# DH-IPC-HFW71242H-Z
## 12MP IR Bullet WizMind Network Camera

ePoE **WizMind**

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 advanced deep learning algorithm, Dahua WizMind 7 Series network camera supports various intelligent functions and satisfies the requirements in different scenes. The camera can accurately recognize person, vehicle, and non-motor vehicle, face, ANPR, and liveness. This series camera has ultra starlight night version effect, and works with ultra-low stream. It supports dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

## Functions

### Video Metadata

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

### 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.

### ANPR

With high-performance GPU chip, deep learning algorithm, and lots of sample training learning, Dahua ANPR technology can automatically collect and recognize the vehicle information, including license plate, logo, vehicle type, and vehicle color.

· 12MP 1/1.7" CMOS image sensor, high image definition

· Outputs max. 12MP (4000 × 3000) @25/30 fps

· H.265 codec, high compression rate, ultra-low bit rate

· Built-in IR LED, max. IR distance: 60 m

· Rotation mode, DWDR; 3D DNR, HLC, BLC, digital watermarking

· ROI, SVC, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments

· Perimeter Protection , Face Detection , Video Metadata , ANPR , People Counting , Queue Management

· Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485; BNC; supports max. 256 G SD card

· 24V AC/12V DC/PoE power supply (the power ports are different depending on the power supply); 12V DC power output, max. current 165mA; easy for installation.

· IP67, IK10 protection

· Five streams for three-channel HD video

| 12Mp | People counting | Queue Management | ANPR | Face Detection | Video Metadata |

### 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.

### 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/weekly/daily reports to meet your requirements.

### 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.

### 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.

**Onvif**

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/1.7"12Megapixel progressive CMOS |
| Max. Resolution | 4000 (H) × 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 @F1.8 |
| S/N Ratio | >56 dB |
| Illumination Distance | 60m (196.9 ft) (IR LED) |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 4 (IR LED) |
| Pan/Tilt/Rotation Range | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360° |

### Lens

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|---|---|
| Lens Type | Motorized vari-focal |
| Mount Type | φ14 |
| Focal Length | 2.7 mm-12 mm |
| Max. Aperture | F1.8 |
| Field of View | Horizontal: 103°–44°<br>Vertical: 75°–33°<br>Diagonal: 135°–55° |
| Iris Type | Auto |
| Close Focus Distance | 1.2 m (3.9 ft) |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | W | 93 m (305.1 ft) | 37 m (121.4 ft) | 18 m (59.1 ft) | 9 m (29.5 ft) |
| | T | 205 m (672.6 ft) | 82 m (269.0 ft) | 41 m (134.5 ft) | 20 m (65.6 ft) |

### Smart event

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|---|---|
| IVS | Abandoned object; missing object |

### Professional, intelligent

| | |
|---|---|
| IVS (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 |
| Face Detection | Face detection; track; optimization; snapshot; face enhancement; face exposure; face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear), mask, beard; face matting setting: face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization time setting |

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|---|---|
| People Counting | Support tripwire number counting, people counting in area, and displaying and outputting yearly/monthly/daily reports.<br>Support queue management, and displaying and outputting monthly/daily reports.<br>Support 4 tripwire rules configuration, people counting in 4 areas, and 4 queue management functions. |
| Video Metadata | Vehicle detection, non-motor vehicle detection, face detection, human body detection, track, optimization, snapshot, report high quality picture, vehicle attributes (license plate, vehicle type, vehicle color, and vehicle brand), other attributes (sun visor, seatbelt, smoking, phoning, in-car accessories, and annual vehicle inspection mark), non-motor vehicle attributes (vehicle type, vehicle color, hat, driver number, cloth type, and cloth color), personnel attribute (cloth type, trousers type, cloth color, trousers color, knapsack, hat, gender and umbrella), face attribute (gender, age, expression, glasses, mask, and beard) |
| Intelligent Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos. |

### Video

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|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream) |
| Smart Codec | Smart H.264+<br>Smart H.265+ |
| Video Frame Rate | Main stream: 4000 × 3000 @1-25/30 fps<br>Sub stream: 704 × 576@1-25fps, 704 × 480@1-30fps<br>Third stream: 1920 × 1080 @1-25/30 fps<br>Fourth stream: 1920 × 1080 @1-25/30 fps<br>Fifth stream: 704 × 576 @1-25 fps; 704 × 480 @1-30 fps |
| Stream Capability | 5 streams |
| Resolution | 12M (4000 × 3000); 8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728); 5M (2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536); 3M (2304 × 1296); 2M (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240); VGA (640 × 480) |
| Bit Rate Control | CBR/VBR |
| Video Bit Rate | H.264: 32 kbps–16384 kbps<br>H.265: 32 kbps–14080 kbps |
| Day/Night | Auto (ICR)/Color/B/W |
| BLC | Yes |
| HLC | Yes |
| DWDR | Yes |
| White Balance | Auto/natural/street lamp/outdoor/manual/regional custom |
| Gain Control | Auto/Manual |
| Noise Reduction | 3D DNR |
| Motion Detection | OFF/ON (4 areas, rectangular) |
| Region of Interest (RoI) | Yes (4 areas) |
| Smart Illumination | Yes |
| Defog | Yes |
| Image Rotation | 0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower.) |
| Mirror | Yes |

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| Privacy Masking | 4 areas |

### Audio

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| Audio Compression | G.711A; G.711Mu; G.726; AAC; G.723 |

### Alarm

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|---|---|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; defocus detection; external alarm; face detection; video metadata; ANPR; people counting in area; stay alarm; people counting; people counting exception detection; queue management;safety exception |

### Network

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|---|---|
| Network | RJ-45 (10/100/1000 Base-T) |
| SDK and API | Yes |
| 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; SAMBA; PPPoE; 802.1x; SNMP |
| Interoperability | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P;RTMP |
| User/Host | 20 (Total bandwidth: 12 M.) |
| Storage | FTP; SFTP; Micro SD card (support max. 256 G); NAS;Dahua Cloud |
| Browser | IE: IE9 and later<br>Chrome: Chrome 42 and later<br>Firefox: Firefox 48.0.2 and later |
| Management Software | Smart PSS; DSS; DMSS |
| Mobile Phone | IOS; Android |

### Certification

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|---|---|
| Certifications | CE-LVD: EN62368-1<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B<br>UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07 |

### Port

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|---|---|
| RS-485 | 1 (baud rate range: 1200 bps–115200 bps) |
| Audio Input | 1 channel (3.5mm JACK port) |
| Audio Output | 1 channel (3.5mm JACK port) |
| Alarm Input | 3 channels in: 5mA 3V–5V DC |
| Alarm Output | 2 channels out: 1,000mA 30V DC/500mA 50V DC |

### Power

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|---|---|
| Power Supply | 12V DC/24V AC/POE+(802.3at) |
| Power Consumption | <19.32W |

### Environment

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|---|---|
| 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 |

### Structure

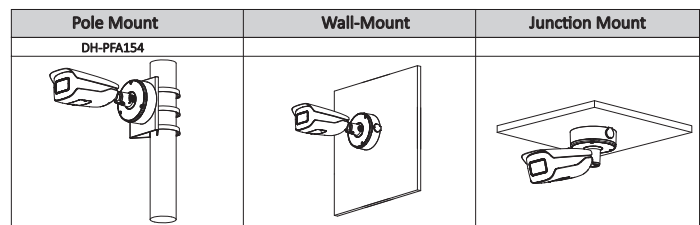| | |
|---|---|
| Casing | Metal + plastic |
| Dimensions | 340.1 mm × 138.3 mm × 134 mm (13.39" × 5.44" × 5.28") (L × W × H) |
| Net Weight | 9.11 kg (20.08 lb) |
| Gross Weight | 11.21 kg (24.71 lb) |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 12MP Camera | DH-IPC-HFW71242HP-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Bullet Network Camera, PAL |
| | DH-IPC-HFW71242HN-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Bullet Network Camera, NTSC |
| | IPC-HFW71242HP-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Bullet Network Camera, PAL |
| | IPC-HFW71242HN-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Bullet Network Camera, NTSC |
| Accessories (optional) | PFA154 | Pole Mount |

## Accessories

### Optional:

PFA154
Pole Mount

| Pole Mount | Wall-Mount | Junction Mount |
|---|---|---|
| DH-PFA154 | | |

## Dimensions (mm/inch)

340.1 [13.39]
138.3 [5.44]
108.5 [4.27]
92.9 [3.66]
134.0 [5.27]
⌀134.0 [⌀5.27]
⌀118.0 [⌀4.65]
3-⌀4.4 [⌀0.17]