

DHI-NVR4104HS-4KS3(960GB)

4CH Compact 1U 1SSD 960GB Lite NETWORK VIDEO RECORDER



Series Overview

The NVR4000-4KS3 model of the Lite Series NVR is favored for its outstanding performance. It supports 4K resolution for scenes that require highly detailed images, and can serve as the edge, central, or backup storage with an intuitive shortcut menu for remote management and control. This NVR also features Smart Motion Detection (SMD) by recorder, which can distinguish target vehicles and humans from ordinary ones in real-time. When an IPC is connected to the NVR, a variety of AI functions become available such as face detection, perimeter protection, and people counting. This NVR is both cost-effective and easy-to-install, making it ideal for a wide range of applications such as for cities, transportation, education and finance.

Functions

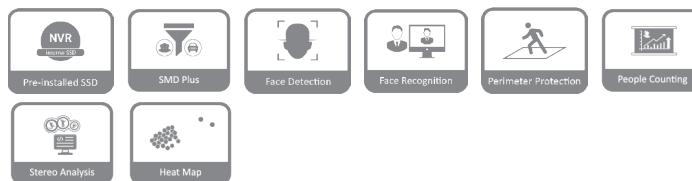
Pre-installed SSD

Unlike the traditional NVR, S-NVR comes with the SSD preinstalled in the device. It is more energy efficient, and has stronger vibration resistance and better heat dissipation. S-NVR also saves you time on selecting the type of hard disk and installing it, greatly increasing your efficiency.

SMD Plus

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.

- Comes with an internal 960GB SSD.
- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max. decoding capability: 8 × 1080p@30 fps or 4 × 4 MP@30 fps.
- Max. 80/80/60 Mbps incoming/recording/outgoing bandwidth.
- Supports IP cameras with a resolution up to 12 MP.
- AI by Recorder supports 4-channel SMD Plus.
- AI by Camera supports face detection and recognition, perimeter protection, SMD Plus, people counting, stereo analysis and heat map.
- Supports EPTZ, and one-click arming and disarming.



Face Detection by Camera

Face detection is to detect if there is any human face appearing in the video. This technology adopts a deep learning algorithm to support face detection, tracking, optimization and capturing, and then output the best face snapshot.

Face Recognition by Camera

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database.

Perimeter Protection by Camera

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improves alarm accuracy.

Stereo Analysis by Camera

With deep learning algorithm and 3-dimensional scene information, Dahua Stereo Analysis technology can recognize people's behaviors, such as fall detection, violence detection, stay detection, and space exception, and then generates alarm signals and triggers linkage.

Heat Map by Camera

Dahua heat map technology is used to display the crowd density and people appearance probability. Export and display the crowd status by different colors. Generally, the crowd status is the statistics of people quantity in space and time dimensions.

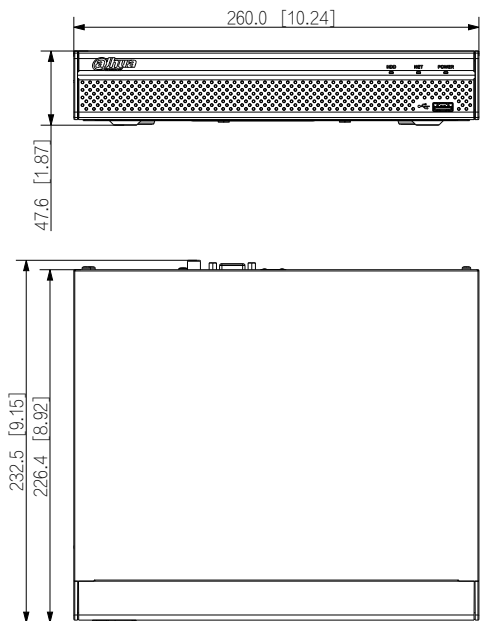
NVR4000-4KS3 Series | DHI-NVR4104HS-4KS3(960GB)

Technical Specification		Audio Compression	G.711a; G.711u; PCM; G.726
System		Network	
Main Processor	Industrial-grade processor	Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; IPv6; UDP; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; FTP; DDNS; SNMP; Alarm Server; P2P; Auto Registration; IP Search (Supports IP camera, DVR, NVS, etc.)
Operating System	Embedded Linux	Mobile Phone Access	iOS; Android
Operating Interface	Web, Local GUI	Interoperability	ONVIF 22.12(Profile T; Profile S; Profile G); CGI; SDK
AI		Browser	Chrome; IE; Safari; Edge; Firefox
AI by Recorder	SMD Plus	Recording Playback	
AI by Camera	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map	Multi-channel Playback	Up to 4 channels
Perimeter Protection		Record Mode	General; motion detection; intelligent; alarm
Perimeter Performance of AI by Camera (Number of Channels)	4 channels	Backup Method	USB device and network
Face Detection		Playback Mode	Instant playback; general playback; event playback; tag playback; smart playback
Face Attributes	Gender; age group; glasses; expressions; face mask; beard	Alarm	
Face Detection Performance of AI by Camera (Number of Channels)	4 channels	General Alarm	Motion detection; privacy masking; video loss; scene changing; PIR alarm; IPC external alarm
Face Recognition		Anomaly Alarm	Camera disconnection; storage error; disk full; IP conflict; MAC conflict; login locked; and cybersecurity exception
Face Recognition Performance of AI by Camera (Number of Channels)	4 channels	Intelligent Alarm	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map
SMD Plus		Alarm Linkage	Record; snapshot; IPC external alarm output; audio; buzzer; log; preset; email
SMD Plus by Recorder	4 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change	Port	
SMD Plus by Camera	4 channels	Audio Input	1-channel RCA
Audio and Video		Audio Output	1-channel RCA
Access Channel	4 channels	Alarm Input	NA (2 channels are optional)
Network Bandwidth	80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing	Alarm Output	NA (1-channel 12 V 1 A output is optional)
Resolution	12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; D1; CIF; QCIF	Disk Interface	960 GB SSD (pre-installed)
Decoding Capability	AI disabled: 1-channel 12 MP@30 fps; 2-channel 8 MP@30 fps; 3-channel 5 MP@30 fps; 4-channel 4 MP@30 fps AI enabled: 1-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 4 MP@30 fps	USB	2 (1 front USB 2.0 port, 1 rear USB 2.0 port)
Video Output	1 HDMI, 1 VGA Simultaneous: HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 Heterogeneous: HDMI: 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720	HDMI	1
Multi-screen Display	Main Screen: 1/4 Sub Screen: 1/4	VGA	1
Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha	Network Port	1 (10/100 Mbps Ethernet port, RJ-45)
Compression Standard		General	
Video Compression	Smart H.265+; H.265; Smart H.264+; H.264	Power Supply	12 VDC, 2 A
		Power Consumption	<11 W (with SSD)
		Net Weight	0.81 kg (1.79 lb)
		Gross Weight	1.38 kg (3.04 lb)
		Product Dimensions	260.0 mm × 232.5 mm × 47.6 mm(10.24" × 9.15" × 1.87") (W × D × H)
		Packaging Dimensions	334 mm × 89 mm × 314 mm (13.15" × 3.50" × 12.36") (W × D × H)
		Operating Temperature	−10 °C to +55 °C (14 °F to +131 °F)
		Storage Temperature	−20 °C to +60 °C (−4 °F to +140 °F)
		Operating Humidity	10%–93% (RH), non-condensing

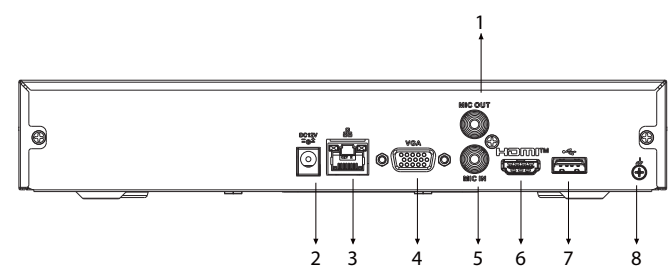
Installation	Rack or desktop
Certifications	CE-EMC: EN 55032:2015+A1:2020; EN IEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A1:2019+A2:2021; EN 55035:2017+A11:2020; EN 50130-4:2011+A1:2014 CE-LVD: EN 62368-1:2014

Ordering Information		
Type	Model	Description
NETWORK VIDEO RECORDER	DHI-NVR4104HS-4KS3(960GB)	4CH Compact 1U 1SSD 960GB Lite NETWORK VIDEO RECORDER

Dimensions (mm[inch])



Panels



- | | | | |
|---|--------------------------|---|-------------|
| 1 | AUDIO OUT, RCA Connector | 2 | Power Input |
| 3 | Network Port | 4 | VGA Port |
| 5 | AUDIO IN, RCA Connector | 6 | HDMI Port |
| 7 | USB Port | 8 | Ground |