

# DH-IPC-HDBW5442R-ASE

4MP WDR 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 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.

### 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.

- 1/1.8" 4Megapixel progressive scan CMOS
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- 25/30 fps@2688 × 1520, 50/60 fps@1080P (1920 × 1080)
- WDR (140 dB), Day/Night (ICR), 3D DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- 2.8 mm fixed lens (3.6 mm, 6.0 mm optional)
- 1/1 Alarm in/out, 1/1 audio in/out
- Max. IR LEDs Length 50 m
- Micro SD memory, IP67, IK10



## 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 yearly/monthly/daily reports to meet your requirements.

## 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.

## 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  $\pm 30\%$  (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	1/1.8" 4Megapixel progressive scan CMOS
Max. Resolution	2688 (H) × 1520 (V)
RAM/ROM	512 MB/128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
S/N Ratio	> 56 dB
Minimum Illumination	0.002 Lux@F1.6
Illumination Distance	Distance up to 50 m (164 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (IR LED)

**Lens**

Lens Type	Fixed-focal																				
Mount Type	Board-in																				
Focal Length	2.8 mm, 3.6 mm, 6.0 mm																				
Max. Aperture	F1.6																				
Angle of View	H: 113°, V: 60°/H: 89°, V: 48°/H: 56°, V: 31°																				
Aperture Type	Fixed																				
Close Focus Distance	1.3 m (4.27 ft)/1.9 m (6.23 ft)/3.8 m (12.47 ft)																				
DORI Distance	<table border="1"> <thead> <tr> <th>Lens</th> <th>Detect</th> <th>Observe</th> <th>Recognize</th> <th>Identify</th> </tr> </thead> <tbody> <tr> <td>2.8mm</td> <td>58m(190ft)</td> <td>23m(75ft)</td> <td>12m(39ft)</td> <td>6m(20ft)</td> </tr> <tr> <td>3.6mm</td> <td>72m(236ft)</td> <td>29m(95ft)</td> <td>14m(46ft)</td> <td>7m(23ft)</td> </tr> <tr> <td>6.0mm</td> <td>113m(371ft)</td> <td>45m(148ft)</td> <td>23m(75ft)</td> <td>11m(36ft)</td> </tr> </tbody> </table>	Lens	Detect	Observe	Recognize	Identify	2.8mm	58m(190ft)	23m(75ft)	12m(39ft)	6m(20ft)	3.6mm	72m(236ft)	29m(95ft)	14m(46ft)	7m(23ft)	6.0mm	113m(371ft)	45m(148ft)	23m(75ft)	11m(36ft)
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**Pan/Tilt/Rotation**

Pan/Tilt/Rotation Range	Pan: 0°–355°; Tilt: 0°–75°; Rotation: 0°–355°
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**Artificial Intelligence**

Face Detection	Face detection; track; optimization; snapshot; face enhancement; face exposure; face matting setting; face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization time setting
Perimeter Protection	Tripwire; intrusion; fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection; people gathering; parking detection
People Counting	Support the counting of enter number, leave number, and pass number, and displaying and outputting yearly/monthly/daily reports. Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm. Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm

**General Intelligence**

Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
General Intelligence	Object Abandoned/Missing
Heat Map	Yes

**Video**

Compression	H.265, H.264, H.264B, H.264H, MJPEG (only supported by sub stream)
Smart Codec	Smart H.265+ / Smart H.264+
Streaming Capability	3 Streams
Resolution	2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/CIF (352 × 288/352 × 240)
Frame Rate	Main Stream: 2688 × 1520 (1 fps–25/30 fps) 2560 × 1440 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps)
	Sub Stream: D1 (1 fps–25/30 fps) D1 (1 fps–50/60 fps)
	Third Stream: 1080P (1 fps–16 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC/HLC/WDR (140 dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off/On (4 Zone, Rectangle)
Region of Interest	Off/On (4 Zone)
Smart Illumination	Yes
Defog	Yes
Flip	0°/90°/180°/270°
Mirror	Off/On
Privacy Masking	Off/On (4 Area, Rectangle)

**Alarm**

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; voltage detection; motion detection; video tampering; scene changing; intrusion; tripwire; abandoned object; missing object; fast moving; parking detection; loitering detection; people gathering; people counting; face detection; People counting in area; Stay alarm; People No. exception detection; Queue Management
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**Network**

Ethernet	RJ-45 (10/100 Base-T)
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; PPPoE; 802.1x; SNMP

Interoperability	ONVIF (Profile S/Profile G/Profile T), CGI, Milstone, Genetec, P2P
User/Host	20 Users
Storage	NAS;FTP;SFTP;Dahua Cloud Micro SD card 256 GB
Browser	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)
Management Software	Smart PSS, DSS, DMSS
Mobile Phone	iOS, Android

**Certifications**

Certifications	CE-LVD: EN62368-1 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
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**Interface**

Audio Interface	1/1 channel In/Out
Alarm	1 channel In: 5mA 5V DC 1 channel Out: 300mA 12V DC

**Electrical**

Power Supply	DC 12V (±30%), PoE (802.3af)
Power Consumption	<6.1W

**Environmental**

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

**Construction**

Casing	Metal
Dimensions	Φ122.0 mm × 88.9 mm (4.80" × 3.50")
Net Weight	0.47 kg (1.04 lb)
Gross Weight	0.63 kg (1.39 lb)

**Ordering Information**

Type	Part Number	Description
4MP camera	DH-IPC-HDBW5442RP-ASE	4MP WDR IR Dome WizMind Network Camera, WDR, PAL
	DH-IPC-HDBW5442RN-ASE	4MP WDR IR Dome WizMind Network Camera, WDR, NTSC
	IPC-HDBW5442RP-ASE	4MP WDR IR Dome WizMind Network Camera, WDR, PAL
	IPC-HDBW5442RN-ASE	4MP WDR IR Dome WizMind Network Camera, WDR, NTSC

Accessories (optional)	PFA137	Junction box
	PFB200C	Inceiling Mount
	PFA200W	Rain Shade
	PFA123	Junction box
	PFB203W	Wall Mount
	PFA152-E	Pole Mount
	PFA106	Mount Adapter
	PFB220C	Ceiling Mount

**Accessories**

**Optional:**



PFA137  
Junction box



PFB200C  
Inceiling Mount



PFA200W  
Rain Shade



PFA123  
Junction box



PFB203W  
Wall Mount



PFA152-E  
Pole Mount



PFA106  
Mount Adapter



PFB220C  
Ceiling Mount



LR1002  
ePoE Over Coax Converter

Junction Mount	Inceiling Mount	Wall Mount with Rain Shade	Junction Mount
PFA137	PFB200C	PFA200W	PFA123
Wall Mount	Pole Mount	Ceiling Mount	
PFB203W	PFB203W + PFA152-E	PFA106 + PFB220C	

**Dimensions (mm[inch])**

