

NVR5216-EI

Recorder IP AI WizSense 16 canali 2 HDD 1U



Wiz Sense

WizSense è una serie di prodotti e soluzioni AI che adottano chip AI indipendenti e algoritmi deep-learning. Distinguendo con elevata precisione figure umane e veicoli nella scena, permettono agli utenti di concentrarsi sui target di reale interesse. Lo stato dell'arte dell'AI applicata alla sicurezza integrata, accessibile a tutti.

Panoramica

La serie NVR5000-EI offre performance elevate e una tecnologia di registrazione avanzata per ogni applicazione di videosorveglianza IP. Il potente processore, l'ampia banda e le capacità di decodifica garantiscono la fluidità video. Il chip AI e gli algoritmi deep learning integrati mettono a disposizione diverse funzioni AI, come face detection e protezione perimetrale.

Funzioni

AcuPick

Questa tecnologia di ricerca leader nel settore impiega efficacemente sia l'intelligenza in front-end che in back-end per trovare rapidamente e con grande precisione i target in enormi quantità di video.

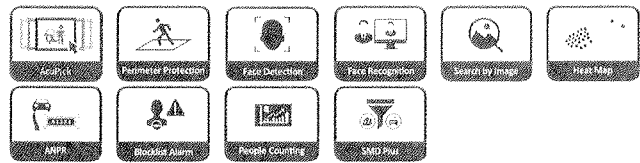
Protezione perimetrale

Filtraggio automatico dei falsi allarmi causati da animali, movimenti del fogliame, effetti di luce, ecc... Consente al sistema di effettuare un secondo riconoscimento dei target aumentando la precisione degli allarmi.

Face Detection

Gli algoritmi deep-learning rilevano i volti presenti nell'inquadratura, li tracciano, selezionano la migliore immagine facciale ed effettuano un'istantanea.

- Decodifica Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
- Max. capacità decodifica: 32 × 1080p@30 fps o 16 × 4MP@30 fps
- Max. 384 Mbps di banda in ingresso/registrazione/uscita
- AcuPick su max. 16 canali
- Cluster N+M
- AI da NVR: 2 canali face detection/recognition, 4 canali protezione perimetrale, 8 canali SMD Plus
- AI da telecamera: face detection/recognition, protezione perimetrale, SMD Plus, metadati, ANPR, analisi stereo, heat map, people counting
- Security baseline 2.3



Face Recognition

La tecnologia di riconoscimento facciale Dahua estrapola gli attributi dei volti ripresi e li confronta con quelli presenti nel database per rilevarne l'identità.

Heat Map da telecamera

Mostra i flussi e la densità di persone con diversi colori generando statistiche sulle quantità in base allo spazio e il tempo.

ANPR da telecamera

Rileva il numero di targa dei veicoli presenti nell'immagine. Supporta le liste di blocco e di autorizzati, e la ricerca dei veicoli per numero di targa nelle registrazioni video.

SMD Plus

Grazie agli algoritmi avanzati, lo Smart Motion Detection Dahua classifica i target che innescano il motion detection e filtrano gli allarmi non rilevanti.

Specifiche tecniche
Sistema

Processore principale	di grado industriale
Sistema operativo	Embedded Linux
Interfaccia	Web, Local GUI

AI

Da NVR	Face detection; face recognition; protezione perimetrale; SMD Plus
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Da telecamera	Face detection; face recognition; metadati video (persone, veicoli a quattro e due ruote); protezione perimetrale; SMD Plus; analisi sterep; distribuzione folla; people counting; ANPR; densità veicoli; heat map
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AcuPick AI da telecamera + NVR	Max. 16 canali, 1 evento combinato per canale
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Protezione perimetrale

Da NVR (N° canali)	4 canali, 10 regole IVS per canale
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Da telecamera (N° canali)	16 canali
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Face Detection

Attributi facciali	Genere; fascia di età; occhiali; espressioni; mascherina; barba
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Da NVR (N° canali)	2 canali (fino a 12 immagini di volti per canale)
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Da telecamera (N° canali)	16 canali
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Face Recognition

Capacità database volti	Fino a 20 database con 20.000 images, con una capacità totale di 2.5 G. Nome, genere, data di nascita, indirizzo, tipo credenziali, N° credenziali, è possibile aggiungere nazione e regione a ogni immagine.
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Da NVR (N° canali)	1. 16 canali FD (da telecamera) + FR (da NVR), flusso immagini: 16 immagini al secondo 2. 2 canali FD (da NVR) + FR (da NVR), flusso video: 12 immagini al secondo
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Da telecamera (N° canali)	16 canali
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SMD Plus

SMD Plus da NVR	8 canali; filtro secondario per persone e veicoli, riduce i falsi allarmi causati da foglie, pioggia ed effetti di luce
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SMD Plus da telecamera	16 canali
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Metadati video

Da telecamera (N° canali)	8 canali
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Attributi persone	Colore e tipo parte superiore, colore e tipo parte inferiore, cappello, borsa, età, genere e ombrello
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Attributi veicoli a quattro ruote	Numero di targa, colore targa, categoria, modello, marchio, utilizzo cellulare, cinture di sicurezza, abitacolo, immatricolazione.
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Attributi veicoli a due ruote	Modello, colore, numero passeggeri, casco.
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Confronto numeri di targa

ANPR da telecamera (N° canali)	8 canali
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Capacità database numeri di targa	1. Fino a 20.000 numeri di targa 2. Liste di blocco e di autorizzati
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Audio e Video

Canali	16
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Banda di rete	AI non attiva: 384 Mbps in ingresso/registrazione/uscita AI attiva: 200 Mbps in ingresso/registrazione/uscita
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Risoluzioni	32 MP; 24 MP; 16 MP; 12 MP; 8 MP; 5 MP; 4 MP; 1080p; 720p; D1; CIF; QCIF
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Capacità decodifica	AI non attiva: 2 canali 32 MP@20 fps; 2 canali 24 MP@20 fps; 4 canali 16 MP@30 fps; 5 canali 12 MP@30 fps; 8 canali 8 MP@30 fps; 12 canali 5 MP@30 fps; 16 canali 4 MP@30 fps AI attiva: 1 canale 32 MP@20 fps; 1 canale 24 MP@20 fps; 2 canali 16 MP@30 fps; 4 canali 12 MP@30 fps; 4 canali 8 MP@30 fps; 8 canali 5 MP@30 fps; 12 canali 4 MP@30 fps
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Uscite video	1 VGA, 1 HDMI VGA: 1920 x 1080, 1280 x 1024, 1280 x 720 HDMI: 3840 x 2160, 1920 x 1080, 1280 x 1024, 1280 x 720 Uscite sorgenti video eterogenee per HDMI e VGA
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Display multi-screen	Schermo principale: 1/4/8/9/16 Schermo secondario: 1/4/8/9/16
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Compatibilità telecamere	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung
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Compressione

Video	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG
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Audio	G.711a; G.711u; PCM; G.726
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Rete

Protocolli di rete	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UDP; SNMP; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; PPPoE; FTP; DDNS; Alarm Server; IP Search (Supporta telecamere IP Dahua, DVR, NVS, ecc.); Multicast; P2P; Auto Registration; iSCSI
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Client mobile	iOS; Android
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Compatibilità	ONVIF 22.06 (Profile T; Profile S; Profile G); CGI; SDK
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Browser	Chrome; IE; Safari; Edge; Firefox
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Playback

Multi-canale	Fino a 16 canali
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Modalità registrazione	Generale, motion detection; intelligent; alarm; POS
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Backup	USB e rete
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Modalità playback	Instantaneo, generale, eventi, tag, smart (face e motion detection)
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Archiviazione

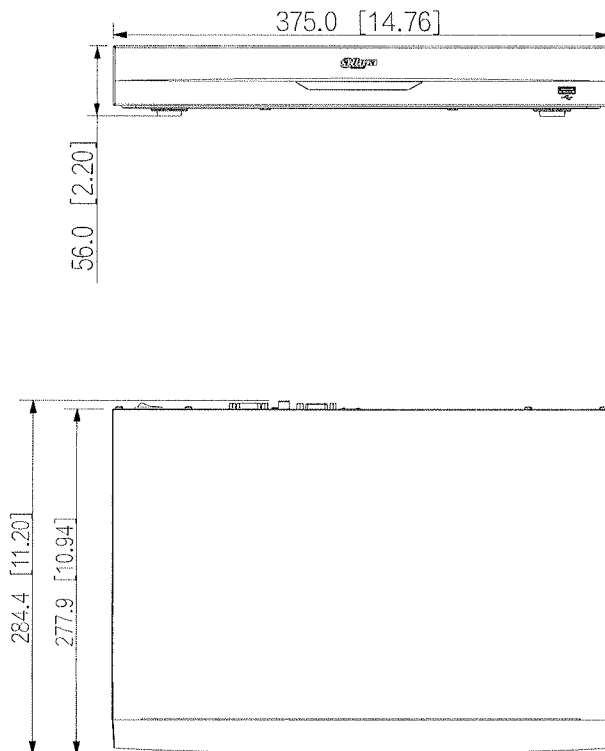
Gruppo dischi	Si
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Allarmi

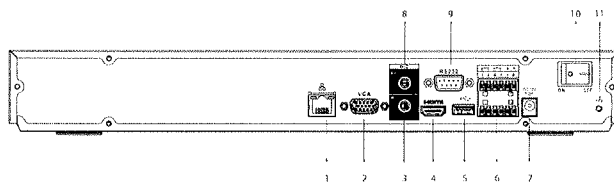
Generali	Motion detection; mascheratura privacy; allarme locale
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Anomalie	Telecamera offline; errore archiviazione; disco pieno; conflitto IP; conflitto MAC; blocco login; malfunzionamento ventola; cybersecurity
Intelligenza artificiale	Face detection; protezione perimetrale; face recognition; metadati video (persone, veicoli a quattro e due ruote); SMD Plus; analisi stereo; distribuzione folla; people counting; ANPR; densità veicoli; heat map
Link allarme	Record; snapshot (panoramic); uscita allarme locale; uscita allarme esterna telecamera IP; controller accessi; audio; buzzer; log; preset; email
Porte	
Ingresso audio	1 canale (RCA)
Uscita audio	1 canale (RCA)
Ingressi allarme	4 canali
Uscite allarme	2 canali
Interfaccia HDD	2 porte SATA, capacità max disco 16 TB. Questo limite può variare in base alla temperatura.
RS-232	1
RS-485	1
USB	2 (1 USB 2.0 frontale, 1 USB 3.0 posteriore)
HDMI	1
VGA	1
Ethernet	1 RJ-45 (10/100/1000 Mbps)
Generale	
Alimentazione	12 VDC, 4 A
Assorbimento	≤ 10 W (senza HDD)
Peso netto	1.57 kg (3.46 lb)
Peso con confezione	2.73 kg (6.02 lb)
Dimensioni prodotto	375.0 mm × 284.4 mm × 56.0mm (14.76" × 11.20" × 2.20") (W × D × H)
Dimensioni confezione	433.0 mm × 141.0 mm × 366.0 mm (17.04" × 5.55" × 14.41") (W × D × H)
Temperatura di esercizio	-10 °C ~ +55 °C (14 °F to +131 °F)
Temperatura di stoccaggio	-20 °C ~ +60 °C (-4 °F to +140 °F)
Umidità di esercizio	10%–93% (RH)
Installazione	Rack o desktop
Certificazioni	FCC: 47 CFR FCC Part15, SubpartB, Class A 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

Dimensioni (mm[inch])



Pannello



- 1 Porta Ethernet
- 2 Porta VGA
- 3 Ingresso Mic (connettore RCA)
- 4 Porta HDMI
- 5 Porta USB
- 6 Ingresso/uscita allarme
- 7 Ingresso alimentazione
- 8 Uscita Mic (connettore RCA)
- 9 Porta RS-232
- 10 Interruttore alimentazione
- 11 Staffa a terra

Info ordine

Articolo	Codice	Descrizione
NVR 16 ch	NVR5216-EI	Recorder IP AI WizSense 16 canali 2 HDD 1U

DH-IPC-EBW81242-AS-S2

12 MP IR Fisheye WizMind Network Camera



Wiz Mind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

Series Overview

With fisheye lens, Dahua Fisheye series camera can realize 360° surveillance, and it is widely applied in various scenes such as airports, shopping centers, banks and hotels.

Functions

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.

Fisheye VR

With intelligent algorithm, Dahua Fisheye VR technology provides interactive 3-dimensional dynamic view through fisheye image. Dahua fisheye VR supports various interactive modes, such as original, bowl, cylinder and asteroid, providing more interactive experience.

People Counting

With advanced stereo image technology and deep learning algorithm, Dahua In Area No. technology recognizes human targets accurately to count people in area in real-time. You can set people quantity threshold, when the number larger or smaller than the threshold, it triggers linkage. It is applicable in the scene that has limit on people quantity.

- 12 MP 1/1.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 12M (4000 × 3000)@25 fps; supports 8M (3280 × 2480)@25/30 fps.
- Built-in IR LED, and the max. illumination distance is 10 m.
- Intelligent monitoring: Intrusion, tripwire, heat map, and people counting.
- SMART H.264 +/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Alarm: 2 in, 2 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card; built-in dual-array Mic and speaker.
- 12 VDC/PoE power supply.
- IP67 and IK10 protection.



Queue Management

With advanced image processing technology and deep learning algorithm, Dahua Queue Management technology counts people quantity in selected area in real time to realize queue management. It supports multiple polygon areas. When No. in area/strand time is not smaller or not larger than the threshold, it triggers alarm.

Heat Map

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs reports to meet your requirements.

Protection (IP67, IK10, Wide Voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

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.

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.

Technical Specification

Camera				
Image Sensor	1/1.7" CMOS			
Max. Resolution	4000 (H) × 3000 (V)			
ROM	2 GB			
RAM	4 GB			
Scanning System	Progressive			
Electronic Shutter Speed	Auto/Manual 1/3 s~1/100,000 s			
Min. Illumination	0.01 Lux@F2.0 (Color, 30 IRE) 0.001 Lux@F2.0 (B/W, 30 IRE) 0 Lux (Illuminator on)			
S/N Ratio	> 56 dB			
Illumination Distance	10 m (32.81 ft) (IR)			
Illuminator On/Off Control	Auto/Manual			
Illuminator Number	3 (IR LED)			
Lens				
Lens Type	Fixed-focal			
Lens Mount	M12			
Focal Length	1.85mm			
Max. Aperture	F2.0			
Field of View	Horizontal: 185° Vertical: 180°			
Iris Control	Fixed			
Close Focus Distance	0.4 m (1.31 ft)			
DORI Distance	Detect	Observe	Recognize	Identify
	40.0 m (131.23 ft)	16.0 m (52.49 ft)	8.0 m (26.2 ft)	4.0 m (13.12 ft)
Smart Event				
Heat Map	Yes			
Professional, intelligent				
IVS (Perimeter Protection)	Intrusion; tripwire			

People Counting	Supports 4 rules to count the number of people entering, exiting, and staying separately. It will trigger alarm linkage when the number of people who entering, exiting or staying exceeds the threshold. It can display and export reports based on year, month, day, week, day or custom time. Supports 4 rules to count the number of people in area and will trigger alarm linkage when the average strand time or people number in the area exceeds the threshold. It can display and export reports based on year, month, day, week, day or custom time. Supports 4 queue management rules to count number of people queuing and queue time in real time, and it will trigger alarm linkage when the number of people queued or queue time exceeds the threshold. It can display and export reports based on year, month, day, week, day or custom time.
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Video	
Video Compression	H.265; H.264; H.264H; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
Video Frame Rate	Main stream: 4000 × 3000@(1~25/25 fps) sub stream: 704 × 576@(1~25/30 fps) third stream: 1280 × 960@(1~17/17 fps) Fisheye mode: 1O (4000 × 3000) 1P (4096 × 1024) 2P (2432 × 2432) 1R (1216 × 1216) 2R (2432 × 2432) 4R (2432 × 2432) 1O + 3R (2432 × 2432) *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	4000 × 3000; 3280 × 2480; 2880 × 2160; (3M) 2048 × 1536; 1.3M (1280 × 960); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 8 kbps~16384 kbps H265: 3 kbps~16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Defog	Yes
Privacy Masking	4 areas

Audio	
Built-in MIC	Yes
Audio Compression	PCM; G.711A; G.711Mu; G.726; G.723
Alarm	
Alarm Event	No SD card; SD card full; SD card durability warning; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; people counting in area; stay detection; people counting; security exception
Network	
Network Port	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
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
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
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P (Only supported by general version)
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE11, IE10 Chrome: 48.0.2564.116 Firefox: 48.0.2 Edge: 42.17134.1.0
Management Software	Smart PSS; DSS; DMSS
Certification	
Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14
Port	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channel in: 5mA 3V-5 VDC
Alarm Output	2 channels out: 1,000mA 30 VDC/500mA 50 VDC
Power	
Power Supply	12 VDC/PoE+
Power Consumption	Basic: 6.5 W (12 VDC); 6.1 W (PoE) Max. (ICR + IR intensity): 13 W (12 VDC); 13.9 W (PoE) Heating: 3 W (12 VDC); 3 W (PoE)
Environment	
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤95%

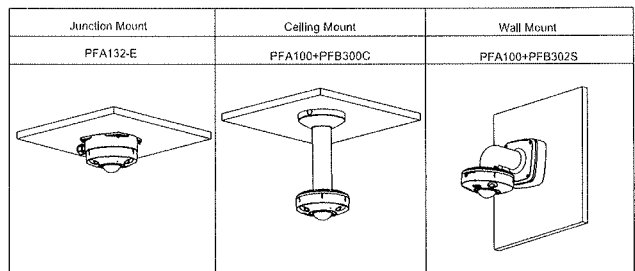
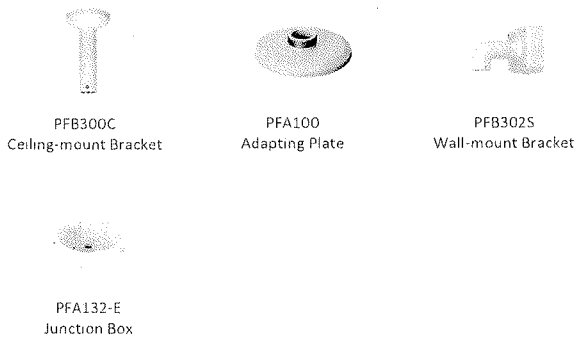
Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Protection	IP67; IK10
Structure	
Casing	Metal
Product Dimensions	59.8 mm × Φ149.8 mm (2.35" × Φ5.90")
Net Weight	0.79 kg (1.74 lb)
Gross Weight	1.21 kg (2.67 lb)

Ordering Information

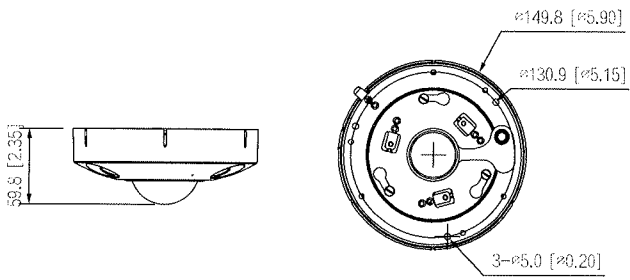
Type	Model	Description
12MP Camera	DH-IPC-EBW81242-AS-S2	12 MP IR Fisheye WizMind Network Camera
	IPC-EBW81242-AS-S2	12 MP IR Fisheye WizMind Network Camera
Accessories (Optional)	PFB300C	Ceiling-mount Bracket
	PFA100	Adapting Plate
	PFB302S	Wall-mount Bracket
	PFA132-E	Junction Box

Accessories

Optional

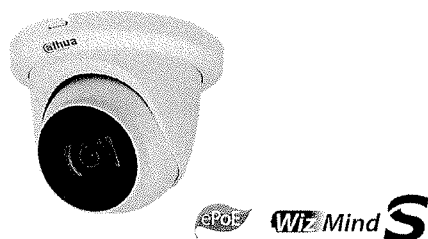


Dimensions (mm[inch])



DH-IPC-HDW5541TM-ASE

5MP IR Fixed-focal Eyeball WizMind Network Camera



Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

Series Overview

Driven by deep learning algorithms, Dahua WizMind S Series network camera offers a variety of intelligent functions that greatly improve the accuracy of audio and video analysis. It supports video metadata, smart sound detection, face detection, perimeter protection, people counting and more. The camera also adopts advanced image processing AI-Powered Image technology and has the Deeplight night vision effect. The camera is dustproof, waterproof and vandal-proof, and is certified as IP67 and IK10 (the type of protection varies depending on the model).

Functions

AI-Powered Image

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

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.

Face Detection

Dahua Face Detection technology can detect the face in the image. With deep learning algorithm, the technology supports detecting, tracking, capturing and selecting the best face image, and then outputs face snapshot.

Smart Sound Detection

With deep learning algorithms, Dahua Smart Sound Detection technology can detect and identify the sound of screams, glass breaking, and more.

* The parameters and datasheets below can only be applied to 5541-ASE-S3 series.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2960 × 1668) @25/30fps.
- Built-in IR LED, and the max. illumination distance is 50 m.
- ROI, SVC, SMART H.264+/H.265+, AI H.264/H.265, encoding after filter, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- With deep learning algorithm, it supports: video metadata, smart sound detection, IVS, face detection, smart object detection, and people counting, etc.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 512 GB Micro SD card, built-in MIC.
- 12 VDC/PoE power supply; ePoE.
- IP67 protection.
- SMD 3.0.



People Counting

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs reports to meet your requirements.

Video Metadata

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

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	2960 (H) × 1668 (V)
ROM	4 GB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.0009 lux@F1.6 (Color, 30 IRE) 0.0005 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 50 m (164.04 ft) (IR)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	2 (IR LED)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 111°, V: 58°, D: 132° 3.6 mm: H: 92°, V: 45°, D: 110° 6 mm: H: 57°, V: 30°, D: 65°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.1 m (3.06 ft) 3.6 mm: 1.7 m (5.58 ft) 6 mm: 3.2 m (10.50 ft)

Lens	Detect	Observe	Recognize	Identify
2.8 mm	63.6 m (208.66 ft)	25.4 m (83.33 ft)	12.7 m (41.67 ft)	6.4 m (21.00 ft)
3.6 mm	85.4 m (280.18 ft)	34.2 m (112.20 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)
6 mm	124.0 m (406.82 ft)	49.6 m (162.73 ft)	24.8 m (81.36 ft)	12.4 m (40.68 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, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection
Smart Object Detection	Smart abandoned object; smart missing object

SMD

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	Yes
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes and 8 expressions; face snapshot set as face, one-inch photo or custom; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting
People Counting	Tripwire people counting, generating and exporting report (day/week/month/year); people counting in area and queue management, generating and exporting report (day/week/month); 4 rules can be set for tripwire, people counting in area and queue management.
Heat Map	Yes
Video Metadata	Motor vehicle, non-motor vehicle, face, human body detection; track; snapshot; snapshot optimization; optimal face snapshot upload. Motor vehicle attributes: vehicle type, vehicle color, vehicle logo and other attributes: seatbelt, smoking, calling. Non-motor vehicle attributes: type, color, number of people, top type and color, hat. Human body attributes: gender, top/bottom type and color, bag, hat and umbrella. Face attributes: gender, age, expressions, glasses, face mask and beard.
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Smart Sound Detection	Yes
Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 2960 × 1668@(1–25/30 fps) Sub stream: D@(1–25/30 fps) Third stream: 1080p@(1–25/30 fps) Fourth stream: 720p@(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	4 streams
Resolution	5M (2960 × 1668/2880 × 1620); 4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–16384 kbps H.265: 12 kbps–11776 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
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 4M (2688 × 1520) resolution and lower)
Mirror	Yes
Privacy Masking	8 areas
LDC	Yes (only 2.8mm/3.6mm supports)
Audio	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
Alarm	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; external alarm; face detection; SMD; people counting in area; stay detection; people counting; people number error detection; queue people number alarm; queue time alarm; security exception
Alarm Event	
Network	
Network Port	RJ-45 (10/100 Enhancement 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); CGI
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE 9 and later Chrome: Chrome 102 and later Firefox: Firefox 88 and later
Management Software	SmartPSS Lite; DSS; DMSS
Mobile Client	iOS; Android
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification

Certification

CE-LVD: EN62368-1
CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
FCC: 47 CFR FCC Part 15, Subpart B
UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14

Certifications

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: wet contact, 5 mA 3V–5 VDC
Alarm Output	1 channel out: wet contact, 300mA 12V DC

Power

Power Supply	12 VDC/PoE (802.3af)/ePoE
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: 4 W (12 VDC); 5.8 W (PoE) Max. (H.265+ WDR+ Intelligence on+IR on): 6.2 W (12 VDC); 8.3 W (PoE)

Environment

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Humidity	10%–95% (RH), non-condensing

Protection

IP67

Structure

Casing Material	Inner core: Metal Cover: Metal Decoration ring: Plastic Quick install mounting plate: Metal
Product Dimensions	99.1 mm × Φ121.9 mm (3.90" × Φ4.80")
Net Weight	500 g (1.10 lb)
Gross Weight	770 g (1.70 lb)

Ordering Information

Type	Model	Description
5MP Camera	DH-IPC-HDW5541TM-ASE	5MP IR Fixed-focal Eyeball WizMind Network Camera
	IPC-HDW5541TM-ASE	5MP IR Fixed-focal Eyeball WizMind Network Camera
Accessories (Optional)	PFA130-E	Water-proof Junction Box
	PFB205W-E	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA109	Mount adapter
	PFB220C	Ceiling Mount Bracket
	PFM321D	12 VDC 1 A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:



PFA130-E
Water-proof
Junction Box



PFB205W-E
Wall Mount
Bracket



PFA152-E
Pole Mount Bracket



PFA109
Mount adapter



PFB220C
Ceiling Mount
Bracket



PFM321D
12 VDC 1 A Power
Adapter

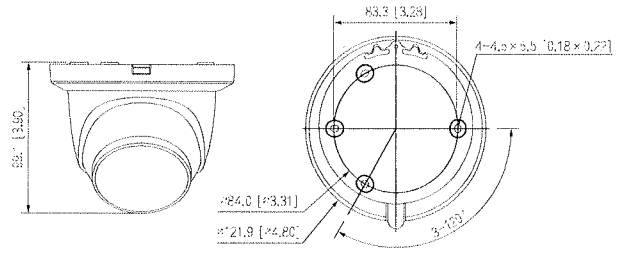


PFM900-E
Integrated
Mount Tester



TF-P100
MicroSD
Memory Card

Dimensions (mm[inch])



Junction Mount	Ceiling Mount	Ball Mount

