DH-IPC-HDBW5842H-ZHE

8MP IR Dome WizMind Network Camera



ePoE WizMind

- 8MP, 1/1.8" CMOS image sensor, low illuminance, high image definition
- Max outputs 8MP (3840 × 2160) @ 25 fps/30 fps
- H.264&H.265 coding, high compression ration
- Wide dynamic, day/night, 3D NR, AWB, HLC, BLC
- ROI, SVC, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- With deep learning algorithm, it supports people counting, face detection, perimeter protection etc
- Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485; BNC; supports max. 256 GSD card, built-in ports, without cables
- 24V AC/12V DC/PoE power supply
- Three streams for two-channel HD video
- IP67, IK10 protection grade
- Anti-corrosion coating(optional)
- 12V DC power output, max. current 165mA , easy for installation



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 starlight solution and deep learning algorithm, Dahua WizMind 5 Series network camera has various intelligent functions, including face capture, perimeter protection and people counting, which greatly improve the accuracy of video analysis. The series camera 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.

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.

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.

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.

Technical Specification

Camera

Image Sensor	1/1.8" 8Megapixel progressive CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	4 GB
RAM	2 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.003 Lux@F1.2 (Color, 30IRE) 0.0003 Lux@F1.2 (B/W, 30IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	40 m (131.23 ft)
Illuminator On/Off Control	Auto/Manual
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	2.7 mm-12 mm
Max. Aperture	F1.2
Field of View	Horizontal: 114°(W)–47°(T) Vertical: 59°(W)–27°(T) Diagonal: 141° (W–55°(T)
Iris Type	Auto
Close Focus Distance	w: 1 m (W: 3.28 ft) T: 2.5 m (T: 8.20 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	87.2 m (286.09 ft)	34.9 m (144.50 ft)	17.4 m (57.08 ft)	8.7 m (28.54 ft)
	T	186.7 m (612.53 ft)	74.7 m (245.08 ft)	37.3 m (122.37 ft)	18.6 m (61.02 ft)

Smart event

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.
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: 3840 × 2160 (1–25/30 fps) Sub stream: 704 × 576 (1–25fps);704 × 480 (1–30fps) Third stream: 1920 × 1080 (1–25/30 fps)
Stream Capability	3 streams
Resolution	8M (3840 × 2160)/6M (3072 × 2048/3072 × 1728)/5M (2592 × 1944)/4M (2688 × 1520)/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–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)
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 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: 160 M.)
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	3 channel In: 5mA 5V DC 2 channel Out: 1000mA 30V DC/500mA 50V AC
Alarm Output	

Power

Power Supply	12V DC/24V AC/PoE+ (802.3at); ePoE
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 × Φ157.9 mm (5.08" × Φ6.22") (L × W × H)
Gross Weight	1600 g (3.53 lb)
Net Weight	1500 g (3.31 lb)

Ordering Information

Type	Part Number	Description
8MP Camera	DH-IPC-HDBW5842HP-ZHE-2712F-DC12AC24V	8MP IR Dome WizMind Network Camera,PAL
	DH-IPC-HDBW5842HN-ZHE-2712F-DC12AC24V	8MP IR Dome WizMind Network Camera,NTSC
	IPC-HDBW5842HP-ZHE-2712F-DC12AC24V	8MP IR Dome WizMind Network Camera,PAL
	IPC-HDBW5842HN-ZHE-2712F-DC12AC24V	8MP IR Dome WizMind Network Camera,NTSC
Accessories (Optional)	PFA773	Sun Shade
	PFB211W	Wall Mount
	PFA152-E	Pole Mount
	PFA101	Mount Adapter
	PFB300C	Ceiling Mount

Accessories

Optional:



PFA773



PFB211W



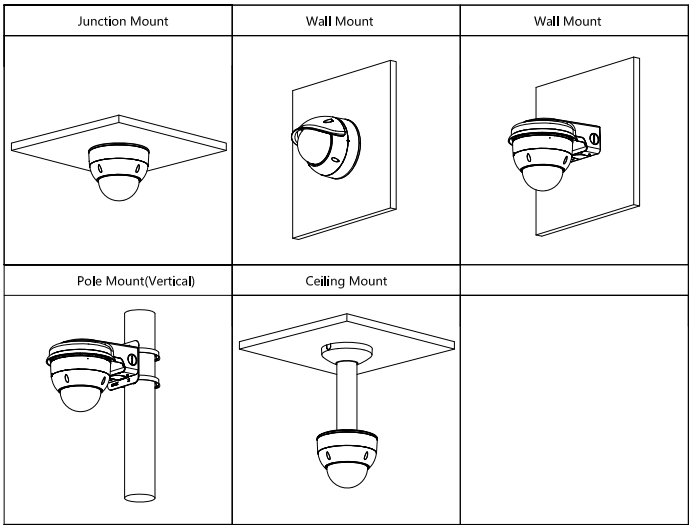
PFA152-E



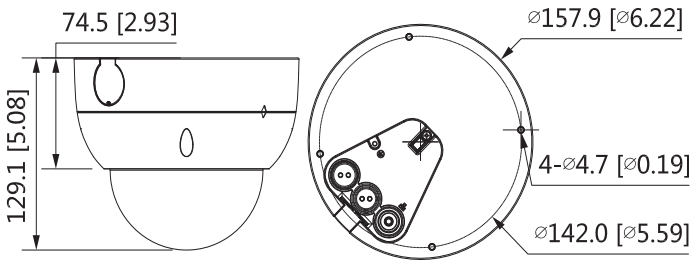
PFA101

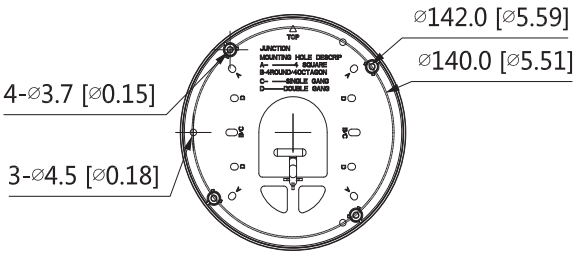


PFB300C



Dimensions (mm[inch])





Rev 001.001 © 2021 Dahua. All rights reserved. Design and specifications are subject to change without notice.
Pictures in the document are for reference only, and the actual product shall prevail.