

# DH-IPC-EBW81242-AS-S2

## 12 MP IR Fisheye WizMind Network Camera



**WizMind**

- 12 MP 1/1.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 12M (4000 × 3000)@25 fps; supports 8M (3280 × 2480)@25/30 fps.
- Built-in IR LED, and the max. illumination distance is 10 m.
- Intelligent monitoring: Intrusion, tripwire, heat map, and people counting.
- SMART H.264 +/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Alarm: 2 in, 2 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card; built-in dual-array Mic and speaker.
- 12 VDC/PoE+ (802.3at) power supply.
- IP67 and IK10 protection.

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 fisheye lens, Dahua Fisheye series camera can realize 360° surveillance, and it is widely applied in various scenes such as airports, shopping centers, banks and hotels.

### Functions

#### 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.

#### Fisheye VR

With intelligent algorithm, Dahua Fisheye VR technology provides interactive 3-dimensional dynamic view through fisheye image. Dahua fisheye VR supports various interactive modes, such as original, bowl, cylinder and asteroid, providing more interactive experience.

#### People Counting

With advanced stereo image technology and deep leaning algorithm, Dahua In Area No. technology recognizes human targets accurately to count people in area in real-time. You can set people quantity threshold, when the number larger or smaller than the threshold, it triggers linkage. It is applicable in the scene that has limit on people quantity.

### Queue Management

With advanced image processing technology and deep leaning algorithm, Dahua Queue Management technology counts people quantity in selected area in real time to realize queue management. It supports multiple polygon areas. When No. in area/strand time is not smaller or not larger than the threshold, it triggers alarm.

### Heat Map

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.

### 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.

**Cyber Security**

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

**Technical Specification**

**Camera**

Image Sensor	1/1.7" CMOS
Max. Resolution	4000 (H) x 3000 (V)
ROM	4 GB
RAM	2 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.01 Lux@F2.0 (Color, 30 IRE) 0.001 Lux@F2.0 (B/W, 30 IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	up to 10 m (32.81 ft) (IR)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)

**Lens**

Lens Type	Fixed-focal								
Lens Mount	M12								
Focal Length	1.85mm								
Max. Aperture	F2.0								
Field of View	Horizontal: 185°; Vertical: 180°								
Iris Control	Fixed								
Close Focus Distance	0.4 m (1.31 ft)								
DORI Distance	<table border="1"> <tr> <th>Detect</th> <th>Observe</th> <th>Recognize</th> <th>Identify</th> </tr> <tr> <td>40.0 m (131.23 ft)</td> <td>16.0 m (52.49 ft)</td> <td>8.0 m (26.2 ft)</td> <td>4.0 m (13.12 ft)</td> </tr> </table>	Detect	Observe	Recognize	Identify	40.0 m (131.23 ft)	16.0 m (52.49 ft)	8.0 m (26.2 ft)	4.0 m (13.12 ft)
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<p>*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.</p>									

**Smart Event**

Heat Map	Yes
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**Professional, intelligent**

IVS (Perimeter Protection)	Intrusion; tripwire
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People Counting	Supports 4 rules to count the number of people entering, exiting, and staying separately. It will trigger alarm linkage when the number of people who entering, exiting or staying exceeds the threshold. It can display and export reports based on year, month, week, day or custom time. Supports 4 rules to count the number of people in area and will trigger alarm linkage when the average strand time or people number in the area exceeds the threshold. It can display and export reports based on month, week, day or custom time. Supports 4 queue management rules to count number of people queuing and queue time in real time, and it will trigger alarm linkage when the number of people queued or queue time exceeds the threshold. It can display and export reports based on month, week, day or custom time
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Fisheye	
Installation	Ceiling mount; wall mount; ground mount
Decoding Mode	Front-dewarp; Back-dewarp; Front-dewarp+Back-dewarp
Display Mode	Front-dewarp (hardware decoding):1O; 1P; 2P; 1R; 2R; 4R; 1O+ 3R *O: Fisheye image view; P: Panoramic image view; R: Region image view Back-dewarp (software decoding): fisheye view; 360° panoramic view + PTZ; dual-channel 180° panoramic view; fisheye + 2PTZ; fisheye + 3PTZ; fisheye + 4PTZ; 360° panoramic view + 6PTZ; fisheye + 8PTZ; 180° panoramic view; 180° panoramic view + 3PTZ; 180° panoramic view + 4PTZ; 180° panoramic view + 8PTZ; VR mode (panorama; semi-circle; cylinder; asteroïd)
Video	
Video Compression	H.265; H.264; H.264H; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
Video Frame Rate	Main stream: 4000 x 3000@(1–25/25 fps) sub stream: 704 x 576@(1–25/30 fps) third stream: 1280 x 960@(1–17/17 fps) Fisheye mode: 1O (4000 x 3000) 1P (4096 x 1024) 2P (2432 x 2432) 1R (1216 x 1216) 2R (2432 x 2432) 4R (2432 x 2432) 1O + 3R (2432 x 2432) *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	3 streams
Resolution	4000 x 3000; 3280 x 2480; 2880 x 2160; (3M) 2048 x 1536; 1.3M (1280 x 960); D1 (704 x 576/704 x 480); CIF (352 x 288/352 x 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 8 kbps–16384 kbps H265: 3 kbps–16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
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)
Defog	Yes
Privacy Masking	4 areas

### Audio

Built-in MIC	Yes, built-in dual Mic
Audio Compression	PCM; G.711A; G.711Mu; G.726; G.723

### Alarm

Alarm Event	No SD card; SD card full; SD card durability warning; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; people counting in area; stay detection; people counting; security exception
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### Network

Network Port	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
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; Milestone; Genetec; P2P (Only supported by general version)
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE11, IE10 Chrome: 48.0.2564.116 Firefox: 48.0.2 Edge: 42.17134.1.0
Management Software	Smart PSS; DSS; DMSS

### 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

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channel in: wet contact, 5mA 3V-5 VDC
Alarm Output	2 channels out: dry contact, 1,000mA 30 VDC/500mA 50 VDC

### Power

Power Supply	12 VDC/PoE+ (802.3at)
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Power Consumption	Basic: 6.5 W (12 VDC); 6.1 W (PoE) Max. (ICR + IR intensity): 13 W (12 VDC); 13.9 W (PoE) Heating: 3 W (12 VDC); 3 W (PoE)
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### Environment

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Protection	IP67; IK10

### Structure

Casing	Metal
Product Dimensions	59.8 mm × Φ149.8 mm (2.35" × Φ5.90")
Net Weight	0.79 kg (1.74 lb)
Gross Weight	1.21 kg (2.67 lb)

### Ordering Information

Type	Model	Description
12MP Camera	DH-IPC-EBW81242-AS-S2	12 MP IR Fisheye WizMind Network Camera
	IPC-EBW81242-AS-S2	12 MP IR Fisheye WizMind Network Camera
Accessories (Optional)	PFB300C	Ceiling-mount Bracket
	PFA100	Adapting Plate
	PFB302S	Wall-mount Bracket
	PFA132-E	Junction Box

### Accessories

#### Optional



PFB300C  
Ceiling-mount Bracket



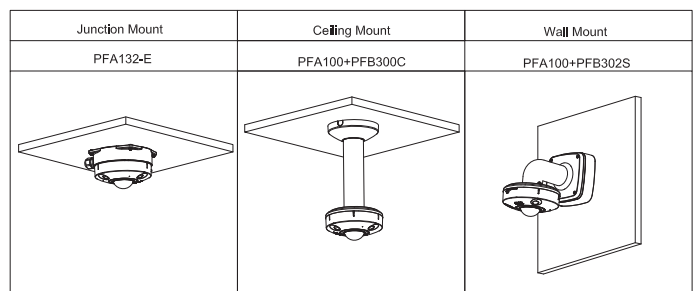
PFA100  
Adapting Plate



PFB302S  
Wall-mount Bracket



PFA132-E  
Junction Box



**Dimensions (mm[inch])**

