

# DH-IPC-HDBW4541RP-ZAS-X

5MP General Vandal-proof Dome Camera Network CAMERA

**WizMind**

## Series Overview

Powered by its advanced deep learning algorithms, Dahua WizMind 4 Series cameras are ahead of their time advancing functions such as perimeter protection, smart motion detection and face detection. With its Starlight sensors and large aperture lenses, cameras in this series deliver excellent image quality even in environments with low illuminance. This series is IP67-rated and IK10-rated (depending on the model) giving you the confidence and precision you are looking for in a camera.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2592 × 1944) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 40 m.
- ROI, SMART H.264 +/-H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Supports the AFSA (Anti-flicker Self-adaption) function, which automatically eliminates flicker.
- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS485, BNC, supports max. 256 G Micro SD card; built in MIC.
- 12 VDC/PoE power supply, easy for installation.
- IP67, IK10 protection.
- SMD 3.0.

## Technical Specification

### Camera

Image Sensor	1/2.7" CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.5 (Color, 30 IRE) 0.0005 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	40 m (131.2 ft) (IR)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	3 (IR LED)
Angle Adjustment	Pan: 0°–355° Tilt: 0°–80° Rotation: 0°–355°

### Lens

Lens Type	Motorized vari-focal				
Lens Mount	φ14				
Focal Length	2.7 mm–13.5 mm				
Max. Aperture	F1.5				
Field of View	H: 99°–28°; V: 71°–21°; D: 134°–35°				
Iris Control	Fixed				
Close Focus Distance	0.8 m (2.62 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	64.0 m (209.97 ft)	25.6 m (83.98 ft)	12.8 m (41.99 ft)	6.4 m (21.00 ft)
	T	210.0 m (688.98 ft)	84.0 m (275.59 ft)	42.0 m (137.80 ft)	21.0 m (68.90 ft)

### Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
SMD 3.0	Less false alarm, longer detection distance
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting
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; H.264B; MJPEG (Only supported by the sub stream)
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Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 2592 × 1944@(1–25/30 fps) sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps) third stream: 1920 × 1080@(1–25/30 fps) fourth stream: 1280 × 720@(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 (2592 × 1944); 4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 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: 3 kbps–8192 kbps H.265: 3 kbps–8192 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)
Image Stabilization	Electronic Image Stabilization (EIS)
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

### Audio

Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; 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; scene changing; audio detection; voltage detection; defocus detection; external alarm; face detection; SMD; security exception
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### Network

Network Port	RJ-45 (10/100 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
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE 11 Chrome Firefox
Management Software	Smart PSS;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

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
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## Port

RS-485	1 (baud rate range:1200 bps–115200 bps)
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	3 channels in: 5mA 3V–5V DC
Alarm Output	2 channels out: 300mA 12V DC

## Power

Power Supply	12 VDC/PoE
Power Consumption	Basic: 3.1 W (12 VDC); 3.8 W (PoE) Max. (WDR + IR intensity + Intelligence on): 6.4 W (12 VDC); 7.7 W (PoE)

## Environment

Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	≤ 95%
Protection	IP67; IK10

## Structure

Casing Material	Metal
Product Dimensions	94 mm × Φ122 mm (3.70" × Φ4.80")
Net Weight	713 g (1.57 lb)
Gross Weight	986 g (2.17 lb)

## Ordering Information

Type	Model	Description
5MP Camera	DH-IPC-HDBW4541RP-ZAS-X	5MP IR Vari-focal Dome WizMind Network Camera
Accessories (Optional)	PFA137	Junction Box Bracket
	PFA109	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	PFB203W	Wall Mount
	PFA152-E	Pole Mount
	PFM321D	12 VDC 1 A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

## Accessories

### Optional:



PFA137  
Junction  
Box Bracket



PFA109  
Mount  
Adapter



PFB220C  
Ceiling Mount  
Bracket



PFM321D  
12 VDC 1 A  
Power Adapter



PFB203W  
Wall  
Mount



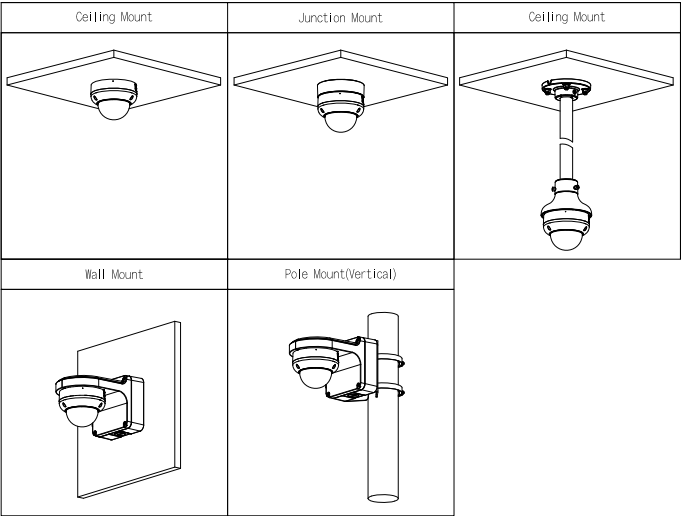
PFA152-E  
Pole  
Mount



PFM900-E  
Integrated  
Mount Tester



TF-P100  
MicroSD  
Memory Card



Dimensions (mm[inch])

