

24-channel 4K Network Video Recorder

1.5U 24-port PoE 4K H.265 Network Video Recorder



- Smart H.265+ and Smart H.264+ Video Compression
- Maximum 320 Mbps Incoming Bandwidth
- Up to 12 MP Resolution for Preview and Playback
- Support for IPC and UPnP Protocols
- 24 PoE Ports
- Customized Live View Layout with Support for Panoramic Displays
- Intelligent Video System with Business Analytics
- 3D Intelligent Positioning with Dahua PTZ Cameras



System Overview

Dahua's Pro Series network video recorders offer excellent performance and high recording quality for IP video surveillance applications. For applications where details are critical for identification, this professional NVR provides a powerful processor with up to 4K resolution. Additionally, the NVR features a mouse shortcut operation menu, remote management and control, center storage, edge storage, and back up storage.

Designed as a cost-effective and easy to install recorder, this NVR is an ideal addition to any security system that monitors public spaces, water conservancy, transportation, city centers, schools, and financial institutions.

The NVR is compatible with numerous third-party devices making it the perfect solution for surveillance systems with or without a video management system (VMS). Its open architecture supports multi-user access and it is compatible with ONVIF 2.4, enabling interoperability when combined with 4K cameras.

Functions

Dewarping Mode

The NVR has the ability to correct the distortion in a circular panoramic view produces by a fisheye lens. The NVR offers various dewarping modes for different installations and configurations.

4K Resolution

4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of Full HD 1080p devices 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.

Intelligent Video System (IVS) Recording

With built-in intelligent video analytics, the NVR has the ability to detect and analyze moving objects for improved video surveillance. The NVR provides standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, People Counting, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

Heat Map

The Heat Map option highlights the areas with the highest concentration of people. This information can then be exported into a customized report to assist in business or forensic analysis.

Point of Sale (POS) (Optional)

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 Technology (ANR)

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.



System Appeared Section Embedded Lands door Processor Part Appeared Support Pathias, Assort Moora, AND, North, Petrosens, And, North, Pet	Technical Specification		Third-party Support		
Pate	System				
December	,	Embedded Quad-core Processor	Third-party Support	Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek,	
Audio and Video Pro Cameria Input	Operating System	Embedded Linux	Network	and others	
Pace	Audio and Video			2 (4) 21 45 2 1 (42 (42 (42 (42 (42 (42 (42 (42 (42 (42	
Display Provided	IP Camera Input	24 Channels	Ethernet	One (1) RJ-45 Port (10/100/1000 Mbps)	
Interface	Two-way Talk		PoE	24 Ports (IEEE802.3af/at), 10/100 Mbps	
Maximum Decoding	Display		Forwarding Bandwidth	320 Mbps	
Native Output Resolution 1280 x 720, 1024 x 768 hander of 1780 P at 20 fpt 700 (1) Chamels of 1780 P at 20 fpt 700 (1) Chamels of 1780 P at 20 fpt 700 (1) Chamels of 1780 P at 20 fpt 700 (2) Chamels of 1780 P at 20 fpt 700 P at 20	Interface	• HDMI-1: 4K • HDMI-2: 1080p	Network Function	SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search	
Maximum Decoding	Native Output Resolution		Maximum User Access	128 Users	
Pasint mum Decoding Five (S) Channels of GAMP at 30 fps Elpit (B) Channels of AMP at 30 fps Elpit (B) Channels of AMP at 30 fps Elpit (B) Channels of AMP at 30 fps Elpit (B) Channels of 1080p at 20 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 20 pt at 30 fps Sisteen (16) Channels of 1080p at 30 fps Sis		, ,	Mobile Operating System	IOS, Android	
Eight (3) Chamels of JAMP at 30 fps Sixteen (10) Chamels of JAMP at 30 fps	Maximum Docading	Five (5) Channels of 6MP at 30 fps	Interoperability	ONVIF 2.4, CGI Conformant	
Sixteen (16) Channels of 10800 / 200 pas 30 fps Multi-screen Display First Screen: 11/4/8/9/16/25 Second Screen: 14/4/8/9/16/25 Second Screen: 14/4/8/9/16/25 Maximum Storage Capacity 3 2 18 On-screen Display Channel Recording Channel Record Interval Re	waxiiiuiii Decouiiig	Eight (8) Channels of 4MP at 30 fps	Storage		
Maximum Storage Capacity 32 TB		Sixteen (16) Channels of 1080p at 60 fps	Internal HDD		
Recording Recording Recording Recording Resolution Resolution Resolution Resolution Record Maximum Incoming Bandwidth Record Mode Record Mode Record Interval	Multi-screen Display		Maximum Storage Capacity	32 TB	
Compression Smart H.265+, H.2665, Smart H.264+, H.264 , MJPEG Supported IP Camera Resolution 1.3 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 1080p, 1.3 MP, 720p, D1, CIF, Maximum Incoming Bandwidth 320 Mbps Bit Rate 16 Kbps to 20 Mbps per channel 85232 One (1) Port for PC Communication and Keyboard One (1) USB 2.0 Port, front panel One (1) USB 2.0 Por	On-screen Display		HDD Mode	Single	
Auxiliary Interface 12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 1080p, 13 MP, 720p, D1, CIF, 14 Maximum Incoming Bandwidth 1520 Mbps per channel 16 Kbps to 20 Mbps per channel R8232	Recording		eSATA	One (1) Port	
Supported IP Camera 12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 1080p, 13 MP, 720p, D, CIF, CIF, CIP, CIP, CIP, CIP, CIP, CIP, CIP, CIP	Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Auviliany Interface		
Maximum Incoming Bandwidth Bit Rate 16 Kips to 20 Mbps per channel Record Mode Manual, Schedule (Regular, Motion Detection), Alarm, IVS, Stop Pre-record: 1 to 3 0s Post-record: 1 to 3 0s Power Consumption P				Two (2) USB 3.0 Ports, rear panel	
Record Mode Manual, Schedule (Regular, Motion Detection), Alarm, IVS, Stop Record Interval Per-record: 1 to 30 s Post-record: 1 to 4 to	Maximum Incoming Bandwidth	320 Mbps	035	One (1) USB 2.0 Port, front panel	
Record Interval Record Interval 1 to 120 minutes (default: 60 minutes) Per-record: 1 to 30 s Post-record: 10 to 300 s Power Supply Power Supply Single, 100 VAC to 240 VAC, 50/60 Hz Power Supply Single, 100 VAC to 240	Bit Rate	16 Kbps to 20 Mbps per channel	RS232	One (1) Port for PC Communication and Keyboard	
Record Interval Pre-record: 1 to 30 s Post-record: 10 to 300 s Power Supply Single, 100 VAC to 240 VAC, 50/60 Hz Video Detection and Alarm Power Consumption < 18 W, without HDD	Record Mode		RS485	One (1) Connection for PTZ Control	
Video Detection and Alarm Recording, PTZ, Tour, Alarm Out, Video Push, Email, ETP, Snapshot, Buzzer and Screen Tips Video Detection Motion Detection, MD Zones: 396 (22 x 18), Video Loss and Tampering Alarm Input Alarm Input Alarm Input Belay Output Playback and Backup Sync Playback Inimpose (14/8/J16 No/NC Programmable, Green Terminal Interface) Power Consumption Alarm Input Total PoE Power 25.5 W single port, 220 W total Environmental Operating Conditions -10° C to +55° C (+14° F to +131° F) Storage Conditions -20° C to +70° C (-4° F to +158° F), 0 to 90% RH Construction Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight A.70 kg (10.40 lb), without HDD Time/Date, Alarm, MD and Exact Search (accurate to one second) Play Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Gamera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Backup Mode Power Consumption 7 total PoE Power 25.5 W single port, 220 W total Environmental Construction -10° C to +55° C (+14° F to +131° F) Storage Conditions -10° C to +55° C (+14° F to +131° F) Total PoE Power 25.5 W single port, 220 W total Environmental Operating Conditions -10° C to +55° C (+14° F to +131° F) Storage Conditions -20° C to +70° C (-4° F to +158° F), 0 to 90% RH Construction Net Weight A.70 kg (10.40 lb), without HDD Installation Rack-mounted Certifications Certifications CE Safety UL 60950-1 CAN/CSA C22.2 No.60960-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B		Pre-record: 1 to 30 s	Electrical		
Trigger Events Recording, PTZ, Tour, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips Video Detection Motion Detection, MD Zones: 396 (22 x 18), Video Loss and Tampering Alarm Input 16 Channels, Low Level Effective, Green Terminal Interface Relay Output Six (6) Channels, NO/NC Programmable, Green Terminal Interface Playback and Backup Sync Playback NVR Video Output Four (4) Channels at 1080p Play Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous Camera, Previous Camera, Previous Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Total PoE Power 25.5 W single port, 220 W total Environmental Operating Conditions -10° C to +55° C (+14° F to +131° F) Storage Conditions -20° C to +70° C (-4° F to +158° F), 0 to 90% RH Construction Construction Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD 6.84 kg (15.10 lb) Installation Rack-mounted Certifications Certifications CE Safety UL 60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Record Interval		Power Supply	Single, 100 VAC to 240 VAC, 50/60 Hz	
Fry, Snapshot, Buzzer and Screen Tips FPP, Snapshot, Buzzer and Screen Tips Wideo Detection Motion Detection, MD Zones: 396 (22 x 18), Video Loss and Tampering Alarm Input 16 Channels, Low Level Effective, Green Terminal Interface Relay Output Six (6) Channels, NO/NC Programmable, Green Terminal Interface Playback and Backup Sync Playback 1/4/9/16 NVR Video Output Four (4) Channels at 1080p Gearch Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Play Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Mode USB Device, Network, eSATA Device Electromagnetic Compatibility Environmental Doperating Conditions -10° C to +55° C (+14° F to +131° F) Operating Conditions -10° C to +55° C (+14° F to +131° F) Construction -20° C to +70° C (-4° F to +158° F), 0 to 90% RH Construction Flow Clay 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD Installation Rack-mounted Certifications CE ENS5032, ENS5024, ENS0130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Video Detection and Alarm		Power Consumption	< 18 W, without HDD	
Video Detection Motion Detection, MD Zones: 396 (22 x 18), Video Loss and Tampering Alarm Input 16 Channels, Low Level Effective, Green Terminal Interface Relay Output Six (6) Channels, NO/NC Programmable, Green Terminal Interface Playback and Backup Sync Playback NVR Video Output Four (4) Channels at 4K or 16 Channels at 1080p 16 Channels at 1080p 16 Channels at 1080p 16 Channels at 1080p 19 Playback Function Play Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Mode USB Device, Network, eSATA Device Environmental Operating Conditions -10° C to +55° C (+14° F to +131° F) Operating Conditions -20° C to +70° C (-4° F to +158° F), 0 to 90% RH Construction Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD Forswell Weight 4.70 kg (10.40 lb), without HDD Installation Rack-mounted Certifications CE ENS5032, ENS5024, ENS0130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Trigger Events	Recording, PTZ, Tour, Alarm Out, Video Push, Email,	Total PoE Power	25.5 W single port, 220 W total	
Alarm Input 16 Channels, Low Level Effective, Green Terminal Interface Relay Output Six (6) Channels, NO/NC Programmable, Green Terminal Interface Playback and Backup Sync Playback 1/4/9/16 NVR Video Output Four (4) Channels at 1080p Time/Date, Alarm, MD and Exact Search (accurate to one second) Playback Function Playback Function Play Backup Selection, Digital Zoom Backup Mode Video Loss and Tampering Operating Conditions -10° C to +55° C (+14° F to +131° F) Storage Conditions -20° C to +70° C (-4° F to +158° F), 0 to 90% RH Construction Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD Gross Weight 6.84 kg (15.10 lb) Installation Rack-mounted Certifications Certifications CE ENS5032, ENS5024, EN50130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	rrigger Events		Environmental		
Relay Output Six (6) Channels, NO/NC Programmable, Green Terminal Interface Playback and Backup Sync Playback I/4/9/16 NVR Video Output Four (4) Channels at 4K or 16 Channels at 1080p Search Mode Playback Function Play pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Mode USB Device, Network, eSATA Device Six (6) Channels, NO/NC Programmable, Green Terminal Interface Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD Gross Weight 6.84 kg (15.10 lb) Installation Rack-mounted Certifications CE EN55032, EN55024, EN50130-4, EN60950-1 Safety Electromagnetic Compatibility FCC Part 15 Subpart B	Video Detection		Operating Conditions	-10° C to +55° C (+14° F to +131° F)	
Relay Output NO/NC Programmable, Green Terminal Interface Playback and Backup Sync Playback 1/4/9/16 NVR Video Output Four (4) Channels at 4K or 16 Channels at 1080p Time/Date, Alarm, MD and Exact Search (accurate to one second) Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD Gross Weight 6.84 kg (15.10 lb) Installation Rack-mounted Certifications CE Safety UL 60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Alarm Input		Storage Conditions	-20° C to +70° C (-4° F to +158° F), 0 to 90% RH	
Playback and Backup Sync Playback 1/4/9/16 Net Weight 4.70 kg (10.40 lb), without HDD NVR Video Output Four (4) Channels at 4K or 16 Channels at 1080p Search Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Dimensions 1.5U, 440.0 mm x 413.30 mm x 76.0 mm (17.30 in. x 16.30 in. x 2.99 in.) Net Weight 4.70 kg (10.40 lb), without HDD Gross Weight Installation Rack-mounted Certifications CE EN55032, EN55034, EN50130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Relay Output		Construction		
NVR Video Output Four (4) Channels at 4K or 16 Channels at 1080p Search Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Gross Weight Installation Rack-mounted Certifications CE EN55032, EN55024, EN50130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B			Dimensions		
Search Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Certifications CE EN55032, EN55024, EN50130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Sync Playback	1/4/9/16	Net Weight	4.70 kg (10.40 lb), without HDD	
Search Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Time/Date, Alarm, MD and Exact Search (accurate to one second) Certifications CE EN55032, EN55024, EN50130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	NVR Video Output		Gross Weight	6.84 kg (15.10 lb)	
Playback Function Play Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode USB Device, Network, eSATA Device Certifications CE EN55032, EN55024, EN50130-4, EN60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B	Search Mode	Time/Date, Alarm, MD and Exact Search (accurate to	Installation	Rack-mounted	
Playback Function Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Backup Mode Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom Safety UL 60950-1 CAN/CSA C22.2 No.60960-1 Electromagnetic Compatibility FCC Part 15 Subpart B		Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera,	Certifications		
Backup Mode USB Device, Network, eSATA Device Electromagnetic Compatibility FCC Part 15 Subpart B			CE		
Electromagnetic Compatibility FCC Part 15 Subpart B	Dealura Mari-		Safety		
	васкир моде	изь Device, Network, eSATA Device		·	

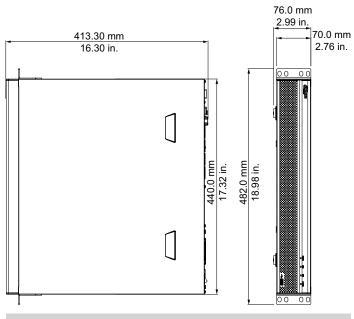
Intelligence

IVS triggers an alarm and takes a defined action for the following events:				
Standard Features	 Tampering with the camera. Camera loses or changes focus drastically. Error writing to an onboard Micro SD card. Error sending or receiving data over the network. Unauthorized access to the camera. 			
Premium Features				
Motion	An object moves through any part of the scene.			
Tripwire	A target crosses a user-defined line.			
Intrusion	A target enters or exits a defined perimeter.			
Scene Change	A person or object moves the camera to change the scene or covers the camera to obscure the scene.			
Abandoned/Missing Object	A target leaves an object in designated area, or a target removes an object from the same designated area.			
Advanced Features				
Facial Detection	Detects and captures a snapshot of a human face in a defined area within a scene.			
People Counting	Measure the number of customers, visitors or passengers in a surveillance scene.			
Heat Map	Generates a visual representation of data.			

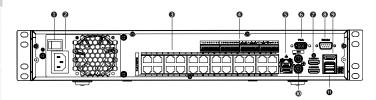
Ordering Information

Туре	Part Number	Description	
24-channel NVR	N54A4P	24-channel 1.5U 24 PoE 4K H.265 Network Video Recorder	
	N54A4P1	24-channel 1.5U 24 PoE 4K H.265 Network Video Recorder, 1 TB	
	N54A4P2	24-channel 1.5U 24 PoE 4K H.265 Network Video Recorder, 2 TB	
	N54A4P3	24-channel 1.5U 24 PoE 4K H.265 Network Video Recorder, 3 TB	
	N54A4P4	24-channel 1.5U 24 PoE 4K H.265 Network Video Recorder, 4 TB	
	N54A4P6	24-channel 1.5U 24 PoE 4K H.265 Network Video Recorder, 6 TB	

Dimensions (mm/in.)



Rear Panel



1	On/Off Button	7	HDMI Output (x2)
2	Power Input	8	RS232 Port
3	PoE Ports (x24)	9	eSATA Port
4	Alarm Input/Output and RS485 Connection (use A/B ports)	10	Audio Input/Output
5	Ethernet Port (1000 Mbps)	11	USB 3.0 Port (x2)
6	VGA Output		

