

# DHI-NVR4108-P-4KS3

8CH Smart 1U 4PoE 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.
- 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.
- Al by Camera supports face detection and recognition, perimeter protection, SMD Plus, people counting, stereo analysis and heat man
- · 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.

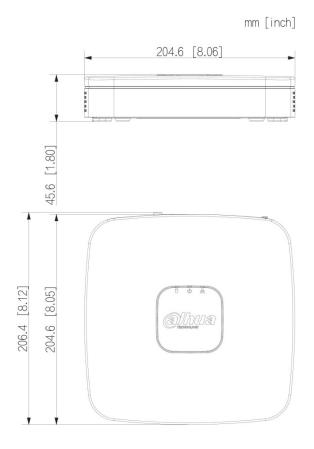
System  Main Processor  Industrial gode processor  Interoperability  Interoperabilit	Technical Specification	on	Compression Standa	ard	
Main Processor Industrial grade processor Operating system Embedded Linux  Operating system Embedded Linux  All Web. Local GUI  All Web. Recorder  SMD Plus  Face detection; face recognition; perimeter protection; SMD Plus people countries, serve analysis; heat map  Perimeter Protection  Perimeter Protection  Perimeter Protection  Perimeter Protection  Recording Playback  Multi-channel Playback  Multi-channel Playback  Multi-channel Playback  Multi-channel Playback  Multi-channel Playback  Up to 8 channels  Gender, we group; plasses; expressions; face mask; and the protection performance of All by Camera (Number of Channels)  Face Detection  Face Detection  Face Recognition  Face			Video Compression	Smart H.265+; H.265; Sm	
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All Subpression interface Web, I local GLII Service Section (Section Section S			Network		
All Website Protocol All by Recorder SMD Plus All by Recorder SMD Plus SMD Plus precipie counting, stores analysis, heat map Perimeter Protection Perimeter Protection Perimeter Protocol All by Camera Size deferation; face recognition; perimeter protection; interoperability December Protocol Browser Chrome; II, Safan, Edge, Recording Playback Multi-channel Playback Multi-channel Playback Multi-channel Playback General, motion detection Face Attributes Cender, age group; glasses, expressions; face masks Deceding Camera (Number of Channels) Gender, age group; glasses, expressions; face masks Deceding Camera (Number of Channels) Gender, age group; glasses, expressions; face masks Deceding Camera (Number of Channels) Gender, age group; glasses, expressions; face masks Deceding Camera (Number of Channels) Gender, age group; glasses, expressions; face masks Deceding Camera (Number of Channels) Gender, age group; glasses, expressions; face masks Deceding Camera (Number of Channels)  Alarm General Alarm Motion detection; private Camera (Number of Channels)  Alarm (Maccomitty) General Alarm Anomaly Alarm Anomaly Alarm Anomaly Alarm Anomaly Alarm Pace detection; face recognition preformance of Al by Camera (Number of Channels)  SMD Plus by Recorder  Alarm (Number of Channels)  SMD Plus by Recorder  Alarm (Number of Channels)  Malarm (Number of Channels)  Alarm (N				HTTP; HTTPS; TCP/IP; IPv-	
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Multi-channel Playback Up to 8 channels  Face Detection  Face Attributes  Gender; age group; glasses; expressions; face mask; beard  Gender; age group; glasses; expressions; face mask; beard USB device and network playback. Mode instant, bayback, general playback Channels  Gender; age group; glasses; expressions; face mask; beard USB device and network playback. Mode instant, bayback, general playback Channels  General Roumber of Channels  General Roumber of Channels  Face Recognition  Face Re			Recording Playback		
Face Detection  Face Attributes  Gender; age group; glasses; expressions; face mask; beard  Face Detection  Performance of Al by Camera (Number of Channels  Face Recognition	AI by Camera (Number of	6 channels		Up to 8 channels	
Face Attributes Gender; age group; glasses; expressions; face mask; beard Face Detection Face Detection Face Detection Face Recognition Face R	,		Record Mode	General, motion detect	
hace Attributes  Beard  Beard Detection  Race Recognition  Race Recognition  Reformance of Al by Camera (Number of Channels)  Race Recognition  Reformance of Al by Camera (Number of Channels)  SMD Plus  Records  Record; Rapshot; IPC experience of Lipting condition change  Adam Linkage  Record; Rapshot; IPC expuze; log; preset; ema  Record; snapshot; IPC expuze; log; preset; ema  Record; snapshot; IPC expuze; log; preset; ema  Audio and Video  Access Channel  Retolution  Resolution  Resolution  Resolution  Resolution  Resolution  Resolution  Resolution  Aldisabled: 1-channel 12 MP(® 30 fps; 2-channel 8 MP@ 30 fps; 3-channel 4 MP@ 30 fps; 2-channel 8 MP@ 30 fps; 3-channel 1 MP(® 30 fps; 3-channel 4 MP@ 30 fps; 2-channel 8 MP@ 30 fps; 3-channel 1 MP(® 30 fps; 3-channel 4 MP@ 30 fps; 2-channel 8 MP@ 30 fps; 3-channel 1 MP(® 30 fps; 3-channel 4 MP@ 30 fps; 2-channel 8 MP@ 30 fps; 3-channel 1 MP(® 30 fps; 3-channel 4 MP@ 30 fps; 2-channel 8 MP@ 30 fps; 3-channel 9 MP@ 30 fps; 3-cha	Face Detection		Backup Method	USB device and network	
Performance of Al by Camera (Number of Channels)  Face Recognition  Face Recognition	Face Attributes		Playback Mode		
Face Recognition Face R	Performance of AI by	6 channels	Alarm		
Face Recognition Performance of AI by Camera (Number of Channels)  SMD Plus  4 channels  4 channels  Alarm Linkage  Access Channel  Alarm Linkage  4 channels  Alarm Linkage  Access Channel  Audio Input  Access Channel  8 channels  Audio Output  Alarm Out	Channels)		General Alarm		
Intelligent Alarm   Face detection; face rec SMD Plus	Face Recognition		Anomaly Alarm	conflict; MAC conflict; lo	
A channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change  SMD Plus by Camera 6 channels  Audio and Video  Access Channel 8 channels  8 channels  80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing  12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 20p; D1; CIF; QCIF  Al disabled: 1-channel 12 MP@30 fps; 2-channel 8 MP@30 fps; 3-channel 15 MP@30 fps; 4-channel 8 MP@30 fps; 3-channel 15 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 3-channel 12 MP30 fps; 3-channel 8 MP30 fps; 3-channel 8 MP30 fps; 3-channel 12 MP30 fps; 3-channel 8 MP30 fps; 3-	Camera (Number of	6 channels	Intelligent Alarm		
MD Plus by Recorder which, reducing false alarms caused by leaves, rain and lighting condition change  Audio Input 1-channel RCA Audio Output NA (2 channels is option Recess Channel Retwork Bandwidth R	SMD Plus		Alarm Linkage		
Audio Input 1-channel RCA Audio Output 1-channel RCA Audio Output 1-channel RCA Audio Output 1-channel RCA Alarm Input NA (2 channels is optio Alarm Output NA (2 channels is optio Alarm Output NA (1-channel 12 V 1 A Input NA (1-channel 12 V 1 A Inp	MD Plus by Recorder	vehicle, reducing false alarms caused by leaves, rain and	Port		
Audio and Video  Access Channel  8 channels  8 channels  80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing  12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; 01; CIF; QCIF  Disk Interface  12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; 01; CIF; QCIF  Disk Interface  13 ATA port. Each disk or varies depending on the varies depending on the varies depending on the varies depending on the MP@30 fps; 3-channel 12 MP@30 fps; 2-channel 8 MP@30 fps; 3-channel 5 MP@30 fps; 4-channel 4 MP@30 fps; 3-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 3-channel 12 MP@30 fps; 3-channel 4 MP@30 fps; 3-channel 12 MP@30 fps; 3-channel 4 MP@30 fps; 3-channel 5 MP@30 fps; 3-channel 6 MP@30 fps; 3-channel 5 MP@30 fps; 3-channel 6 MP@30 fps; 3-channel 5 MP@30 fps; 3-channel 6	MD Plus by Camera		Audio Input	1-channel RCA	
Alarm Input NA (2 channels is option  Modes incoming, 80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing  12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; D1; C1F; QC1F  Al 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; 3-channel 12 MP@30 fps; 4-channel 4 MP@30 fps; 5-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 5-channel 13 MP@30 fps; 4-channel 8 MP@30 fps; 5-channel 14 MP@30 fps; 4-channel 8 MP@30 fps; 5-channel 15 MP@30 fps Al enabled: 1-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 5-channel 14 MP@30 fps; 4-channel 8 MP@30 fps; 6-channel 14 MP@30 fps; 4-channel 8 MP@30 fps; 6-channel 14 MP@30 fps; 4-channel 8 MP@30 fps; 8-channel 14 MP@30 fps; 4-chan	•		Audio Output	1-channel RCA	
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SATA port. Each disk or varies depending on the vari			Alarm Output	NA (1-channel 12 V 1 A	
Al 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; 3-channel 5 MP@30 fps; 4-channel 4 MP@30 fps; 8-channel 12 MP@30 fps; 4-channel 4 MP@30 fps; 8-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 4 MP@30 fps; 7-channel 1080p@30 fps	letwork Bandwidth	outgoing	Disk Interface	·	
Decoding Capability         MP@30 fps; 3-channel 5 MP@30 fps; 4-channel 4 MP@30 fps; 8-channel 1080p@30 fps Al enabled: 1-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 4 MP@30 fps; 7-channel 1080p@30 fps         VGA         1 (10/100 Mbps Ethern 1 (10/100 Mbps Ethern 1 (10/100 Mbps, 1	Resolution		USB	2 (2 rear USB 2.0 ports)	
Decoding Capability         MP@30 fps; 8-channel 1080p@30 fps         VGA         1           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         Network Port         1 (10/100 Mbps Ethern PoE Port           Al HDMI, 1 VGA Simultaneous: HDMI: 3840 x 2160, 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720 Heterogeneous: HDMI: 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720         Power Supply         53 VDC, 1.22 A           Aulti-screen Display         Main Screen: 1/4/8/9 Sub Screen: 1/4/8/9         Net Weight         0.50 kg (1.10 lb)           Wildti-sparty Camera Access         ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha         Product Dimensions         204.6 mm x 206.4 mm			HDMI	1	
MP@30 fps; 2-channel 12 Nivews 1ps; 1-channel 8   MP@30 fps; 3-channel 4   MP@30 fps; 7-channel 1080p@30 fps   PoE Port   4 ports, 10/100 Mbps Ethern MP@30 fps; 7-channel 1080p@30 fps   PoE Port   4 ports, 10/100 Mbps, 1 HDMI, 1 VGA   Simultaneous: HDMI: 3840 x 2160, 1920 x 1080, 1280 x 1024, 1280 x 720   Power Supply   53 VDC, 1.22 A   Power Supply   Foundation of NVR is separated by VGA: 1920 x 1080, 1280 x 1024, 1280 x 720   Power Consumption   Power of PoE is 36 W, to single port is 25.5 W   VGA: 1920 x 1080, 1280 x 1024, 1280 x 720   Power Consumption   NVR is separated by VGA: 1920 x 1080, 1280 x 1024, 1280 x 720   Power Consumption   NVR is separated by VGA: 1920 x 1080, 1280 x 1024, 1280 x 720   Net Weight   0.50 kg (1.10 lb)   Chird-party Camera Access   ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha   Product Dimensions   Product Dim	Decoding Capability	MP@30 fps; 8-channel 1080p@30 fps	VGA	1	
HDMI, 1 VGA   Simultaneous:   HDMI: 3840 x 2160, 1920 x 1080, 1280 x 1024, 1280 x   Power Supply   Fower Supp	,	MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 4	Network Port	1 (10/100 Mbps Etherr	
Simultaneous:   General   General			PoE Port	4 ports, 10/100 Mbps,	
720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720 Heterogeneous: HDMI: 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720  Multi-screen Display  Main Screen: 1/4/8/9 Sub Screen: 1/4/8/9  ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha  Product Dimensions  9 VMET Supply  Fower Supply  53 VDC, 1.22 A  Forely is a supply  53 VDC, 1.22 A  Fower Supply  53 VDC, 1.22 A  Forely is a supply  54 VIII of the supply is a supply		Simultaneous:	General		
Heterogeneous:   HDMI: 1920 x 1080, 1280 x 1024, 1280 x 720   Power Consumption   Power of PoE is 36 W, to Single port is 25.5 W	Video Output	720	Power Supply	53 VDC, 1.22 A	
Sub Screen: 1/4/8/9  Sub Screen: 1/4/8/9  Gross Weight  1.38 kg (3.04 lb)  ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha  Product Dimensions  204.6 mm × 206.4 mm		Heterogeneous: HDMI: 1920 <b>x</b> 1080, 1280 <b>x</b> 1024, 1280 <b>x</b> 720	Power Consumption	power of PoE is 36 W, t	
ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha	Multi-screen Display		Net Weight	0.50 kg (1.10 lb)	
Hanwha  Product Dimensions  204.6 mm x 206.4 mm :			Gross Weight	1.38 kg (3.04 lb)	
	Third-party Camera Access		Product Dimensions	204.6 mm × 206.4 mm × 1 80") (W × D × H)	

## NVR4000-4KS3 Series | DHI-NVR4108-P-4KS3

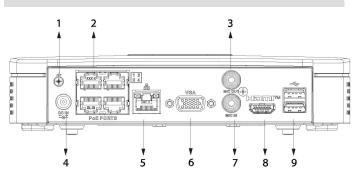
Packaging Dimensions	364 mm <b>x</b> 96 mm <b>x</b> 261 mm (14.33" <b>x</b> 3.78" <b>x</b> 10.26") (W <b>x</b> D <b>x</b> H)		
Operating Temperature	-10 °C to +55 °C (14 °F to +131 °F)		
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)		
Operating Humidity	10%–93% (RH), non-condensing		
Installation	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-NVR4108-P-4KS3	8CH Smart 1U 4PoE 1HDD Lite Network Video Recorder			

## Dimensions (mm[inch])



## Panels



1 Ground

- 2 PoE Ports
- 3 AUDIO OUT, RCA Connector 4
- Power Input

5 Network Port

9 USB Ports

- VGA Port
- 7 AUDIO IN, RCA Connector
- HDMI Port