

DH-IPC-HDBW7442H-Z4

4MP IR Dome 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 advanced deep learning algorithm, Dahua WizMind 7 Series network camera supports various intelligent functions and satisfies the requirements in different scenes. The camera can accurately recognize person, vehicle, and non-motor vehicle, face, ANPR, and liveness. This series camera has ultra starlight night version effect, and works with ultra-low stream. It supports dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

Functions

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.

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.

- \cdot 4MP, 1/1.8" CMOS image sensor, low illuminance, high image definition
- \cdot Max outputs 4MP (2688 \times 1520) @50 fps/60 fps
- \cdot H.264&H.265 coding, high compression ration \cdot Wide dynamic, day/night, 3D NR, AWB, HLC, BLC
- \cdot ROI, SVC, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- \cdot With deep learning algorithm, it supports people counting, face detec tion, perimeter protection etc
- · Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485; BNC; supports max. 256 G SD card
- · 24V AC/PoE/12V DC power support
- · Five streams for three-channel HD video
- · IP67, IK10 protection grade
- · Anti-corrosion coating(optional)
- \cdot 12V DC power output, max. current 165mA , easy for installation



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.

ePoE

Dahua ePoE technology provides a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

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.

Privacy Protection

Dahua Privacy Protection technology can mask the detected face and human body to protect the privacy of some special targets.

Cyber Security

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

ANPR

With high-performance GPU chip, deep learning algorithm, and lots of sample training learning, Dahua ANPR technology can automatically collect and recognize the vehicle information, including license plate, logo, vehicle type, and vehicle color.

Technical Specification

Camera

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Image Sensor		1/1.8" 4Meg	1/1.8" 4Megapixel progressive CMOS		
Max. Resolution		2688 (H) × 1520 (V)			
ROM		4 GB			
RAM		2 GB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100000 s			
Min. Illumination		0.001 Lux@F1.6 (Color, 30IRE) 0.0002 Lux@F1.6 (B/W, 30IRE) 0 Lux (Illuminator on)			
S/N Ratio		> 56 dB			
Illumination Distance		80 m (262.5 ft)			
Illuminator On/Off Control		Auto			
Illuminator Number		3 (IR LED)			
Pan/Tilt/Rotation Range		Pan: 0°–355° Tilt: 0°–80° Rotation: 0°–355°			
Lens					
Lens Type		Motorized vari-focal			
Mount Type		Module interface			
Focal Length		8 mm–32 mm			
Max. Aperture		F1.6 (Constant)			
Field of View		Horizontal: 40° (W)–15° (T) Vertical: 23° (W)–9° (T) Diagonal: 46° (W)–18° (T)			
Iris Type		Auto;Precise iris control			
Close Focus Distance		W: 2.5 m (W: 8.20 ft) T: 6 m (T: 19.68 ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	151 m (495.4 ft)	60.7 m (199.1 ft)	30.3 m (99.4 ft)	15.1 m (49.5 ft)
	т	400 m (1312.3 ft)	160 m (524.9 ft)	80 m (262.5 ft)	40 m (131.2 ft)

Sm	nart	ev	ent	

IVS	Abandoned object, moving object
Professional, intelligent	
IVS (Perimeter Protection)	Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human); parking detection, loitering detection, and people gathering.

Face Detection	Face detection, track, priority, snapshot,Upload Optimized snapshot picture; face enhancement, face exposure, face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, sadness, disgust, fear, surprise, calm, happiness and confusion), Mouth mask, beard; Face matting setting: face, single inch photo Three snapshot; methods: real-time snapshot, priority snapshot, quality priority; Face angle filter Priority time setting; Support Duration Optimal,Non-living Filtering;
ANPR	ANPR, track, priority, snapshot Vehicle attributes: license plate, vehicle type, vehicle color, vehicle brand Other attributes: sun visor, seat belt, smoking, phoning, in-car accessories, annual vehicle inspection mark
Video Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.
People Counting	Support tripwire number counting, people counting in area, and displaying and outputting yearly/monthly/ daily reports.Support queue management, and displaying and outputting monthly/daily reports. Support 4 tripwire rules configuration, people counting in 4 areas, and 4 queue management functions
Intelligent 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, H.264B, MJPEG(only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main Stream: 2688 × 1520 (1–50/60 fps) Sub stream: 704 × 576 (1–25fps);704 × 480 (1–30fps) Third stream: 1920 × 1080 (1–25/30 fps) Fourth stream: 1920 × 1080 (1–25/30 fps) Fifth stream: 704 × 576 (1–25fps);704 × 480 (1–30fps)
Stream Capability	5 streams
Resolution	4M (2688 × 1520), 3M (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–10240 Kbps H.265: 12 Kbps–10240 Kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	140 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)

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Electronic Image Stabilization(EIS)	Yes
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution or below.)
Mirror	Yes
Privacy Masking	4 areas
Audio	
Audio Compression	G.711a; G.711Mu; G726; 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; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; defocus detection; external alarm; face detection; people counting in area; stay alarm; people counting; people counting exception detection; safety exception, Queue Management
Network	
Network	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
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P;RTMP
User/Host	20(Total bandwidth: 80M)
Storage	FTP; Micro SD card (256 G); NAS; SFTP
Browser	IE: IE9 and later Chrome: Chrome 42 and later Firefox: Firefox 48.0.2 and later
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS, Android
Certification	
Certifications	CE-LVD: EN62368-1,EN60950-22 (optional) CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07,UL 50E NEMA Type 4X (optional)
Port	
RS-485	1 (baud rate range: 1200 bps–115200 bps)
Audio Input	Audio Interface: 1/1 channel In/Out
Audio Output	
Alarm Input Alarm Output	3 channel In: 5mA 5V DC 2 channel Out: 1000mA 30V DC/500mA 50V AC
Power	

12V DC/24V AC/PoE+ (802.3at); ePoE

Power Supply

Power Consumption	Basic power consumption: 5.4W (12V DC); 5W(24V AC); 4.9W (PoE) Max. power consumption (Max. stream + intelligent function + IR LED + focus): 16.7W (12V DC);15.7W(24V AC); 15.6W (PoE) Heat power consumption: 3.3W (12V DC);5.5W(24V AC); 5.5W (PoE)	
Environment		
Operating Conditions	-40°C to +60°C (-40°F to +140°F)/Less than 95% RH	
Storage conditions	-40°C to +60°C (-40°F to +140°F)	
Protection Grade	IP67, IK10, Anti-Corrosion Protection: NEMA 4X (optional)	
Structure		
Casing	Metal+Plastic	
Dimensions	129.1 mm × Φ 157.9 mm (5.08" × Φ 6.22") (L × W × H)	
Net Weight	1500 g (3.31lb)	
Gross Weight	1600 g (3.53 lb)	

Ordering Information			
Туре	Part Number	Description	
4MP Camera	DH-IPC- HDBW7442HP-Z4	4MP IR Dome WizMind Network Camera,PAL	
	DH-IPC- HDBW7442HN-Z4	4MP IR Dome WizMind Network Camera,NTSC	
	IPC- HDBW7442HP-Z4	4MP IR Dome WizMind Network Camera,PAL	
	IPC- HDBW7442HN-Z4	4MP IR Dome WizMind Network Camera,NTSC	
Accessories (Optional)	PFA773	Sun Shade	
	PFB211W	Wall Mount	
	PFA152-E	Pole Mount	
	PFA101	Mount Adapter	
	PFB300C	Ceiling Mount	

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Accessories

Optional:





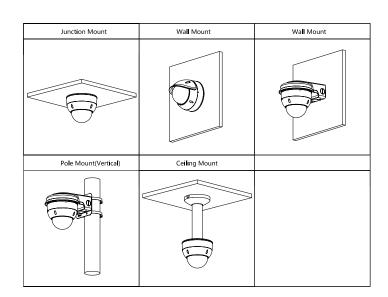


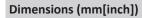
PFA152-E

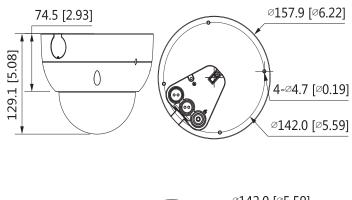


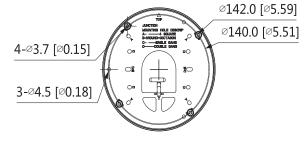
PFA101











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