

# DH-IPC-HFW8841X-E3

## 8MP WizMind Triple-Lens 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

Equipped with advanced AI chip and advanced deep learning algorithm, Dahua WizMind Triple-Lens series network camera supports various intelligent functions, such as stereo analysis, people counting and IVS, which provides better intelligent application solutions based on scenes.

### Functions

#### Stand Detection

With deep learning algorithm, the network camera can recognize the target urately, and detect standing actions in the detection area. Under certain conditions, the standing target can be magnified.

#### In Area No.

With advanced stereo image technology and deep leaning algorithm, Dahua In Area No. technology recognizes human targets urately 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.

#### Protection (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.

- 8MP 1/1.8" CMOS and 2MP 1/2.8" CMOS image sensors, low luminance, high definition image.
- Outputs max. 8MP (3840 × 2160@30 fps).
- H.265 codec, high compression ratio, and ultra-low bit rate.
- Built-in IR light, and the max. illumination distance is 30 m.
- ROI, SMART 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.
- Three intelligent resources switchable: IVS, people counting, and stereo analysis.
- Tripwire, intrusion, abandoned object, missing object, loitering detection, and people gathering.
- Stereo analysis: Stand detection.
- Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485; BNC; max. 256 G Micro SD card; built-in MIC.
- Supports HDCVI output, and outputs detail and panoramic image, and stand detection alarm.
- 12V DC/PoE power supply, 12V power output and max. current of 0.165A, facilitate installation.
- IP67 protection.



### Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, ess 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 comprising the device.

**Technical Specification**

**Camera**

Image Sensor	Channel 1: 1/1.8" CMOS Channel 2: 1/2.8" CMOS
Max. Resolution	Channel 1: 3840 (H) × 2160 (V) Channel 2: 1920 (H) × 1080 (V)
ROM	4 GB
RAM	4 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	Channel 1: 0.0015 Lux@F1.6 (Color, 30 IRE) 0.0002 Lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on) Channel 2: 0.002 Lux@F1.6 (Color, 30 IRE) 0.0002 Lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.4 ft) (IR LED)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90°

**Lens**

Lens Type	Fixed-focal				
Lens Mount	M12				
Focal Length	2.8 mm				
Max. Aperture	F1.6				
Field of View	Channel 1: Horizontal: 110.8°; Vertical: 59°; Diagonal: 131° Channel 2: Horizontal: 106°; Vertical: 57°; Diagonal: 126°				
Iris Control	Fixed				
Close Focus Distance	Channel 1: 1.8 m (5.9 ft) Channel 2: 0.6 m (2.0 ft)				
DORI Distance	Channel	Detect	Observe	Recognize	Identify
	Channel 1	84 m (275.6 ft)	33.6 m (110.2 ft)	16.8 m (55.1 ft)	8.4 m (27.6 ft)
	Channel 2	38.6 m (126.6 ft)	15.4 m (50.5 ft)	7.7 m (25.3 ft)	3.9 m (12.8 ft)

**Smart Event**

IVS	Tripwire; intrusion; loitering detection; people gathering; abandoned object; missing object
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**Professional, intelligent**

People Counting	Support people counting in 4 areas
Stereo Analysis	Classroom: Support stand detection
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)
Smart Codec	Smart H.265+/Smart H.264+
Video Frame Rate	Channel 1: Main stream: 3840 × 2160@25/30 fps Sub stream: 1920 × 1080@25/30 fps Third stream: 1280 × 720@25/30 fps Fourth stream: 1920 × 1080@25/30 fps Channel 2: Main stream: 1920 × 1080@25/30 fps Sub stream: 1280 × 720@25/30 fps Third stream: 1920 × 1080@25/30 fps Fourth stream: 1280 × 720@25/30 fps
Stream Capability	4 streams
Resolution	3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048); 3072 × 1728 (3072 × 1728); 2592 × 1944 (2592 × 1944); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1280 × 960 (1.3M); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	Channel 1: H.264: 32 kbps–16,384 kbps H.265: 12 kbps–16,384 kbps Channel 2: H.264: 32 kbps–12,032 kbps H.265: 12 kbps–7,424 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
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)
Image Stabilization	Channel 1: Electronic Image Stabilization (EIS) Channel 2: NA
Smart Illumination	Yes
Privacy Masking	4 areas
<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
<b>Alarm</b>	
Alarm Event	No SD card; SD card no space; SD card error; network disconnection; IP conflict; motion detection; video tampering; tripwire; intrusion; abandoned object; missing object; scene changing; audio detection; sound intensity changing; people gathering; loitering detection; stand detection; people counting; illegal ess; voltage detection; security exception
<b>Network</b>	
Network Port	RJ-45 (10/100/1,000 Base-T)

SDK and API	Yes
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; count 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; RTMP
User/Host	20 (Total bandwidth: 320 M)
Storage	FTP; SFTP; Micro SD card (Support max. 256 G); NAS
Browser	IE: IE11 and earlier Chrome: 76 and earlier Firefox: 68 and earlier
Mobile Client	IOS; Android

**Port**

RS-485	1 (Baud rate range: 1,200 bps–115,200 bps)
Audio Input	1 channel (3.5 mm JACK port)
Audio Output	1 channel (3.5 mm JACK port)
Alarm Input	3 channels in: 5mA 3V–5V DC
Alarm Output	2 channels out: 1,000mA 30V DC/500mA 50V DC

**Power**

Power Supply	12V DC/PoE (802.3at)
Power Consumption	Basic: 7.54W (12V DC); 9W (PoE) Max. (WDR + stereo analysis + IR LED intensity): 10.32W (12V DC); 12.94W (PoE)

**Environment**

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Operating Humidity	≤ 95%
Protection	IP67

**Structure**

Casing	Metal + plastic
Product Dimensions	176.9 mm × 230.9 mm × 50.4 mm (7.0" × 9.1" × 2.0") (L × W × H)
Net Weight	1.87 kg (4.1 lb)
Gross Weight	2.37 kg (5.2 lb)

**Ordering Information**

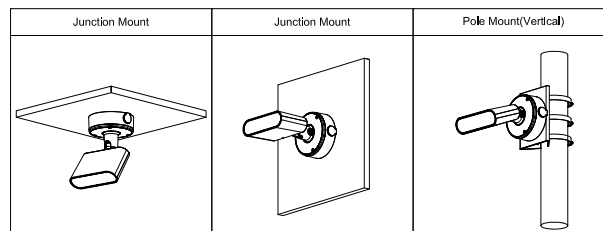
Type	Model	Description
8MP Camera	DH-IPC-HFW8841X-E3	8MP WizMind Triple-Lens Network Camera
	IPC-HFW8841X-E3	8MP WizMind Triple-Lens Network Camera
Accessories (Optional)	PFA154	Pole Mount

**Accessories**

**Optional:**



PFA154 Pole Mount



**Dimensions (mm[inch])**

