NVR504L-16/32-16P-4KS2E
16/32Channel 1.5U 16PoE 4K&H.265 Pro Network Video Recorder

· Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
· Max 320Mbps Incoming Bandwidth
· Up to 12MP Resolution for Preview and Playback
· 2HDMI/2VGA simultaneous video output
· 1-8 PoE Ports Support 800m ePoE & EoC

Pro Series	H.265	COUNTING People Counting	Heat Map
Face Detection	Tripwire	Intrusion	Missing Abandon Detection

System Overview

NVR504L-xx/16P-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.

Due to its easy-to-install design, the 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, which make 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 4K cameras.
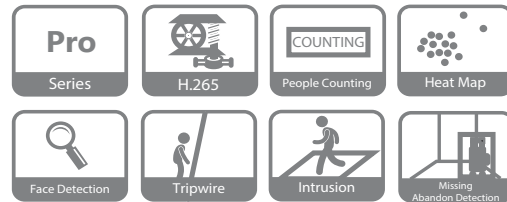
Functions

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.

ePoE & EoC
The NVR supports 800m ePoE and EoC technology for use in a broad range of application scenarios. ePoE technology simplifies the network structure of long-range surveillance projects, eliminating the requirement for extra network repeater devices, making the system more reliable and easy to deploy. EoC technology makes it possible to upgrade existing systems to high definition IP surveillance while using existing coax cables.

Smart Fan
The NVR is equipped with a smart fan to achieve high cooling efficiency. It automatically adjusts fan speed according to CPU and ambient temperature. The fan is long-lasting and low noise, reducing maintenance costs and improving the user experience.

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!

Fisheye Dewarping
Fisheye dewarping solves the problem of distortion in the circular panoramic view. The NVR offers various dewarping modes for different installations and configurations that enhance the video, in both live or playback modes. Each dewarping mode offers options to adjust each scene.

ANPR
Automatic Number Plate Recognition available for convenient entrance/exit management. Support license plate recognition(working with Dahua ITC camera), black/white list import/export, add/delete B/W list number, search result from recorded video.

Point of Sale (POS)
Ideal for grocery and retail stores, the optional POS solution allows the NVR to receive a POS transaction via corresponding video. This feature allows merchants to analyze specific transactions via the Fuzzy search algorithm.

Automatic Network Replenishment (ANR) 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.

ONVIF

Technical Specification

System

Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX

Audio and Video

IP Camera Input	16/32/64 Channel
Two-way Talk	1 Channel Input, 2 Channel Output, RCA

Display

Interface	2 HDMI, 2 VGA
Resolution	HDMI1: 3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
	VGA1: 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
	HDMI2/VGA2: 1920 × 1080
Decoding Capability	4-ch@8MP(30fps), 16-ch@1080P(30fps)
Multi-screen Display	1st Screen: 16CH: 1/4/8/9/16 32CH: 1/4/8/9/16/25/36 64CH: 1/4/8/9/16/25/36/64 2nd Screen: 1/4/8/9/16
OSD	Camera title, Time, Camera lock, Motion detection, Recording

Recording

Compression	Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
Resolution	12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P, D1 etc.
Bit Rate	16Kbps ~ 20Mbps Per Channel
Record Mode	Manual, Schedule (Regular, MD(Motion Detection) , Alarm, IVS), 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, Alarm Out, Video Push, Email, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss and Tampering
Alarm input	16 Channel
Relay Output	6 Channel

Playback and Backup

Sync Playback	1/4/9/16
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
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/eSATA Device

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 Ports (10/100/1000Mbps)
PoE	16 ports (IEEE802.3af/at) 1-8 ports support ePoE & EoC
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,DDNS, FTP, Alarm Server, 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	4 SATA III Ports, Up to 10 TB capacity for each HDD
eSATA	1 eSATA

Auxiliary Interface

USB	3 USB Ports (2 Rear USB 3.0 , 1 Front USB 2.0)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

Electrical

Power Supply	Single, AC100V ~ 240V, 50 ~ 60 Hz
Power Consumption	NVR: <17.5W (Without HDD)
	PoE: Max 25.5W for single port 150W total rated power, 80% control for protection
Fan	Smart fan, automatically adjust running speed

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

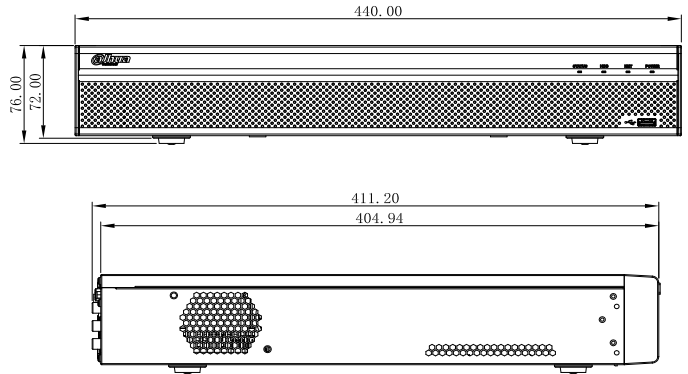|	
Dimensions	1.5U, 440mm x 411.2mm x 76mm ; (17.3" x 16.2" x 3.0")
Net Weight	4.65kg (10.3 lb) (without HDD)
Gross Weight	7kg (15.4 lb) (without HDD)
Installation	Rack-mounted

Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL 60950-1

Ordering Information

Type	Part Number	Description
16 Channel NVR	NVR504L-16/16P-4KS2E	16 Channel 1.5U 16PoE 4K&H.265 Pro Network Video Recorder
32 Channel NVR	NVR504L-32/16P-4KS2E	32 Channel 1.5U 16PoE 4K&H.265 Pro Network Video Recorder
64 Channel NVR	NVR504L-64/16P-4KS2E	64 Channel 1.5U 16PoE 4K&H.265 Pro Network Video Recorder
Accessories	ESS1504C	4 HDDs eSATA Storage (Please confirm with Technical Support for HDD capacity & compatibility)
	ESS1508C	8 HDDs eSATA Storage (Please confirm with Technical Support for HDD capacity & compatibility)

Dimensions (mm)

440.00

76.00
72.00

411.20
404.94

Accessories

ESS1504C

ESS1508C

Rear Panel