

DHI-NVR4116HS-8P-4KS3

16CH Compact 1U 8PoE 1HDD 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

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.

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.

- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max. decoding capability: 8 x 1080p@30 fps or 2 x 8 MP@30 fps.
- · Max. 160/160/80 Mbps incoming/recording/outgoing bandwidth.
- · Supports IP cameras with a resolution up to 12 MP.
- · Al by Recorder supports 4-channel SMD Plus.
- Al 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.















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.

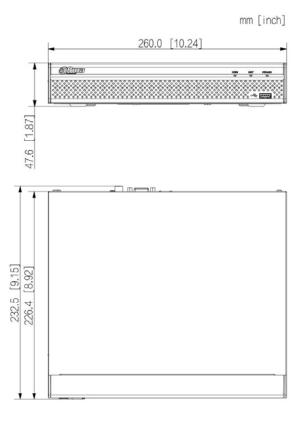
Technical Specification	nn -		ONIVIE: Panaconia: Canus Asia Assault S. I.	
	on .	Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelc Hanwha	
System		Compression Standa	Compression Standard	
Main Processor	Industrial-grade processor	Video Compression	Smart H.265+; H.265; Smart H.264+; H.264	
Operating System	Embedded Linux	Audio Compression	G.711a; G.711u; PCM; G726	
Operating Interface	Web, Local GUI	Network		
Al			HTTP; HTTPS; TCP/IP; IPv4; IPv6; UDP; NTP;	
Al by Recorder	SMD Plus	Network Protocol	SMTP; UPnP; IP Filter; FTP; DDNS; SNMP; Ala P2P; Auto Registration; IP Search (Supports I DVR, NVS, etc.)	
AI by Camera	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map			
Perimeter Protection		Mobile Phone Access	iOS; Android	
Perimeter Performance of		Interoperability	ONVIF 22.12(Profile T; Profile S; Profile G); Co	
AI by Camera (Number of	6 channels	Browser	Chrome; IE; Safari; Edge; Firefox	
Channels)		Recording Playback	Recording Playback	
Face Detection		Multi-channel Playback	Up to 16 channels	
Face Attributes	Gender; age group; glasses; expressions; face mask; beard	Record Mode	General, motion detection; intelligent; alarm	
Face Detection		Backup Method	USB device and network	
Performance of AI by Camera (Number of Channels)	6 channels	Playback Mode	Instant playback, general playback, event playback, smart playback	
Face Recognition		Alarm		
Face Recognition Performance of Al by Camera (Number of Channels)	6 channels	General Alarm	Motion detection; privacy masking; video los changing; PIR alarm; IPC external alarm	
		Anomaly Alarm	Camera disconnection; storage error; disk fu conflict; MAC conflict; login locked; and cybe exception	
SMD Plus		Labelli a ab Alema	Face detection; face recognition; perimeter	
SMD Plus by Recorder	4 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change	Intelligent Alarm	SMD Plus; people counting; stereo analysis; Record; snapshot; IPC external alarm output	
SMD Plus by Camera	6 channels	Alarm Linkage	buzzer; log; preset; email	
,	Citatines	Port		
Audio and Video		Audio Input	1-channel RCA	
Access Channel	16 channels	Audio Output	1-channel RCA	
Network Bandwidth	Al disabled: 160 Mbps incoming, 160 Mbps recording and 80 Mbps outgoing	Alarm Input	NA (2 channels is optional)	
Network Banawidth	Al enabled: 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	1 SATA port. Each disk can contain up to 20 T varies depending on the environment temper	
	Al disabled: 1-channel 12 MP@30 fps; 2-channel 8	USB	2 (1 front USB 2.0 port, 1 rear USB 2.0 port)	
Decoding Canability	MP@30 fps; 3-channel 5 MP@30 fps; 4-channel 4 MP@30 fps; 8-channel 1080p@30 fps	НОМІ	1	
Decoding Capability	Al 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; 7-channel 1080p@30 fps	VGA	1	
		Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)	
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	PoE Port	8 ports, 10/100 Mbps, IEEE 802.3 af/at	
		General		
		Power Supply	53 VDC, 1.81 A	
video Output				
video Output		Power Consumption	Total output of NVR is <10 W(without HDD) power of PoE is 72W, the maximum output single port is 25.5W	

NVR4000-4KS3 Series | DHI-NVR4116HS-8P-4KS3

Gross Weight	2.05 kg (4.52 lb)	
Product Dimensions	260.0 mm x 232.5 mm x 47.6 mm(10.24" x 9.15" x 1.87") (W x D x H)	
Packaging Dimensions	374 mm x 119 mm x 311 mm (14.72" x 4.69" x 12.24") (W x D x 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				
Туре	Model	Description		
NETWORK VIDEO RECORDER	DHI-NVR4116HS-8P-4KS3	16CH Compact 1U 8PoE 1HDD Lite Network Video Recorder		

Dimensions (mm[inch])



Panels 9

