

# DH-IPC-HCBW8442

## 4MP WizMind Corner 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 H.265 encoding technology, Dahua WizMind corner series network camera has efficient encoding capacity, which helps to save bandwidth and storage space. The camera adopts starlight technology, intelligent IR technology, and intelligent image analysis technology; and has waterproof function, dust-proof function and vandal-proof function, complying to the standards of IP67 and IK10+(50J).

### Functions

#### Smart ( H.265+ & 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.

#### Starlight

Dahua Starlight technology mainly applies to the environment of low illuminance, and it can provide clear colorful video. Even in the environment of ultra-low illuminance, the technology can guarantee the good image effect.

#### 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.

- 1/1.8" 4Megapixel progressive scan CMOS
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- 25/30 fps@2688 × 1520
- WDR (140 dB), Day/Night (ICR), 3D NR, AWB, AGC, BLC
- 2.5 mm fixed lens, distortion correction
- 1/1 Alarm in/out, 1/1 audio in/out
- Max. IR LEDs Length 10 m
- IP67 and IK10+ (50J) protection



#### Distortion Correction

With advanced distortion correction algorithm, Dahua Distortion Correction corrects the image distortion in both horizontal and vertical directions to be consistent with the actual situation.

#### Invisible IR LED Illuminator ( 940 nm )

With 940 nm IR LED, the IR LED Illuminator of the camera is invisible to naked eyes.

#### 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.

#### 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 3 times from a 5 kg hammer falling from a height of 100 cm (Impact energy is 50J).

Wide voltage: The camera allows  $\pm 30\%$  input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

**Technical Specification**

|                                  |   |                     |                    |                    |
|----------------------------------|---|---------------------|--------------------|--------------------|
| <b>Camera</b>                    |   |                     |                    |                    |
| Image Sensor                     | 1/1.8"4Megapixel progressive CMOS   |                     |                    |                    |
| Max. Resolution                  | 2688 (H) ×1520 (V)  |                     |                    |                    |
| ROM                              | 128 MB  |                     |                    |                    |
| RAM                              | 512 MB  |                     |                    |                    |
| Scanning System                  | Progressive   |                     |                    |                    |
| Electronic Shutter Speed         | Auto/Manual 1/3 s–1/100000 s  |                     |                    |                    |
| Min. Illumination                | 0.004 Lux@F2.0 (Color, 30IRE)<br>0.0004 Lux@F2.0 (B/W, 30IRE)<br>0 lux (Illuminator on)   |                     |                    |                    |
| Illumination Distance            | 10 m (32.8 ft) (monitoring distance)  |                     |                    |                    |
| Illuminator On/Off Control       | Auto/Manual   |                     |                    |                    |
| Illuminator Number               | 2   |                     |                    |                    |
| Pan/Tilt/Rotation Range          | Vertical: -10° to +10°<br>Rotation: 0° to 355°  |                     |                    |                    |
| <b>Lens</b>                      |   |                     |                    |                    |
| Lens Type                        | Fixed   |                     |                    |                    |
| Mount Type                       | M12   |                     |                    |                    |
| Focal Length                     | 2.5 mm  |                     |                    |                    |
| Max. Aperture                    | F2.0  |                     |                    |                    |
| Field of View                    | Horizontal: 135°<br>Vertical: 90°   |                     |                    |                    |
| Iris Type                        | Fixed aperture  |                     |                    |                    |
| Close Focus Distance             | 0.4 m (1.3 ft)  |                     |                    |                    |
| DORI Distance                    | Detect  | Observe             | Recognize          | Identify           |
|                                  | 34.5 m<br>(113.2 ft)  | 13.8 m<br>(45.3 ft) | 6.9 m<br>(22.6 ft) | 3.4 m<br>(11.2 ft) |
| <b>Smart event</b>               |   |                     |                    |                    |
| General IVS Analytics            | Abandoned object; moving object   |                     |                    |                    |
| Heat Map                         | Yes   |                     |                    |                    |
| <b>Professional, intelligent</b> |   |                     |                    |                    |
| 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   |                     |                    |                    |
| People Counting                  | Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/monthly/daily reports<br>Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm<br>Support queue management, and 4 rules configuration.<br>Count number of people or stay time and link alarm |                     |                    |                    |
| Intelligent Search               | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.  |                     |                    |                    |

|                                      |  |
|--------------------------------------|--|
| <b>Video</b>                         |  |
| 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                     | Main stream: 2688 × 1520 (1 fps–25/30 fps)<br>Sub stream: D1 (1 fps–25/30 fps)<br>Third stream: 1080p (1 fps–25/30 fps)<br>*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                           | 2688 × 1520; 2560 × 1440; 2304 × 1296; 2016 × 1512; 1080p (1920 × 1080); UXGA(1600 × 1200); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF(352 × 288/352 × 240)  |
| Bit Rate Control                     | CBR; VBR   |
| Video Bit Rate                       | H.264: 32 Kbps–8192 Kbps<br>H.265: 19 Kbps–8192 Kbps   |
| Day/Night                            | Auto (ICR)/Color/B/W   |
| BLC                                  | Yes  |
| WDR                                  | 140 dB   |
| White Balance                        | Auto/natural/street lamp/outdoor/manual/regional custom  |
| Gain Control                         | Manual/Auto  |
| Noise Reduction                      | 3D NR  |
| Motion Detection                     | OFF/ON (4 areas, rectangular)  |
| Region of Interest (Rol)             | Yes (4 areas)  |
| Electronic Image Stabilization (EIS) | Yes  |
| Smart Illumination                   | Yes (Adjust by user)   |
| Defog                                | Yes  |
| Image Rotation                       | 0°/90°/180°/270°   |
| Mirror                               | Yes  |
| Privacy Masking                      | 4 areas  |
| <b>Audio</b>                         |  |
| Built-in MIC                         | Yes  |
| Audio Compression                    | G.711a; G.711Mu; G.726;  |
| <b>Network</b>                       |  |
| Network                              | RJ-45 (10/100 Base-T)  |
| 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                |
| 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); CGI; Milestone; Genetec; P2P  |

|                             |   |
|-----------------------------|---|
| Scene self-adaptation (SSA) | Yes   |
| User/Host                   | 20 (Total bandwidth: 80 M.)   |
| Edge Storage                | FTP; NAS; Micro SD card (support max. 256 G)  |
| Browser                     | IE: Versions later than IE 8<br>Google<br>Firefox<br>Apple: versions later than Safari 12 |
| Management Software         | Smart PSS; DSS; DMSS  |
| Mobile Phone                | IOS, Android  |

**Ordering Information**

| Type       | Part Number      | Description                            |
|------------|------------------|--|
| 4MP Camera | DH-IPC-HCBW8442P | 4MP WizMind Corner Network Camera,PAL  |
|            | DH-IPC-HCBW8442N | 4MP WizMind Corner Network Camera,NTSC |
|            | IPC-HCBW8442P    | 4MP WizMind Corner Network Camera,PAL  |
|            | IPC-HCBW8442N    | 4MP WizMind Corner Network Camera,NTSC |

**Certification**

|                |   |
|----------------|---|
| Certifications | CE-LVD: EN62368-1<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B |
|----------------|---|

**Port**

|              |  |
|--------------|--|
| RS-485       | 1 (Baud rate range: 1200 bps–115200 bps) |
| Audio Input  | 1 channel (Terminal)                     |
| Audio Output | 1 channel (Terminal)                     |
| Alarm Input  | 1 channel in: 5mA 3V–5V DC               |
| Alarm Output | 1 channel out: 300mA 12V DC              |

**Power**

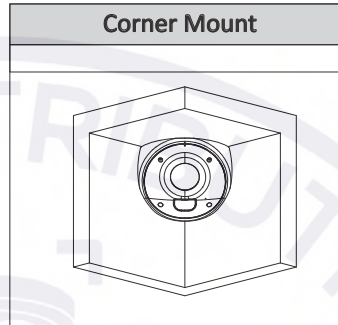
|                   |  |
|-------------------|--|
| Power Supply      | 12V DC/PoE (802.3af) /ePOE   |
| Power Consumption | Basic power consumption: 3W (12V DC); 3.6W (PoE)<br>Max. power consumption (ICR + IR full intensity): 9.5W (12V DC); 11.5W (PoE) |

**Environment**

|                       |                                  |
|-----------------------|----------------------------------|
| Operating Temperature | –30°C to +60°C (–22°F to +140°F) |
| Operating Humidity    | ≤95%                             |
| Storage Temperature   | –30°C to +60°C (–22°F to +140°F) |
| Ingress Protection    | IP67; IK10+(50J)                 |

**Structure**

|              |  |
|--------------|--|
| Casing       | Metal  |
| Dimensions   | 209.4 mm × 212.0 mm × 103.1 mm<br>(8.2" × 8.3" × 4.1") (L × W × H) |
| Net Weight   | 1365 g (3.0 lb)  |
| Gross Weight | 1465 g (3.2 lb)  |



**Dimensions (mm[inch])**

