



# dahua DH-IPC-HDBW1230DE-SW Wi-Fi Series 2MP IR Fixed Focal Wi-Fi Dome Network Camera User Guide

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**dahua DH-IPC-HDBW1230DE-SW Wi-Fi Series 2MP IR Fixed Focal Wi-Fi Dome Network Camera**



## Specifications

- **Model:** DH-IPC-HDBW1230DE-SW
- **Resolution:** 2MP
- **IR Distance:** 30m (98.43 ft)
- **Image Sensor:** 1/2.8 CMOS
- **RAM:** 64 MB
- **ROM:** 16 MB
- **Lens Type:** Fixed-focal
- **Lens Mount:** M12
- **Focal Length:** 2.8 mm; 3.6 mm
- **Video Compression:** H.264B; H.264; H.264H; H.265
- **Network Protocol:** TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, HTTPS, FTP, 802.1x, QoS, IPv6

## Product Usage Instructions

### Installation

1. Choose a suitable mounting location ensuring a clear view of the area to be monitored.
2. Mount the camera securely using appropriate mounting hardware.
3. Connect the camera to a power source and ensure a stable Wi-Fi connection.

### Configuration

1. Access the camera's settings interface through a web browser or dedicated software.
2. Configure network settings, image quality, motion detection, and other desired parameters.
3. Set up user accounts and access controls for security.

## **Monitoring**

1. Access the camera feed through a web browser or mobile app using the assigned IP address or cloud service.
2. Monitor live footage, and playback recordings, and adjust camera settings as needed.

## **Maintenance**

1. Regularly check and clean the camera lens to ensure clear image capture.
2. Update firmware periodically to ensure optimal performance and security.

## **FAQ**

- **Q: How far can the IR LEDs illuminate in night mode?**
  - **A:** The IR distance is up to 30m (98.43 ft) for clear night vision.
- **Q: Can I use this camera outdoors?**
  - **A:** Yes, the camera is rated IP67 for dust and water resistance, making it suitable for outdoor use.
- **Q: What is the recommended mounting height for optimal coverage?**
  - **A:** For best results, mount the camera at a height where the desired monitoring area is within the specified field of view of the lens.

## **Series Overview**

With features of simple installation, easy operation, and a high performance-cost ratio, the Dahua Entry series network camera is applicable to small and medium-sized scenes, such as homes/residences, small-sized retail stores, and other small and medium-sized enterprises.

## **Functions**

### **Smart H.265+ & Smart H.264+**

With an 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.

### **Motion Detection**

When moving objects appear in the monitoring image, Dahua Motion Detection technology triggers alarm or records.

### **Day/Night**

Dahua Day/Night function provides color image when illumination is adequate; when illuminance is inadequate, it switches night mode and provides white and black image. It can guarantee that the network camera can work normally when illuminance changes.

Protection (IP67, IK10, Wide Voltage)

**IP67:** The camera passes a series of strict test on dust and soak. It has the dust-proof function, and the enclosure can work 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  $\pm 30\%$  (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environments with instable voltage.

- 2-MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2 MP (1920 × 1080)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED.
- SMART H.264 +/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- DWDR, 3D NR, BLC, digital watermarking, applicable to various monitoring scenes.
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access.
- Supports single antenna 2.4G Wi-Fi that covers a range of up to 80 m in an open area.
- Supports max. 256 G Micro SD card.
- 12 VDC power supply.
- IP67, IK10 protection.



## Cyber Security

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

## Technical Specification

### Camera

|                            |  |
|----------------------------|--|
| Image Sensor               | 1/2.8" CMOS  |
| Max. Resolution            | 1920 (H) × 1080 (V)  |
| ROM                        | 16 MB  |
| RAM                        | 64 MB  |
| Scanning System            | Progressive  |
| Electronic Shutter Speed   | Auto/Manual 1/3 s–1/100,000 s  |
| Min. Illumination          | 0.025 <a href="#">lux@F2.0</a> (Color, 30 IRE) 0.0025 <a href="#">lux@F2.0</a> (B/W, 30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio                  | >56 dB   |
| Illumination Distance      | 30 m (98.43 ft) (IR LED)   |
| Illuminator On/Off Control | Auto; Manual   |
| Illuminator Number         | 3 (IR LED)   |
| Pan/Tilt/Rotation Range    | Pan: 0–355°<br><br>Tilt: 0–75°<br><br>Rotation: 0–355°   |

## Lens

|                      |        |   |                    |                   |                   |
|----------------------|--------|---|--------------------|-------------------|-------------------|
| Lens Type            |        | Fixed-focal   |                    |                   |                   |
| Lens Mount           |        | M12   |                    |                   |                   |
| Focal Length         |        | 2.8 mm; 3.6 mm  |                    |                   |                   |
| Max. Aperture        |        | F2.0  |                    |                   |                   |
| Field of View        |        | 2.8 mm:<br>Horizontal: 100°; Vertical: 53°; Diagonal: 120°<br>3.6 mm:<br>Horizontal: 86°; Vertical: 43°; Diagonal: 102° |                    |                   |                   |
| Iris Control         |        | Fixed   |                    |                   |                   |
| Close Focus Distance |        | 2.8 mm: 0.6 m (1.97 ft)<br>3.6 mm: 1.0 m (3.28 ft)  |                    |                   |                   |
| DORI Distance        | Lens   | Detect  | Observe            | Recognize         | Identify          |
|                      | 2.8 mm | 46.9 mm (153.87 ft)   | 18.8 m (61.69 ft)  | 9.4 m (30.84 ft ) | 4.7 m (15.42 ft ) |
|                      | 3.6 mm | 58.8 mm (192.91 ft)   | 23.5 mm (77.10 ft) | 11.8 m (38.71 ft) | 5.9 m (19.36 ft ) |

## Video

|                   |   |
|-------------------|---|
| Video Compression | H.264B; H.264; H.264H; H.265  |
| Smart Codec       | Smart H.265+; Smart H.264+  |
| Video Frame Rate  | <p>Main stream:</p> <p>1920 × 1080@ (1–25/30 fps)</p> <p>Sub stream:</p> <p>640 × 480@(1–25 fps)</p> <p>640 × 480@(1–30 fps)</p> <p>*The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.</p> |
| Stream Capability | 2 streams   |
| Resolution        | 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720)   |
| Bit Rate Control  | CBR/VBR   |

|                          |  |
|--------------------------|--|
| Video Bit Rate           | H264: 24 kbps–4096 kbps H265: 9 kbps–4096 kbps               |
| Day/Night                | Auto (ICR)/Color/B/W   |
| BLC                      | Yes  |
| WDR                      | DWDR   |
| White Balance            | Auto; natural; street lamp; outdoor; manual; regional custom |
| Gain Control             | Auto   |
| Noise Reduction          | 3D NR  |
| Motion Detection         | OFF/ON (4 areas, rectangular)                                |
| Region of Interest (RoI) | Yes (4 areas)  |
| Smart Illumination       | Yes  |
| Image Rotation           | 0°/180°  |
| Mirror                   | Yes  |

## Alarm

|             |   |
|-------------|---|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; I P conflict; illegal access; motion detection; video tampering |
|-------------|---|

## Network



|                     |   |
|---------------------|---|
| Network Port        | RJ-45 (10/100 Base-T)   |
| Wi-Fi               | IEEE802.11b/g/n 2.4–2.4835 GHz  |
| Wireless Range      | Up to 80 m (The performance varies based on actual environment)   |
| SDK and API         | Yes   |
| Cyber Security      | Video encryption; configuration encryption; Digest; WSSE; account lockout; security logs; generation and importing of X.509 certificates; HTTPS; trusted boot; trusted execution; trusted upgrade |
| Network Protocol    | IPv4; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; DHCP; DNS; NTP; Multicast; RTMP   |
| Interoperability    | ONVIF (Profile S/Profile G); CGI; P2P   |
| User/Host           | 6 (Total bandwidth: 36 M)   |
| Storage             | Micro SD card (support max. 256 GB, sold separately)  |
| Browser             | IE<br>Chrome<br>Firefox   |
| Management Software | Smart PSS; DSS; DMSS  |
| Mobile Client       | iOS; Android  |

## Certification

|                |   |
|----------------|---|
| Certifications | CE-LVD: EN62368-1;<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU;<br>CE-RED: Radio Equipment Directive 2014/53/EU; FCC: 47 CFR<br>FCC Part 15, Subpart B;<br>FCC ID: FCC PART 15C |
|----------------|---|

## Power

|                   |   |
|-------------------|---|
| Power Supply      | 12 VDC  |
| Power Consumption | Basic: 2 W (12 VDC);<br>Max. (H.265+IR intensity): 4.9 W (12 VDC) |

## Environment

|                       |                                      |
|-----------------------|--------------------------------------|
| Environment           |                                      |
| Operating Temperature | −40 °C to +60 °C (−40 °F to +140 °F) |
| Operating Humidity    | ≤95%                                 |
| Storage Temperature   | −30 °C to +60 °C (−22 °F to +140 °F) |
| Protection            | IP67; IK10                           |
| Structure             |                                      |
| Casing                | Metal                                |
| Product Dimensions    | Φ110.7 mm × 88.7 mm (Φ4.33" × 3.49") |
| Net Weight            | 414 g (0.91 lb)                      |
| Gross Weight          | 592 g (1.31 lb)                      |

## Ordering Information

| Ordering Information |                               |  |
|----------------------|-------------------------------|--|
| Type                 | Model                         | Description                                  |
| 2MP Camera           | DH-IPC- HDBW1230DEP-SW- 0280B | 2MP IR Fixed-focal Wi-Fi Dome Network Camera |
|                      | DH-IPC- HDBW1230DEP-SW- 0360B | 2MP IR Fixed-focal Wi-Fi Dome Network Camera |
|                      | DH-IPC- HDBW1230DEN-SW-0280B  | 2MP IR Fixed-focal Wi-Fi Dome Network Camera |
|                      | DH-IPC- HDBW1230DEN-SW-0360B  | 2MP IR Fixed-focal Wi-Fi Dome Network Camera |
| Accessories          | NBS05C120050VE                | 12V DC/0.5A Power Adapter                    |
|                      | PFA136                        | Junction Mount                               |
|                      | PFB203W                       | Wall Mount                                   |
|                      | PFA109+PFB220C                | Ceiling Mount                                |
|                      | PFB203W+PFA152-E              | Pole Mount                                   |
|                      | PFM900-E                      | Integrated Mount Tester                      |
|                      | TF-P100                       | MicroSD Memory Card                          |

## Accessories



# NBS05C120050VE

## 12V DC/0.5A

### Power Adapter

#### Optional



PFA136  
Junction Mount



PFB203W  
Wall Mount



PFA109+PFB220C  
Ceiling Mount



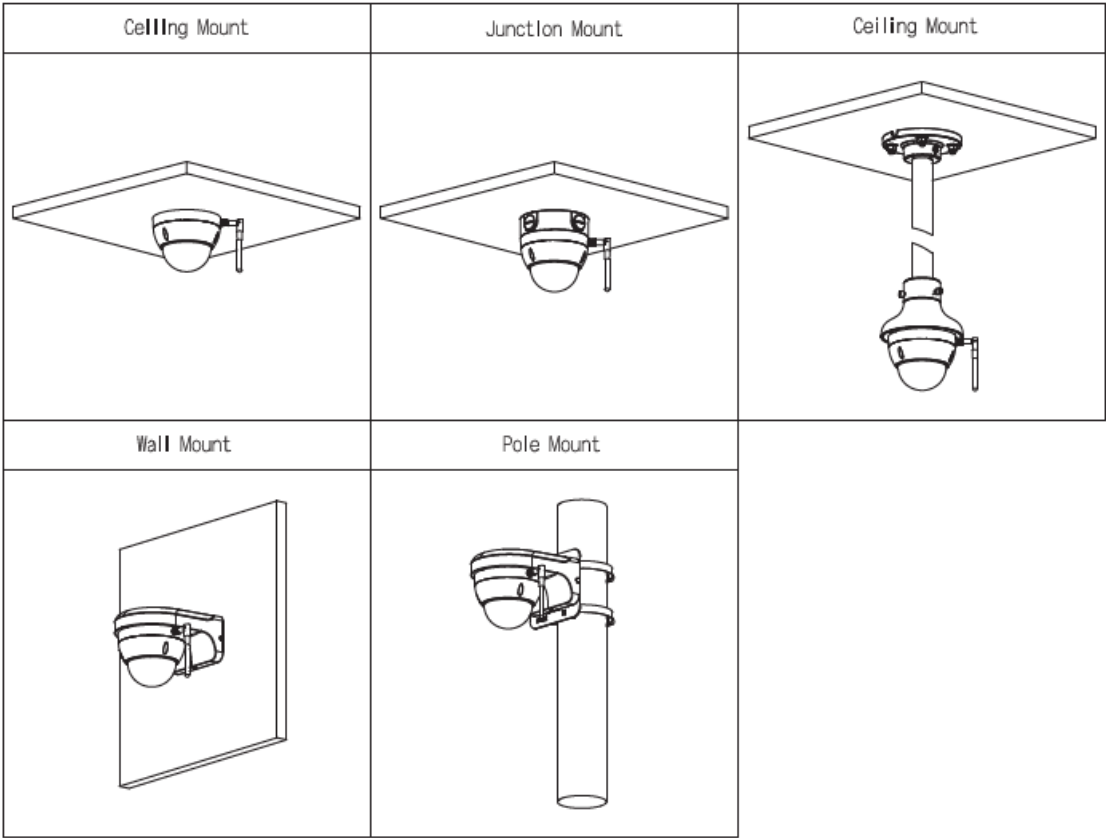
PFB203W+PFA152-E  
Pole Mount



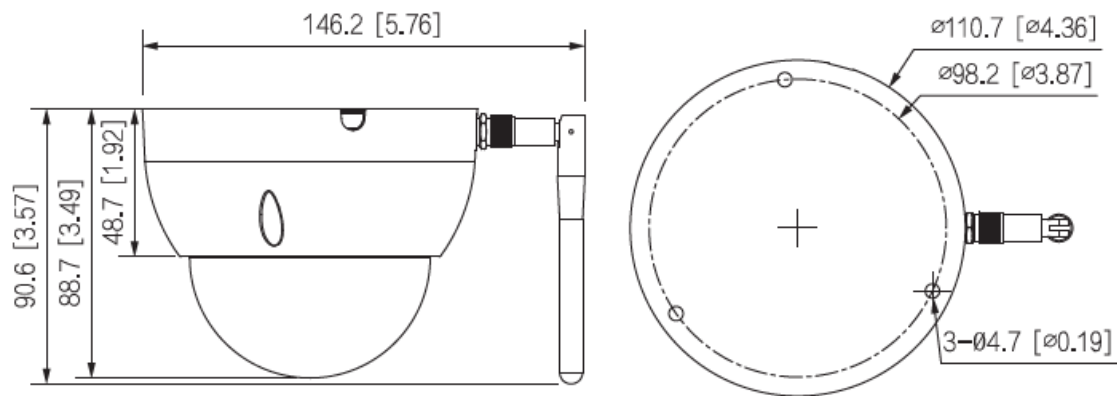
PFM900-E  
Integrated  
Mount Tester



TF-P100  
MicroSD  
Memory Card




Dimensions (mm[inch])



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- [www.dahuasecurity.com](http://www.dahuasecurity.com)

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|  | <p><b><a href="#">dahua DH-IPC-HDBW1230DE-SW Wi-Fi Series 2MP IR Fixed Focal Wi-Fi Dome Network Camera</a> [pdf] User Guide</b></p> <p>DH-IPC-HDBW1230DE-SW Wi-Fi Series 2MP IR Fixed Focal Wi-Fi Dome Network Camera, DH-IPC-HDBW1230DE-SW, Wi-Fi Series 2MP IR Fixed Focal Wi-Fi Dome Network Camera, Focal Wi-Fi Dome Network Camera, Dome Network Camera, Network Camera</p> |
|--|--|

References

- [Dahua Technology - World Leading Video-Centric AIoT Solution & Service Provider](#)
- [User Manual](#)

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