

# DH-IPC-HDBW7442H-ZFR

4MP IR Dome WizMind Network Camera



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

### **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.

### 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.  $\cdot 4 \text{MP}, 1/1.8"\,\text{CMOS}$  image sensor, low illuminance, high image definition

- · Max outputs 4MP (2688 × 1520) @50 fps/60 fps
- $\cdot$  H.264&H.265 coding, high compression ration  $\cdot$  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
- $\cdot$  With deep learning algorithm, it supports people counting, face recognition, perimeter protection etc
- · Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485; BNC; supports max. 256 G SD card
- · 24V AC/12V DC/PoE power supply
- $\cdot$  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



### 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.

### Face Recognition

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database to recognize the person identity.

### **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.

### **Privacy Protection**

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

## Wiz Mind | DH-IPC-HDBW7442H-ZFR

### **Technical Specification**

### Camera

$\begin{split}                                      $	Camera					
RAMIn the set of	Image Sensor		1/1.8" 4Megapixel progressive CMOS			
RAM2 GBScanning SystemProgressiveElectronic Shutter SpeedAuto/Manual 1/3 s=1/100 USElectronic Shutter SpeedAuto/Manual 1/3 s=1/100 USImage SystemODOI Lux@F1.2 (Color, 30 IRE) OLUX (IIIuminator on)S/N Ratio $$	Max. Resolution		2688 (H) × 1520 (V)			
Second progressive ProgressiveProgressive ProgressiveSecond progressive Second progressiveProgressive ProgressiveElectronic Shutter SpeedAuto/Manual 1/3 s=1/10000 sMin. Illuminatior Dilux (Illuminator on)0.000 Lux@F1.2 (Color, 30/IE) OLUX (Illuminator on)S/N Ratio $> 56 dB$ S/N Ratio $> 56 dB$ Illuminator Orff ControlAutoIlluminator Nutre $3 (IR LED)$ Illuminator Nutre $3 (IR LED)$ Pan/Tilt/Rotatur Range $3 (IR LED)$ Pan/Tilt/Rotatur RangeNotorized surversIlluminator TypeMotorized surversLens Type $Motorized surversFocal LengthNotorized surversMax. Aperture1.2Field of View1.2Progressive1.2Irits TypeAuto;ProcressiversIrits TypeMato;ProcressiversClose Focus DurceV: 1 m (3.2 Et)Tris TypeAuto;ProcressiversLensV: 1 m (3.2 Et)Norizon 1: 14^{or}(W) - 47^{or}(T)SongraversNorizon 1: 14^{or}(W) - 57^{or}(T)SongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversSite markSongraversS$	ROM		16 GB			
It is the series of the serie	RAM		2 GB			
Min. Illumination Distance 0.001 Lx@F1.2 (B/W, 30IRE) 0.0002 Lux@F1.2 (B/W, 30IRE) 0.0002 Lux@F1.2 (B/W, 30IRE)   S/N Ratio > 56 dB   S/N Ratio 40 m (131.23 ft)   Illumination Distance 40 m (131.23 ft)   Illuminator O/ff Control Auto   Illuminator N/T $Auto$ Pan/Tilt/Rotation Range Pan: 0^-355°   Kotation: 0^-355° $Fire N/T   Pan/Tilt/Rotation Range Pan: 0^-355°   Kotation: 0^-355° Fire N/T   Lens Type Motorized V/T   Mount Type Motorized V/T   Mount Type Fire N/T   Max. Aperture Fire N/T   Field of View Fire N/T   Diagonal: L14*(W)-47*(T) V/T   Diagonal: L14*(W)-47*(T) V/T   Lens Detect Secontio$	Scanning Syste	m	Progressive			
Min. Illumination0.0002 Lux@F1.2 (B/W, 30IRE) O Lux (Illuminator on)S/N Ratio> 56 dBIllumination Distance40 m (131.23 ft)Illuminator Or Illuminator Or f ControlAutoIlluminator Nor Illuminator Nor Mount Type3 (IR LED)Pan/Tilt/Rotation Range $3$ (IR LED)Pan/Tilt/Rotation Range $Pan: 0^{*-355^{*}}$ Rotation: $0^{*-355^{*}}$ 	Electronic Shut	tter Speed	Auto/Manual 1/3 s-1/100000 s			
$\begin{tabular}{                                    $	Min. Illumination		0.0002 Lux@	PF1.2 (B/W, 30	,	
Illuminator On/Off ControlAutoIlluminator N/Off ControlA (IR LED)Illuminator N/Or3 (IR LED)Pan/Tilt/Rotation RangePan: 0°-355° Tilt: 0°-80° Rotation: 0°-355°Pan/Tilt/Rotation RangePan: 0°-355°LensVarian Several Se	S/N Ratio		> 56 dB			
Illuminator Number3 (IR LED)Pan/Tilt/Rotation Range $3 (IR LED)$ Pan/Tilt/Rotation Range $2 (IR LEO)^{-355^{\circ}}$ Lens $3 (IR LED)^{-355^{\circ}}$ Lens Type $Motorized verifocal$ Mount Type $Motorized verifocal$ Mount Type $Module interface$ Focal Length $2.7 mm \cdot 12 m = 10^{-10} m m^{-10} $	Illumination Di	stance	40 m (131.23 ft)			
Pan/Tilt/Rotation RangePan: 0°-355° Rotation: 0°-355°Pan/Tilt/Rotation RangePan: 0°-355° Rotation: 0°-355°LensLens TypeMotorized vari-focalMount TypeModule interfocalMount TypeModule interfocalFocal Length2.7 mm·12 mFocal LengthHorizontal: 14°(W)-47°(T) Vertical: 59°(W)-27°(T) Diagonal: 14" (W-55°(T)Field of ViewF1.2Field of ViewAuto;Precise sortrolIris TypeAuto;Precise sortrolIris TypeLensLensDetect00001 DORI DistanceDetectMaxPanceInterformGo.1 m (187.19ft)Quart T128.6 m51.4 m25.7 m (39.37 ft)12.8 m	Illuminator On/Off Control		Auto			
Tilt: 0°-80° Rotation: 0°-355°Rotation: 0°-355°LensMotorized vari-focalLens TypeMotorized vari-focalMount TypeModule inter-focalMount TypeModule inter-focalMount TypeSame data with the formation of the focal lengthFocal Length2.7 mm-12 wer set set set set set for focalMax. ApertureF1.2Max. ApertureHorizontal: 14°(W)-47°(T) Vertical: 59°(W)-27°(T) Diagonal: 14' (W-55°(T))Field of ViewAuto;Precist: set	Illuminator Number		3 (IR LED)			
Motorized vari-focal   Mount Type Module interface   Focal Length 2.7 mm-12 mm-12   Max. Aperture F1.2   Max. Aperture F1.2   Field of View Horizontal: 14°(W)-47°(T) Vertical: 59°(W)-27°(T) Diagonal: 141° (W-55°(T) Second Seco	Pan/Tilt/Rotation Range		Tilt: 0°-80°			
Mount Type Module interface   Focal Length 2.7 mm-12 mm-12   Max. Aperture F1.2   Miss Aperture Horizontal: $14^{\circ}$ (W)-47°(T) Vertical: $59^{\circ}$ (W)-27°(T) Diagonal: $141^{\circ}$ (W-55°(T)   Iris Type Auto;Precise Second 2000   Close Focus Distance Detect Observe Recognize Identify   DORI W 60.1 m (187.19 ft) 24 m (78.74 ft) 12 m (39.37 ft) 6 m (19.69 ft)   T 128.6 m 51.4 m 25.7 m 12.8 m	Lens					
Focal Length 2.7 mm-12 mm   Max. Aperture F1.2   Field of View F1.2   Field of View Auto;Precise 59°(W)-27°(T) Diagonal: 141° (W-55°(T))   Iris Type Auto;Precise control   Close Focus Distance W: 1 m (3.28ft) T: 2.5 m (8.20ft)   DORI Distance Detect Observe Recognize Identify   W 60.1 m (187.19 ft) 24 m (78.74 ft) 12 m (39.37 ft) 6 m (19.69 ft)   DORI Distance T 128.6 m 51.4 m 25.7 m 12.8 m	Lens Type		Motorized vari-focal			
Image: Second	Mount Type		Module interface			
Horizontal: 114° (W)-47°(T)   Field of View Horizontal: 114° (W)-47°(T)   Vertical: 59° (W)-27°(T) Diagonal: 141° (W-55°(T)   Iris Type Auto;Precise is control   Close Focus Distance W: 1 m (3.28ft)   Lens Detect Observe Recognize Identify   DORI W 60.1 m (187.19 ft) 24 m (12 m (39.37 ft) 6 m (19.69 ft)   Dostance T 128.6 m 51.4 m 25.7 m 12.8 m	Focal Length		2.7 mm-12 mm			
Field of ViewVertical: 59°(W)-27°(T) Diagonal: 141° (W-55°(T))Iris TypeAuto;Precise is controlIris TypeAuto;Precise is controlClose Focus Distance $W: 1 m (3.28f)$ T: 2.5 m (8.20f)DORI DistanceLensDetectObserveRecognizeW $60.1 m$ (187.19 ft) $24 m$ (78.74 ft) $12 m$ (39.37 ft) $6 m$ (19.69 ft)T128.6 m $51.4 m$ $25.7 m$ $12.8 m$	Max. Aperture		F1.2			
Close Focus Distance   W: 1 m (3.28ft) T: 2.5 m (8.20ft)     DORI Distance   Lens   Detect   Observe   Recognize   Identify     T   128.6 m   24 m   12 m   6 m   (19.69 ft)     T   128.6 m   51.4 m   25.7 m   12.8 m	Field of View		Vertical: 59°(W)–27°(T)			
Lens   Detect   Observe   Recognize   Identify     DORI   W   60.1 m (187.19 ft)   24 m (78.74 ft)   12 m (39.37 ft)   6 m (19.69 ft)     T   128.6 m   51.4 m   25.7 m   12.8 m	Iris Type		Auto;Precise iris control			
DORI   W   60.1 m (187.19 ft)   24 m (78.74 ft)   12 m (39.37 ft)   6 m (19.69 ft)     T   128.6 m   51.4 m   25.7 m   12.8 m	Close Focus Distance					
DORI   W   (187.19 ft)   (78.74 ft)   (39.37 ft)   (19.69 ft)     Distance   T   128.6 m   51.4 m   25.7 m   12.8 m		Lens	Detect	Observe	Recognize	Identify
T 128.6 m 51.4 m 25.7 m 12.8 m		W				
		Т				

### 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 Recognition	Face recognition, track, priority, snapshot, 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), mask, beard Face matting setting: face, single inch photo Two snapshot strategies: priority snapshot, recognition Face angle filter Priority time setting Management of 5 group face libraries Single person register and person register in batch Face recognition and similarity setting Max supports face contrast in face library with 200,000 faces Support Duration Optimal, Non-living Filtering			

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
Video Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.
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)
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

### Wiz Mind | DH-IPC-HDBW7442H-ZFR

Wiz Mind  D	H-IPC-HDBW /442H-ZFR
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 Recognition; 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: 80 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	
Alarm Output	3 channel In: 5mA 5V DC 2 channel Out: 1000mA 30V DC/500mA 50V AC

Power

Power Supply

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)

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

### Structure

Casing	Metal + Plastic
Dimensions	129.1 mm $\times$ Ф157.9 mm (5.08" $\times$ Ф6.22") (L $\times$ W $\times$ H)
Net Weight	1500 g(3.31 lb)
Gross Weight	1600 g (3.53 lb)

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

### Accessories

### **Optional:**







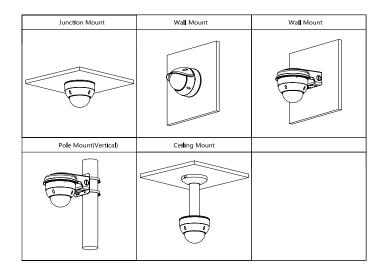
PFB211W

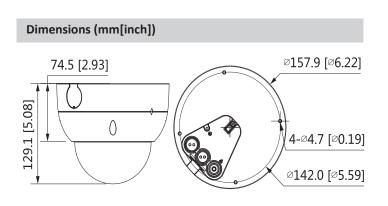


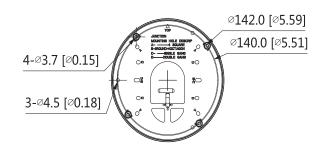


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PFB300C







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