

DH-IPC-HDBW71242H-Z

12MP IR Dome WizMind 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

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

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.

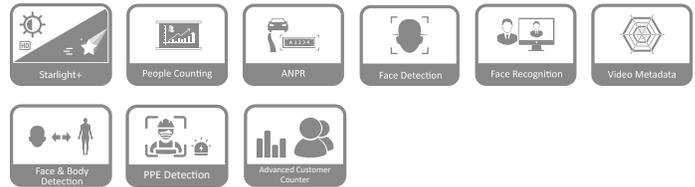
Video Metadata

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. The camera can count targets by directions (A>B, B>A, or A<>B), and export the report.

Face and Human Body Association

With deep learning algorithm, Dahua Face and Human Body Association technology detects face and human body of one person, captures them separately, selects the best image, and then associates them.

- 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: 40 m
- Rotation mode, DWDR, 3D NR, 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; 12V DC power output, max. current 165mA; easy for installation.
- IP67, IK10 protection
- Anti-corrosion coating (optional)
- Five streams for three-channel HD video



Face Recognition

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database to recognize the person identity.

Advanced Customer Counter

With Advanced Customer Counter, the camera can remove staff and returning customers from your store traffic count. It enables managers to build a full picture of the number and groups of customers.

PPE Detection

With the PPE Detection function, the camera can detect attributes including face masks, helmets, glasses, safety vests, and the color of tops and bottoms, and determine whether PPE requirements are met. Match attributes alarm or mismatch attributes alarm can be triggered according to the alarm settings.

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.

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.

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.

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.

Technical Specification

Camera

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| 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 (Color, 30IRE) 0.001 Lux@F1.8 (B/W, 30IRE) 0 Lux (Illuminator on) |
| S/N Ratio | > 56 dB |
| Illumination Distance | 40 m (131.2 ft) (IR LED) |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 3 (IR LEDs) |
| Pan/Tilt/Rotation Range | Pan: 0°–355° Tilt: 0°–80° Rotation: 0°–355° |

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° Vertical: 75°–33° Diagonal: 135°–55° |
| Iris Type | Auto |
| Close Focus Distance | 1.2 m (3.9 ft) |

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|---------------|------|------------------|-----------------|-----------------|----------------|
| | Lens | Detect | Observe | Recognize | Identify |
| DORI Distance | W | 97 m (318.2 ft) | 38 m (124.7 ft) | 19 m (62.3 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 |
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Professional, intelligent

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| 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 |
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| 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; Support Duration Optimal, Non-living Filtering |
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| Face Recognition | There are two models: General mode and counting mode. General mode: Face detection; track; snapshot; snapshot optimization; face enhancement; face exposure; face attribute extraction including 6 attributes (gender, age, glasses, expressions, mask and beard) and 8 expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear); supports up to 5 face databases with 50,000 face pictures in total; supports non-living filtering Counting mode: Offers advanced customer counter, filtering of specified face database, and exporting of reports before and after removing duplicate faces. |
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| Face and Body Detection | There are two modes: General mode and PPE Detection. General mode: Supports enabling face detection and human detection at the same time, and alarms can be triggered. PPE Detection: Supports PPE detection, can detect attributes including face mask, safety helmet, glasses, and safety vest, top color and bottom color, and determine whether PPE requirements are met. Alarms can be triggered according to the alarm settings. |
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| People Counting | Support tripwire number counting, people counting in area, and displaying and outputting yearly/monthly/daily reports. Support queue management, and displaying and outputting monthly/daily reports. Support 4 tripwire rules configuration, people counting in 4 areas, and 4 queue management functions. |
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| ANPR | ANPR, track, priority, snapshot Vehicle attributes: License plate, vehicle type, vehicle color Other attributes: Seat belt, smoking, phoning |
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| Video Metadata | Supports human body, human face, motor vehicle and non-motor vehicle image capture, attributes extraction, counting targets by directions (A>B, B>A, or A<>B), and exporting the report. |
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| Intelligent Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos. |
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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+ Smart H.265+ |

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| Video Frame Rate | Main stream: 4000 × 3000 @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: 1920 × 1080 @1-25/30 fps 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 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 NR |
| 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° (Supports 90°/270° with 2688 × 1520 resolution and lower) |
| Mirror | Yes |
| Privacy Masking | 8 areas |

Audio

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| Audio Compression | G.711A; G.711Mu; G.726; G.723 |
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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; defocus detection; external alarm; face detection; people counting in area; stay alarm; people counting; people counting exception detection; safety exception; queue management; face & body detection; face & body detection (match attributes alarm); face & body detection (mismatch attributes alarm); face recognition |
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Network

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| Network | 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 |

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| 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; Bonjour |
| Interoperability | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P;RTMP |
| User/Host | 20 (Total bandwidth: 240 M) |
| Storage | FTP; SFTP; Micro SD card (support max. 256 G); NAS |
| Browser | IE: IE9 and later Chrome: Chrome 42 and later 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, EN60950-22 (optional) CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07, UL 50E NEMA Type 4X (optional) |
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Port

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| RS-485 | 1 (baud rate range: 1200 bps–115200 bps) |
| Audio Input | 1 channel (3-pin terminal with 2.54mm clearance; with audio cable) |
| Audio Output | 1 channel (3-pin terminal with 2.54mm clearance; with audio cable) |
| 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); ePoE |
| Power Consumption | Basic power consumption: 6.1W (12V DC); 6.1W (24V AC active power); 5.4W (PoE) Max. power consumption: 17.9W (12V DC); 17.1W(24V AC active power); 16.8W (PoE) |

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, Anti-Corrosion Protection: NEMA 4X (optional) |

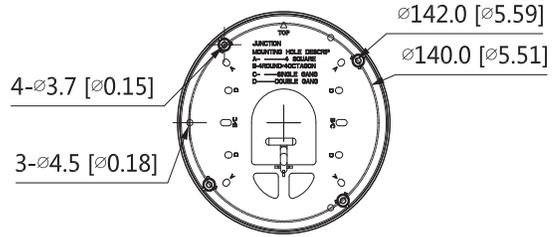
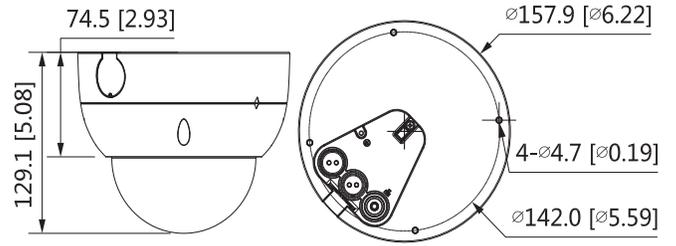
Structure

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|--------------|---------------------------------------|
| Casing | Metal + plastic |
| Dimensions | 129.1 mm × Φ157.9 mm (5.08" × Φ6.22") |
| Net Weight | 1500 g (3.31 lb) |
| Gross Weight | 1600 g (3.53 lb) |

Ordering Information

| Type | Part Number | Description |
|------------------------|-------------------------------------|--|
| 12MP Camera | DH-IPC-HDBW71242HP-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Dome Network Camera, PAL |
| | DH-IPC-HDBW71242HN-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Dome Network Camera, NTSC |
| | IPC-HDBW71242HP-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Dome Network Camera, PAL |
| | IPC-HDBW71242HN-Z-2712-DC12AC24V | 12MP WizMind 7 Series IR Dome Network Camera, NTSC |
| Accessories (optional) | PFA773 | Sun Shade |
| | PFB300C | Ceiling Mount |
| | PFA152-E | Pole Mount |
| | PFB211W | Wall Mount |
| | PFA101 | Mount Adapter |

Dimensions (mm [inch])



Accessories

Optional:



PFA773



PFB300C



PFA152-E



PFB211W



PFA101

| Junction Mount | Wall Mount | Wall Mount |
|----------------------|---------------|------------|
| | | |
| Pole Mount(Vertical) | Ceiling Mount | |
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