

# NVR1638

8/16/32 Channel 1U 4K&H.265 Lite Network Video Recorder



- Smart H.265+/H.265/Smart H.264+/H.264
- Max 200Mbps Incoming Bandwidth
- Up to 8MP Resolution for Preview and Playback
- Up to 2ch@4K/8ch@1080P decoding
- HDMI/VGA simultaneous video output



## System Overview

Dahua NVR4000-4KS2 is introduced as the first Lite series NVR that supports for 4K and H.265 encoding technology with excellent performance at an affordable price. For applications where image details are highly required, it delivers the capability of 4K resolution processing. The NVR can be served as edge storage, central storage or backup storage with an intuitive shortcut operation menu for remote management and control.

Due to its cost-effective and easy-to-install design, this NVR is ideal for a wide range of applications such as public safety, water conservancy, transportation, city centers, education, and financial institutions.

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

## Functions

### 4K Resolution

4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of standard HDTV 1080p cameras and offers superior picture quality and image details. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

### Intelligent Video System

Working with IVS-enabled IP cameras, the NVR recognizes and records video that contains IVS data on all IP channels. The NVR records standard intelligence at-the-edge features, as well as premium IVS features that detect abandoned or missing objects, Tripwire violations, and intrusion violations. The NVR is also capable of recording business analysis data – Facial Detection, People Counting, and Heat Map – from IP cameras with built-in Intelligent Business Analytics.

### ANR (Automatic Network Replenishment Technology)

Network Video Recorders with the ANR function automatically store video data on an IP camera SD card when the network is disconnected. After recovery of the network, the NVR automatically retrieves the video data stored on the camera.

### 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 NVR 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	Quad-core embedded processor
Operating System	Embedded LINUX

### Audio and Video

IP Camera Input	8/16/32 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

### Display

Interface	1 HDMI, 1 VGA
Resolution	HDMI: 3840×2160, 1920×1080, 1280×1024, 1280×720
	VGA: 1920×1080, 1280×1024, 1280×720
Decoding Capacity	2ch@4K 30fps, 8ch@1080P 30fps
Multi-screen Display	8CH: 1/4/8/9
	16CH: 1/4/8/9/16
	32CH: 1/4/8/9/16/25/36
OSD	Camera title, Time, Camera lock, Motion detection, Recording

### Recording

Compression	Smart H.265+/H.265/Smart H.264+/H.264
Resolution	8Mp/ 6Mp/ 5MP/ 4MP/ 3MP/ 1080P/ 1.3MP/ 720P etc.
Record Rate	200Mbps
Bit Rate	16Kbps ~ 20Mbps Per Channel
Record Mode	Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Tampering, Video Loss), Stop
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

### Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Video Push, Email, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss and Tampering
Alarm input	4 Channel
Alarm output	2 Channel

### Playback and Backup

Playback	8CH: 1/4/9
	16/32CH: 1/4/9/16
Search Mode	Time /Date, MD and Exact Search (accurate to second), Smart search
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Backup Selection, Digital Zoom
Backup Mode	USB Device/Network

### Third-party Support

Third-party Support	Arecont Vision, Airlive, AXIS, Canon, Dynacolor, JVC, LG, Panasonic, Pelco, PSIA, Samsung, Sanyo, Sony, Watchnet and more
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### Network

Interface	1 RJ-45 Port (10/100/1000Mbps)
Ethernet Port	1 Independent 1000Mbps Ethernet Port
PoE	N/A
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, SNMP, IP Search (Support Dahua IP camera, DVR, NVS, etc.), Easy4ip
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, SDK, CGI

### Storage

Internal HDD	2 SATA III Ports, Up to 6 TB capacity for each HDD
HDD Mode	Single

### Auxiliary Interface

USB	2 ports(1 USB2.0, 1 USB3.0)
RS232	N/A
RS485	N/A

### Electrical

Power Supply	DC12V/4A
Power Consumption	< 6.9W(without HDD)

### Environmental

Operating Conditions	-10°C ~ +55°C (+14°F ~ +131°F), 86 ~ 106kpa
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 0 ~ 90% RH

### Construction

Dimensions	1U, 375mm×281.5mm×56mm (14.8" x 11.1" x 2.2")
Net Weight	1.6kg (3.5 lb) (without HDD)
Gross Weight	3.2kg(7.1 lb)(without HDD)

### Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL60950-1

### Ordering Information

Type	Part Number	Description
8 Channel NVR	DHI-NVR4208-4KS2	8 Channel 1U 4K&H.265 Lite Network Video Recorder
16 Channel NVR	DHI-NVR4216-4KS2	16 Channel 1U 4K&H.265 Lite Network Video Recorder
32 Channel NVR	DHI-NVR4232-4KS2	32 Channel 1U 4K&H.265 Lite Network Video Recorder
Accessories	N/A	N/A

### Rear Panel



### Dimensions (mm)

