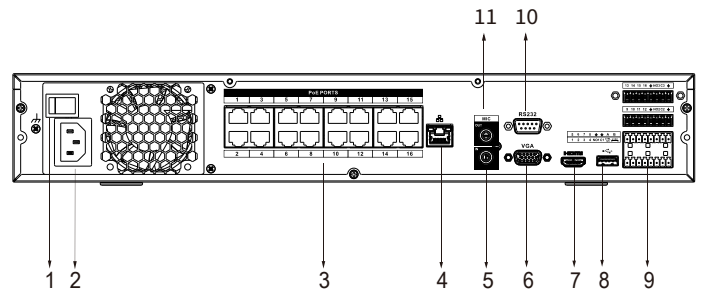
### Ordering Information

Type	Model	Description
16 Channel NVR	DHI-NVR4416-16P-4KS2	16 Channel 1.5U 16PoE 4K & H.265 Lite Network Video Recorder
32 Channel NVR	DHI-NVR4432-16P-4KS2	32 Channel 1.5U 16PoE 4K & H.265 Lite Network Video Recorder

### Dimensions (mm[inch])



### Panels



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