

DH-IPC-HDW3667EM-S-IL-ANZ

6MP Smart Dual Light Fixed-focal Eyeball WizSense Network Camera



WizSense

Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

With advanced deep learning algorithm, Dahua WizSense 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

Functions

AI SSA

Dahua AI Scene Self-adaptation (AI SSA) adopts deep learning algorithms to detect environmental conditions, such as rain, fog, backlight, low light and flicker, to adjust the parameters of the image to suit the conditions, ensuring that clear images are always produced.

SMD 4.0

Dahua Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

Smart Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

- 6-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 6 MP (3288 ×1850)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in multi-core light, the max. IR distance is 30 m and the max. warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two function support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Max. 512 G Micro SD card; built-in Mic.
- 12 VDC/PoE power supply.
- IP67 protection.
- SMD 4.0.
- Supports AI SSA.
- SMD area can be set in warm light areas that support triggering alarms.



Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Protection (IP67, Wide Voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normally after soaking in 1 m deep water for 30 minutes. Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/2.7" CMOS
Max. Resolution	3288 (H) × 1850 (V)
ROM	256 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.4 (Color, 30 IRE) 0.0005 lux@F1.4 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 30 m (98.43 ft) (IR) Up to 30 m (98.43 ft) (Warm light)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	2 (Multi-core (IR + warm) light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–80° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	F1.4
Field of View	2.8 mm: H: 110°; V: 58°; D: 132° 3.6 mm: H: 86°; V: 49°; D: 100°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.4 m (4.59 ft) 3.6 mm: 1.9 m (6.23 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	84.8 m (278.22 ft)	33.9 m (111.22 ft)	17.0 m (55.77 ft)	8.5 m (27.89 ft)
	3.6 mm	98.7 m (323.82 ft)	39.5 m (129.59 ft)	19.7 m (64.63 ft)	9.9 m (32.48 ft)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.				

Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
SMD	SMD 4.0
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets.
AI SSA	Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.

Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
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Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by sub stream)
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 3288 × 1850@(1–25/30 fps) Sub stream: 1920 × 1080@(1–25/30 fps) Third stream: 1920 × 1080@(1–25/30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	3 streams
Resolution	6M (3288 × 1850/3200 × 1800); 5M (2960 × 1668/2880 × 1620); 4M (2688 × 1520/2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	VBR; CBR; ABR
Video Bit Rate	H.264: 3 kbps–16384 kbps; H.265: 3 kbps–16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto/Manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Smart Dual Light	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	8 areas
LDC	Yes

Audio

Built-in MIC	Yes, built-in Mic
Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection SMD; security exception
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Network

Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P
Interoperability	ONVIF (Profile S & Profile G & Profile T & Profile M); CGI
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE11; Chrome; Firefox
Management Software	Smart PSS Lite; DSS; DMSS; DoLynk Care
Mobile Client	iOS; Android
Cyber Security	Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HTTPS; 802.1x; Trusted boot; Trusted execution; Trusted upgrade; Session security; Security warning

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
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Power

Power Supply	12 VDC/PoE (802.3af)
Dual Power Backup	When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.
Power Consumption	Basic: 3.7 W (12 VDC); 5.3 W (PoE); Max.: 7.4 W (12 VDC); 9.5 W (PoE) (H.265 + WDR + warm light + intelligence on)

Environment

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Humidity	≤95% (RH), non-condensing
Protection	IP67

Structure

Casing Material	Metal
Product Dimensions	93.6 mm × Φ106.0 mm (3.69" × Φ4.17")
Net Weight	0.53 kg (1.17 lb)
Gross Weight	0.71 kg (1.57 lb)

Ordering Information

Type	Model	Description
IP CAMERA	DH-IPC-HDW3667EM-S-IL-ANZ	6MP Smart Dual Light Fixed-focal Eyeball WizSense Network Camera
Accessories (Optional)	PFA139	Junction Box
	PFB2204W	Wall Mount
	PFA106	Ceiling Mount
	PFB220C	Ceiling Mount
	PFA152-E	Pole Mount
	PFM900-E	Integrated Mount Tester
	TF-P100	TLC SD Card

Accessories

Optional:



PFA139
Junction
Box



PFB2204W
Wall
Mount



PFA106
Ceiling
Mount



PFB220C
Ceiling
Mount



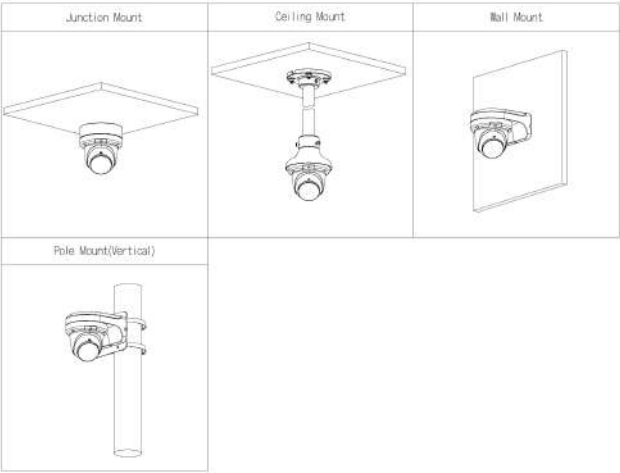
PFA152-E
Pole
Mount



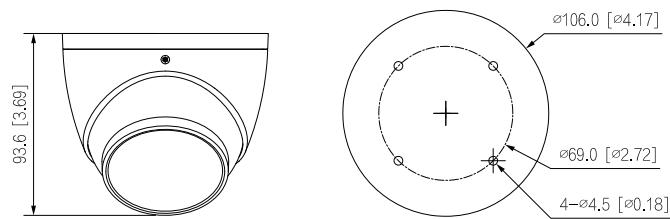
PFM900-E
Integrated
Mount Tester



TF-P100
TLC SD
Card



Dimensions (mm[inch])



DHI-NVR4108HS-8P-4KS3

8CH 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.

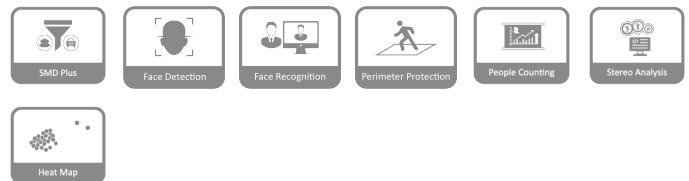
Face Detection by Camera

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 × 1080p@30 fps.
- Max. 160/160/80 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.



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.

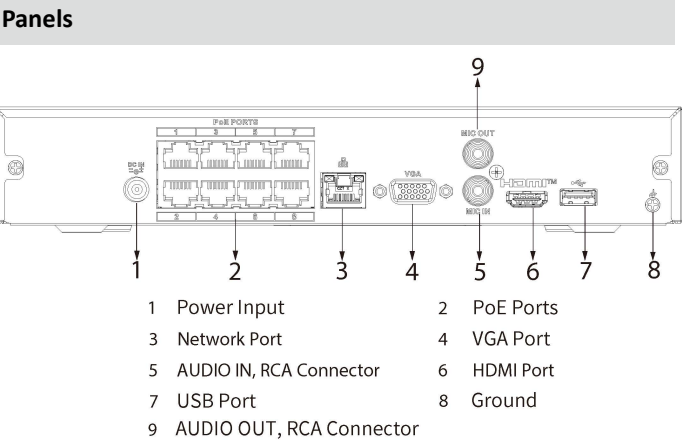
Technical Specification

System	
Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operating Interface	Web, Local GUI
AI	
AI by Recorder	SMD Plus
AI by Camera	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map
Perimeter Protection	
Perimeter Performance of AI by Camera (Number of Channels)	6 channels
Face Detection	
Face Attributes	Gender; age group; glasses; expressions; face mask; beard
Face Detection Performance of AI by Camera (Number of Channels)	6 channels
Face Recognition	
Face Recognition Performance of AI by Camera (Number of Channels)	6 channels
SMD Plus	
SMD Plus by Recorder	4 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
Network Bandwidth	AI disabled: 160 Mbps incoming, 160 Mbps recording and 80 Mbps outgoing AI enabled: 80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing
Resolution	12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; D1; CIF; QCIF
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; 8-channel 1080p@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; 7-channel 1080p@30 fps
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
Multi-screen Display	Main Screen: 1/4/8/9 Sub Screen: 1/4/8/9

Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha
Compression Standard	
Video Compression	Smart H.265+; H.265; Smart H.264+; H.264
Audio Compression	G.711a; G.711u; PCM; G726
Network	
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.)
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 22.12(Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome; IE; Safari; Edge; Firefox
Recording Playback	
Multi-channel Playback	Up to 8 channels
Record Mode	General, motion detection; intelligent; alarm
Backup Method	USB device and network
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback
Alarm	
General Alarm	Motion detection; privacy masking; video loss; scene changing; PIR alarm; IPC external alarm
Anomaly Alarm	Camera disconnection; storage error; disk full; IP conflict; MAC conflict; login locked; and cybersecurity exception
Intelligent Alarm	Face detection; face recognition; perimeter protection; SMD Plus; people counting; stereo analysis; heat map
Alarm Linkage	Record; snapshot; IPC external alarm output; audio; buzzer; log; preset; email
Port	
Audio Input	1-channel RCA
Audio Output	1-channel RCA
Alarm Input	NA (2 channels is optional)
Alarm Output	NA (1-channel 12 V 1 A output is optional)
Disk Interface	1 SATA port. Each disk can contain up to 20 TB. This limit varies depending on the environment temperature.
USB	2 (1 front USB 2.0 port, 1 rear USB 2.0 port)
HDMI	1
VGA	1
Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)
PoE Port	8 ports, 10/100 Mbps, IEEE 802.3 af/at
General	
Power Supply	53 VDC, 1.81 A
Power Consumption	Total output of NVR is <10 W(without HDD) Total output power of PoE is 72 W,the maximum output power of a single port is 25.5 W
Net Weight	0.92 kg (2.03 lb)

NVR4000-4KS3 Series | DHI-NVR4108HS-8P-4KS3

Gross Weight	2.05 kg (4.52 lb)
Product Dimensions	260.0 mm × 232.5 mm × 47.6 mm(10.24" × 9.15" × 1.87") (W × D × H)
Packaging Dimensions	374 mm × 119 mm × 311 mm (14.72" × 4.69" × 12.24") (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-NVR4108HS-8P-4KS3	8CH Compact 1U 8PoE 1HDD Lite Network Video Recorder

Dimensions (mm[inch])

