NVR421HP4-4-4K

4 Channel Compact 1U 4PoE 4K&H.265 Lite Network Video Recorder

8Mp | H.265 | Heat Map | Tripwire | Intrusion | COUNTING People Counting

Onvif

- H.265/H.264 codec decoding
- Max 80Mbps Incoming Bandwidth
- Up to 8MP Resolution for Preview and Playback
- Up to 2ch@4K/8ch@1080P decoding
- HDMI/VGA simultaneous video output
- Support IPC UPnP, 4PoE ports

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System Overview

NVR421HP4-4-4K is 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.

High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

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.

Easy4ip

The Easy4ip 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

Aduio and Video

IP Camera Input	4 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	4CH: 1/4
OSD	Camera title, Time, Camera lock, Motion detection, Recording

Recording

Compression	H.265/ H.264
Resolution	8Mp/ 6Mp/ 5MP/ 4MP/ 3MP/ 1080P/ 1.3MP/ 720P etc.
Record Rate	80Mbps
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	N/A
Relay Output	N/A

Playback and Backup

Playback	4CH: 1/4
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

Network

Interface	1 RJ-45 Port (10/100Mbps)
Ethernet Port	1 Independent 100Mbps Ethernet Port
PoE	4 Ports(IEEE802.3at/af)
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	1 SATA III Port, Up to 6 TB capacity for each HDD
HDD Mode	Single

Auxiliary Interface

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

Electrical

Power Supply	DC48V/1.5A
Power Consumption	NVR: <7.5W (Without HDD)
	PoE: Max 25.5W for single port, 50W in total

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

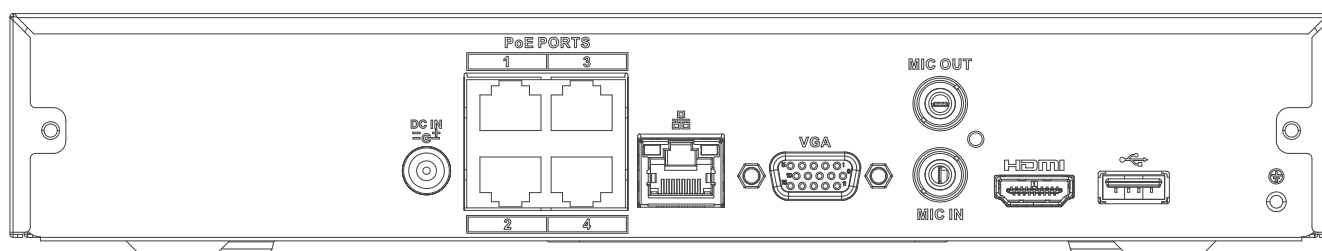|	
Dimensions	Compact 1U, 260mm×224.9mm×47.6mm (10.2" x 8.9" x 1.9")
Net Weight	0.8kg (1.76 lb) (without HDD)
Gross Weight	1.6kg(3.53 lb)(without HDD)

Certifications

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

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WINIC

Rear Panel

Dimensions (mm)

260.0

Front Panel

47.6

224.9