

# DH-IPC-HFW1230DT-STW

## 2 MP IR Fixed-focal WiFi Bullet Network Camera



### System Overview

Driven by industry-leading technology, Dahua Wi-Fi series network cameras are highly precise and easy to install, producing high-quality images. They have strong Wi-Fi connection capabilities and do not require network cables, eliminating the need for a professional construction team. This series of cost-effective cameras support SD card storage, and are dustproof and waterproof. They are ideal for small and medium-sized scenes such as retail stores, homes, and other small and medium-sized enterprises.

### Functions

#### 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.

#### Two-way Audio

With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way audio through the mobile app.

#### Dual-antenna

High-performance dual antenna and MIMO (multiple-input and multiple output) technology of the network camera make the WiFi transmission distance farther, anti-interference performance better, and video transmission smoother.

#### 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.

- 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, and the max. illumination distance is 30 m.
- 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, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access.
- Built-in dual-antenna 2.4G Wi-Fi that covers a range of up to 150 m in an open area.
- Supports max.256 G Micro SD card.Built-in MIC and speaker.
- 12 VDC power supply.
- IP67 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 lux@F2.0 (Color, 30 IRE)<br>0.0025 lux@F2.0 (B/W, 30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio                  | > 56 dB   |
| Illumination Distance      | 30 m (98.43 ft)   |
| Illuminator On/Off Control | Auto; Manual  |
| Illuminator Number         | 1 (IR LED)  |

|                         |   |
|-------------------------|---|
| Pan/Tilt/Rotation Range | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360° |
|-------------------------|---|

## 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         |
|                      | 2.8mm   | 46.9 m (153.87 ft) | 18.8 m (61.68 ft) | 9.4 m (30.84 ft)  | 4.7 m (15.42 ft) |
|                      | 3.6mm   | 58.8 m (192.91 ft) | 23.5 m (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   | Main stream:<br>1920 × 1080 (1–25/30 fps)<br>Sub stream:<br>640 × 480@(1–25 fps)<br>640 × 480@(1–30 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  | 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<br>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   | 1024 kbps (1080p)   |
| Smart Illumination | Yes   |
| Image Rotation     | 0°/180°   |
| Mirror             | Yes   |

## Audio

|              |     |
|--------------|-----|
| Built-in MIC | Yes |
|--------------|-----|

|                   |                 |
|-------------------|-----------------|
| Built-in Speaker  | Yes             |
| Audio Compression | G.711a; G.711Mu |

## Alarm

|             |  |
|-------------|--|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; audio detection; intensity change; SMD (human) |
|-------------|--|

## Network

|                     |  |
|---------------------|--|
| Network Port        | RJ-45 (10/100 Base-T)  |
| Wi-Fi               | IEEE802.11b/g/n 2.4–2.4835 GHz; 2.4 G  |
| Wireless Range      | Up to 150 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 certification; 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 T); CGI; P2P  |
| User/Host           | 6 (Total bandwidth: 36 M)  |
| Storage             | Micro SD card (support max. 256 GB)  |
| 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;<br>FCC:47 CFR FCC Part 15, Subpart B;<br>FCC ID:FCC PART 15C |
|----------------|--|

## Power

|                   |  |
|-------------------|--|
| Power Supply      | 12 VDC   |
| Power Consumption | Basic: 2.2 W (12 VDC)<br>Max. (H.265+IR intensity):6.21 W (12 VDC) |

## Environment

|                       |                                      |
|-----------------------|--------------------------------------|
| Operating Temperature | –30 °C to +50 °C (–22 °F to +122 °F) |
| Operating Humidity    | ≤ 95%                                |
| Storage Temperature   | –40 °C to +60 °C (–40 °F to +140 °F) |
| Protection            | IP67                                 |

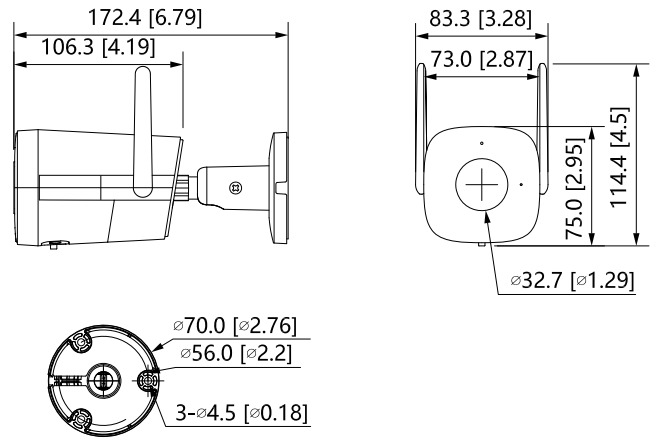
## Structure

|                    |   |
|--------------------|---|
| Casing             | Front cover: Plastic<br>Rear: Plastic<br>Bracket: Metal |
| Product Dimensions | 180 mm × 83.3 mm × 114.8 mm (7.09" × 3.28" × 4.52")     |
| Net Weight         | 350.1 g (0.77 lb)                                       |
| Gross Weight       | 588.1 g (1.30 lb)                                       |

**Ordering Information**

| Type        | Model                       | Description  |
|-------------|-----------------------------|--|
| 2 MP Camera | DH-IPC-HFW1230DTP-STW-0280B | 2 MP IR Fixed-focal WiFi Bullet Network Camera, PAL, 2.8 mm  |
|             | DH-IPC-HFW1230DTN-STW-0280B | 2 MP IR Fixed-focal WiFi Bullet Network Camera, NTSC, 2.8 mm |
|             | DH-IPC-HFW1230DTP-STW-0360B | 2 MP IR Fixed-focal WiFi Bullet Network Camera, PAL, 3.6 mm  |
|             | DH-IPC-HFW1230DTN-STW-0360B | 2 MP IR Fixed-focal WiFi Bullet Network Camera, NTSC, 3.6 mm |
| Accessories | ADS-12AM-12 12012EPG        | 12V DC/1A Power Adapter                                      |
|             | PFA134                      | Junction Box   |
|             | PFA152-E                    | Pole Mount   |
|             | PFM900-E                    | Integrated Mount Tester                                      |
|             | TF-P100                     | MicroSD Memory Card  |

**Dimensions (mm[inch])**



**Accessories**

Included:



ADS-12AM-12 12012EPG  
12 V DC/1A  
Power Adapter

Optional:



PFA134  
Junction  
Box



PFA152-E  
Pole  
Mount



PFM900-E  
Integrated  
Mount Tester



TF-P100  
MicroSD  
Memory Card

