

DHI-NVR4816/4832-16P-4KS2

16/32 Channel 2U 8HDDs 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

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|-------|--|
| 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 |
|------------|-----|

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 | 8 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 |
| eSATA | 1 |
| 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 | 2 front USB 2.0 ports, 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 (IEEE802.3af/at) |

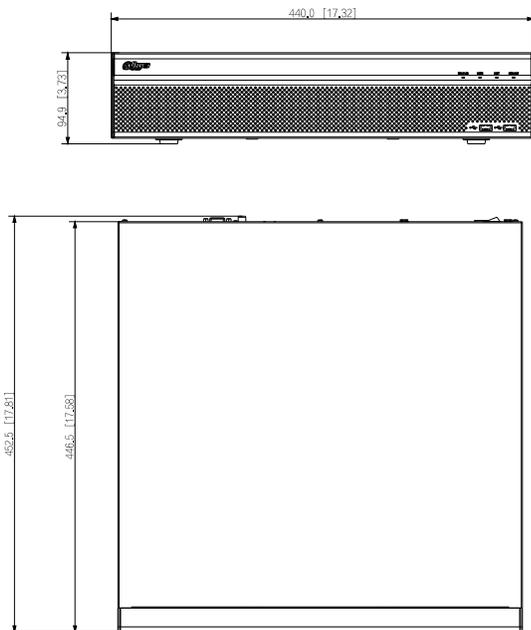
General Parameter

| | |
|-----------------------|---|
| 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 | 5.4 kg (11.9 lb) (without HDD) |
| Gross Weight | 9.5 kg (20.9 lb) (without HDD) |
| Product Dimensions | 440.0 mm × 452.5 mm × 94.9 mm (17.3" × 17.8" × 3.7") |
| Package Dimensions | 563 mm × 563 mm × 215 mm (22.2" × 22.2" × 8.5") |
| 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 |

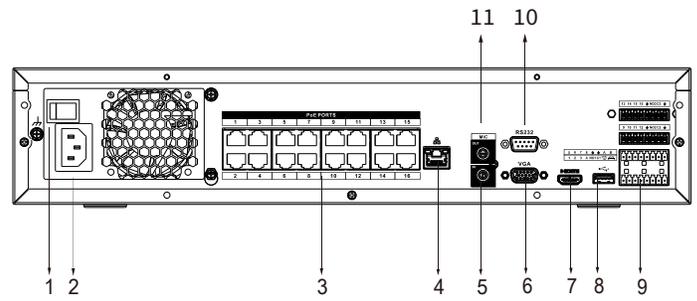
Ordering Information

| Type | Model | Description |
|----------------|----------------------|--|
| 16 Channel NVR | DHI-NVR4816-16P-4KS2 | 16 Channel 2U 16PoE 4K & H.265 Lite Network Video Recorder |
| 32 Channel NVR | DHI-NVR4832-16P-4KS2 | 32 Channel 2U 16PoE 4K & H.265 Lite Network Video Recorder |

Dimensions (mm[inch])



Panels



- | | |
|-----------------------------|----------------|
| 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 | |