

# NSC-EBW5641-AS

6MP IR Fisheye WizMind Network Camera



WizMind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS, 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

### 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.

### Fisheye Front-dewarp

Utilizes its hardware decoding ability to offer different types of dewarping modes. These modes not only adapt to different installation methods, but also effectively solve distortion issues that typically occur in the standard fisheye view. This function also directly outputs dewarped streams, making it convenient to dock with back-end or third-party platforms.

### 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.

- 6-MP 1/2.5" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 6 MP (2560 × 2560)@25/30 fps.
- 360° fisheye monitoring covers all the corners without any blind zone.
- Supports fisheye front-dewarp and back-dewarp.
- Supports split screen for 2 and 4 windows.
- Built-in IR LED, and the max. illumination distance is 15 m.
- ROI, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- With deep learning algorithm, it supports: Perimeter Protection, People Counting, Heat map.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 1TB Micro SD card;
- Built-in speaker and dual Mic. Supports two-way talk.
- 12 VDC / PoE(802.3af) power supply.
- IP67 and IK10 protection.
- IP Address locking system, after several (customizable) number of wrong access
- AES256 encryption for video recorded on SD card and exported video
- encrypted video live stream by TLS secure channel



### Queue Management

With advanced image processing technology and deep learning 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

Dahua heat map technology is used to display the crowd density and people appearance probability. Display the crowd status by different colors. Generally, the crowd status is the statistics of people quantity in space and time dimensions.

### 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 work normally 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 ±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	1/2.5" CMOS
Max. Resolution	2560 (H) × 2560 (V)
ROM	4 GB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s~1/100,000 s
Min. Illumination	0.006 lux@F2.0 (Color, 30 IRE) 0.0006 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	1.68 mm: Up to 15 m (49.21 ft) (IR)
Illuminator On/Off Control	Auto;Manual;Mechanical IR filter
Illuminator Number	3 (IR LED) 850 nm

**Lens**

Lens Type	Fixed-focal				
Lens Mount	M12				
Focal Length	1.68 mm				
Max. Aperture	F2.0				
Field of View	1.68 mm: H: 185°; V: 185°; D: 185°				
Iris Control	Fixed				
Close Focus Distance	1.68 mm: 0.3 m (0.98 ft)				
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	33.6 m 1.68 mm	13.4 m ( 110.24 ft)	6.7 m ( 43.96 ft)	3.4 m ( 21.98 ft)	3.4 m ( 11.15 ft)

\*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.

**Intelligence**

EPTZ	Yes
IVS (Perimeter Protection)	Tripwire, intrusion (the two functions support accurate detection of human)
People Counting	Tripwire people counting, generating and exporting report (day/month/year); queue management and people counting in area, generating and exporting report (day/month); 4 rules can be set for tripwire, people counting in area and queue management.
Heat Map	Yes

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 sub stream)
AI Coding	AI H.265; AI H.264 *Includes smart codec technology, Smart H.265+ and Smart H.264+
Video Frame Rate	Max Resolution in O Mode by Default Main stream: 2560 × 2560@(1~25/30 fps) sub stream: 1440 × 1440@(1~25/30 fps) third stream: 1440 × 1440@(1~25/30 fps) Resolution of 2 Split Windows in 2P Mode: Sub stream: Panoramic View and Split Window: 1920 × 1440@(1~25/30 fps); 640 × 480@(1~25/30 fps); 320 × 240@(1~25/30 fps); third stream: Panoramic View and Split Window: 1920 × 1440@(1~25/30 fps); 640 × 480@(1~25/30 fps); 320 × 240@(1~25/30 fps); Resolution of 2 Split Windows in 2R Mode: Sub stream: Panoramic View and Split Window: 2560 × 960@(1~25/30 fps); 1280 × 480@(1~25/30 fps); 640 × 240@(1~25/30 fps); third stream: Panoramic View and Split Window: 2560 × 960@(1~25/30 fps); 1280 × 480@(1~25/30 fps); 640 × 240@(1~25/30 fps); Resolution of 4 Split Windows in 4R Mode: sub stream: Panoramic View and Split Window: 1920 × 1440@(1~25/30 fps); 640 × 480@(1~25/30 fps); 320 × 240@(1~25/30 fps); third stream: Panoramic View and Split Window: 1920 × 1440@(1~25/30 fps); 640 × 480@(1~25/30 fps); 320 × 240@(1~25/30 fps);
Streaming Capability	3 streams
Resolution	6M (2560 × 2560); 4M (2048 × 2048); 1.6M (1280 × 1280); 2M (1440 × 1440); 1M (1024 × 1024); (720 × 720); SVCD (480 × 480); 2.5M (2560 × 960); 1.5M (2048 × 768); 1.3M (1920 × 720); (1280 × 480); (640 × 240); (1280 × 480); (640 × 240); VGA (640 × 480); QVGA (320 × 240); 3M (2048 × 1536); 2.7M (1920 × 1440); XVGA (1024 × 768); UVGA (1600 × 1200)
Bit Rate Control	VBR;CBR;ABR
Video Bit Rate	H.264: 3 kbps~16384 kbps; H.265: 3 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

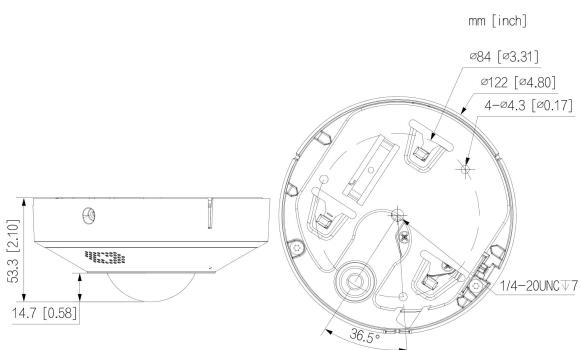
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Defog	Yes
Image Rotation	0°/180°
Mirror	Yes
Privacy Masking	4 mosaics + 4 color blocks
<b>Fisheye</b>	
Installation	Ceiling mount; wall mount; ground mount
Decoding Mode	Front-dewarp; Back-dewarp
	Front-dewarp (hardware decoding): 1O; 1P; 2P; 1R; 2R; 4R; 1O+3R 2P/2R: Supports split screen for 2 windows. 4R: Supports split screen for 4 windows. *O: Fisheye image view; P: Panoramic image view; R: Region image view.
Display mode	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; asteroid)
<b>Audio</b>	
Built-in MIC	Yes, built-in dual Mic
Built-in Speaker	Yes, built-in speaker
Audio Compression	PCM; G.711a; G.711Mu; G.726
<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; scene changing; tripwire; intrusion; audio detection; intensity change; voltage detection; external alarm; people counting in area; stay detection; people counting; abnormal number of people detection; security exception
<b>Network</b>	
Network Port	RJ-45 (10/100 Base-T) shielded
SDK and API	Yes
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; QoS; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 1TB); NAS; Super Coding
Browser	IE: IE11; Chrome; Firefox
Management Software	DSS NetShield
Security	Digest; WSSE; Account lockout; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HTTPS by default; 802.1x; Trusted boot; Trusted execution; Trusted upgrade; Session security; Security warning

<b>Certification</b>	
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
<b>Port</b>	
RS-485	1 (baud rate range: 1200 bps–115200 bps)
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: wet contact, 5 mA 3–5 VDC
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC
<b>Power</b>	
Power Supply	12 VDC, 1 A; PoE (802.3af)
Dual Power Backup	When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.
Power Consumption	Basic: 1.4 W (12 VDC), 2.6 W (PoE); Max.: 8.1 W (12 VDC), 10.1 W (PoE) (ICR switch + IR intensity)
<b>Environment</b>	
Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing
Storage Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Storage Humidity	≤95% (RH), non-condensing
Protection	IP67; IK10
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.
<b>Structure</b>	
Casing Material	Metal + plastic
Product Dimensions	Φ122 mm × 53.3 mm (Φ4.80" × 2.10")
Net Weight	0.46 kg (1.01 lb)
Gross Weight	0.75 kg (1.65 lb)

**Ordering Information**

Type	Model	Description
IP CAMERA	NSC-EBW5641-AS	6MP IR Fisheye WizMind Network Camera

Type	Model	Description
Accessories (Optional)	DH-PFB220C	Ceiling Mount Bracket
	DH-PFA109	Mount Adapter
	DH-PFA150	Pole Mount Bracket
	DH-PFA156	Pole Mount Bracket
	DH-PFB2204W	Wall Mount Bracket
	DH-PFA137	Junction Box
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester
	DHI-TF-P100/1TB	MicroSD Card

**Dimensions (mm[inch])**

**Accessories**

Optional:


 DH-PFA109  
Mount Adapter

 DH-PFA137  
Junction Box

 DH-PFA150  
Pole Mount Bracket

 DH-PFA156  
Pole Mount Bracket

 DH-PFB2204W  
Wall Mount Bracket

 DH-PFB220C  
Ceiling Mount Bracket

 DH-PFM320D-EN  
DC12V2A power adapter

 DHI-TF-P100/1TB  
MicroSD Card

 PFM900-E  
Integrated Mount Tester

**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. NetShield serie devices have passed hard penetration tests and have high level of cyber security.

