# DH-IPC-HDBW5242H-ZHE-MF

## 2MP Vari-focal Dome WizMind Network Camera

· 2MP, 1/1.8" CMOS image sensor, low illuminance, high image definition

· Outputs max. 2MP (1920 × 1080) @60 fps

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

· Max. IR distance: 50 m

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

· Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes

· Intelligent detection: Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human), abandoned object, missing object, loitering detection, people gathering, parking detection, heat map, face detection, face attributes and people counting

· Alarm: 3 in, 2 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card

· 24V AC/PoE/12V DC power supply (power input ports vary depending on power supply)

· ePoE, transmission over long distance, easy for installations of various scenes

· IP67, IK10 protection

· Supports junction box mount

ePoE **WizMind**

| 2Mp | Face Detection | Face Attributes | Perimeter Protection | People counting | Starlight+ |

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 starlight solution and deep learning algorithm, Dahua WizMind 5 Series network camera has various intelligent functions, including face capture, perimeter protection and people counting, which greatly improve the accuracy of video analysis. The series camera supports dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

## Functions

### 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.

### Face Attributes

With deep learning algorithm, the network camera can recognize face attributes, such as gender, age, expression, glasses, mouth mask, and beard.

### 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.

### ePoE

Dahua ePoE technology provides a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

### 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 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.

ONVIF

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/1.8"2Megapixel progressive CMOS |
| Max. Resolution | 1920 (H) × 1080 (V) |
| ROM | 128 MB |
| RAM | 1 GB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.003 Lux @F1.8 |
| S/N Ratio | ＞56 dB |
| Illumination Distance | 50 m (164 ft) (IR LED) |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 3 (IR LED) |
| Pan/Tilt/Rotation Range | Pan: 0°–355°<br>Tilt: 0°–80°<br>Rotation: 0°–355° |

### Lens

| | |
|---|---|
| Lens Type | Motorized vari-focal |
| Mount Type | φ14 |
| Focal Length | 2.7 mm–18 mm |
| Max. Aperture | F1.8 |
| Field of View | Horizontal: 107°–33.9°<br>Vertical: 69°–19°<br>Diagonal: 134°–38.8° |
| Iris Type | Auto |
| Close Focus Distance | W/T: 1.2 m (3.9 ft) |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | W | 41.0 m (130.7 ft) | 16.0 m (52.5 ft) | 8.0 m (26.2 ft) | 4.0 m (13.1 ft) |
| | T | 130.7 m (428.8 ft) | 52.0m (170.6 ft) | 26.0m (85.3 ft) | 13.0m (42.7 ft) |

### Smart Event

| | |
|---|---|
| IVS | Abandoned object; missing object |
| Heat Map | Yes |

### 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; report high quality picture; 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 |

| | |
|---|---|
| People Counting | Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/monthly/weekly/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. 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. |

### Video

| | |
|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream) |
| Smart Codec | Smart H.265+/H.264+ |
| Video Frame Rate | Main stream: 1920 × 1080 (1 fps–50/60 fps)<br>Sub stream: D1 (1 fps–50/60 fps)<br>Third stream: 1080p (1 fps–25/30 fps) |
| Stream Capability | 3 streams |
| Resolution | 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (354 × 288/354 × 240) |
| Bit Rate Control | CBR/VBR |
| Video Bit Rate | H.264: 32 kbps–8192 kbps<br>H.265: 32 kbps–8192 kbps |
| Day/Night | Auto (ICR)/Color/B/W |
| BLC | Yes |
| HLC | Yes |
| WDR | 140 dB |
| Scene Self-adaptation | 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) |
| Electronic Image Stabilization (EIS) | Yes |
| Smart Illumination | Yes |
| Defog | Yes |
| Image Rotation | 0°/90°/180°/270° |
| Mirror | Yes |
| Privacy Masking | 4 areas |

### Audio

| | |
|---|---|
| Audio Compression | PCM; G.711a; G.711Mu; G.726; AAC; G.723 |

### Alarm

| | |
|---|---|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; defocus detection; scene changing; intrusion; tripwire; abandoned object; missing object; fast moving; parking detection; loitering detection; people gathering; input abnormal detection; intensity change detection; people counting; face detection; people counting in area; stay alarm; people No. exception detection; queue management |

## Network

| | |
|---|---|
| Network | RJ-45 (10/100 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 |
| User/Host | 20 (Total bandwidth: 80 M) |
| Storage | FTP; SFTP; Micro SD card (support max. 256 G); Dahua Cloud; NAS |
| Browser | IE: IE8 and later<br>Chrome<br>Firefox<br>Safari: Safari 12 and later |
| Management Software | Smart PSS; DSS; DMSS |
| Mobile Phone | IOS; Android |

## Certification

| | |
|---|---|
| Certification | 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

| | |
|---|---|
| Audio Input | 1 channel (terminal) |
| Audio Output | 1 channel (terminal) |
| Alarm Input | 3 channels in: 5mA 3V–5V DC |
| Alarm Output | 2 channels out: 300mA 12V DC |

## Power

| | |
|---|---|
| Power Supply | 12V DC (±25%)/24V AC (±30%)/PoE (802.3af) |
| Power Consumption | <11.9W |

## Environment

| | |
|---|---|
| Operating Conditions | −40°C to +60°C (−40°F to +140°F)/Less than 95% RH |
| Strorage Conditions | −40°C to +60°C (−40°F to +140°F) |
| Protection Grade | IP67; IK10 |

## Structure

| | |
|---|---|
| Casing | Metal |
| Dimensions | 129.1 mm × Φ157.9mm (5.1"× Φ6.2") |
| Net Weight | 1500.0 g (3.3 lb) |
| Gross Weight | 1600.0 g (3.5 lb) |

## Ordering Information

| Type | Model | Description |
|---|---|---|
| 2MP Camera | DH-IPC-HDBW5242HP-ZHE-MF | 2MP Vari-focal Dome WizMind Network Camera , PAL |
| | DH-IPC-HDBW5242HN-ZHE-MF | 2MP Vari-focal Dome WizMind Network Camera , NTSC |
| | IPC-HDBW5242HP-ZHE-MF | 2MP Vari-focal Dome WizMind Network Camera , PAL |
| | IPC-HDBW5242HN-ZHE-MF | 2MP Vari-focal Dome WizMind Network Camera , NTSC |
| Accessories (Optional) | PFA773 | Wall Mount |
| | PFB210W | Pole Mount |
| | PFA152-E | Pole Mount |
| | PFA101 | Ceiling Mount |
| | PFB300C | Ceiling Mount |
| | PFM900-E | Integrated Mount Tester |
| | PFM321D | 12V 1A Power Adapter |

## Accessories

### Optional



PFA773
Wall Mount

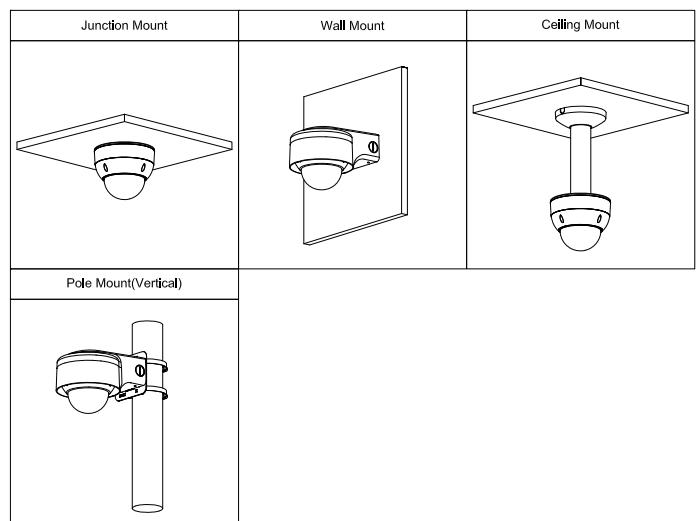PFB210W
Pole Mount

PFA152-E
Pole Mount

PFA101
Ceiling Mount

PFB300C
Ceiling Mount

PFM900-E
Integrated Mount Tester

PFM321D
12V 1A Power Adapter



| Junction Mount | Wall Mount | Ceiling Mount |
|---|---|---|

| Pole Mount(Vertical) |
|---|

## Dimensions (mm[inch])

74.5 [2.93]

129.1 [5.08]

⌀157.9 [⌀6.22]

4-⌀4.7 [⌀0.19]

⌀142.0 [⌀5.59]

⌀142.0 [⌀5.59]
⌀140.0 [⌀5.51]

4-⌀3.7 [⌀0.15]

3-⌀4.5 [⌀0.18]