# DH-IPC-WL46A

## 4MP Fixed-focal Floodlight Network Camera



Driven by industry-leading technology, Dahua Wireless Series network cameras are highly precise, producing high-quality images. They do not require network cables, making their installation easy to implement. It includes WiFi Series, 4G Camera, and 5G Camera to meet the needs of different wireless application scenarios.

## Series Overview

With features of simple installation, easy operation, and high performance-cost ratio, 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 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.

- 4-MP 1/3" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2560 × 1440)@25 fps/30 fps
- H.265 codec, high compression rate, ultra-low bit rate.
- SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Built-in microphone and speaker for real-time communication.
- Active alarm with built-in 110 dB Siren.
- The built-in dual floodlights can switch between warm and cool color temperature and have 4 floodlights modes.
- Detects humans, vehicles and animals to reduce the occurrence of false alarms.
- SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Dual-band 2.4 GHz and 5 GHz WiFi options, IEEE802.11a/b/g/n/ac.
- Supports max. 256 G Micro SD card and NVR storage.
- 100–240 VAC power supply, easy for installation.
- IP65 Protection.

### 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.

### 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 | 1/3" CMOS |
| Max. Resolution | 2560 (H) × 1440 (V) |
| ROM | 128 MB |
| RAM | 512 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.005 lux@F1.6 (Color,30 IRE)<br>0.0005 lux@F1.6 (B/W,30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio | >56 dB |
| Illumination Distance | 10 m (32.81 ft) (IR);<br>30 m (98.43 ft) (Floodlight) |
| Illuminator On/Off Control | Auto; Manual |
| Illuminator Number | 1 (IR LED); 2 (Floodlight, color can be switched between warm and cool) |
| Floodlight Brightness | 1500-2400 lm |
| Floodlight Color Temperature | 3000K±200K (warm);<br>6000K±300K (cool) |
| Floodlight Modes | Motion Activation<br>Manual<br>Schedule<br>PIR Activation |
| Pan/Tilt/Rotation Range | Camera:<br>Pan: −85° to +85°<br>Tilt: −90° to +45°<br>Rotation: 0° to +360°<br>Floodlight:<br>Tilt: −90° to +90°<br>Rotation: −145° to +145° |
| PIR Sensor Distance | 10 m (the height of the device is 3 m, placed at an angle of 30° from the horizontal) |
| PIR Detection Range | 270° |

### Lens

| | |
|---|---|
| Lens Type | Fixed-focal |
| Lens Mount | M12 |
| Focal Length | 2.8 mm |
| Max. Aperture | F1.6 |
| Field of View | H: 98°; V: 55°; D: 115° |
| Iris Control | Fixed |
| Close Focus Distance | 1.0 m (3.28 ft) |

| DORI Distance | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|
| | 61.2 m (200.79 ft) | 24.5 m (80.38 ft) | 12.2 m (40.03 ft) | 6.1 m (20.01 ft) |

### Video

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|---|---|
| Video Compression | H.264B; H.264; H.264H; H.265; MJPEG |
| Smart Codec | Smart H.265+; Smart H.264+ |

| | |
|---|---|
| Video Frame Rate | Main stream:<br>2560 × 1440@(1–25 fps)<br>2560 × 1440@(1–30 fps)<br>Sub stream 1:<br>704 × 576@(1–25 fps)<br>704 × 480@(1–30 fps)<br>Sub stream 2:<br>640 × 480@(1 fps–25 fps)<br>640 × 480@(1 fps–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 | 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 1M (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
| Bit Rate Control | CBR/VBR |
| Video Bit Rate | H264: 32 kbps–8192 kbps;<br>H265: 32 kbps–8192 kbps |
| Day/Night | Auto(ICR)/Color/B/W |
| BLC | Yes |
| HLC | 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 |
| Privacy Masking | Yes |

### Audio

| | |
|---|---|
| Built-in MIC | Yes |
| Built-in Speaker | Yes |
| Audio Compression | G.711a; G.711Mu; G.726; PCM |

### Alarm

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|---|---|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; security exception; motion detection; video tampering; sence changing; SMD (human, animal and vehicle); audio detection; intensity change |

### Network

| | |
|---|---|
| Wi-Fi | IEEE802.11a/b/g/n/ac 2.4–2.4835GHz & 5.18–5.85GHz,EIRP:≤20dBm@2400-2483.5MHz;≤23dBm@5150-5250MHz;≤20dBm@5250-5350MHz;≤27dBm@5470-5725MHz;≤14dBm@5725-5850MHz9(CE );output power:≤30dBm@2400-2483.5MHz;≤24dBm@5150-5250MHz;≤24dBm@5250-5350MHz;≤24dBm@5470-5725MHz(FCC) |
| 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; IPV6; ARP&Ping; TCP; UDP; HTTP; RTSP; HTTPS; DDNS; Email; SNMP; Multicast; Auto Registration; Wireless Qos; Wi-Fi setting; hotspot scanning; 802.1x; UPnP status; Bonjour; UPnP; device discovery |
| Interoperability | ONVIF; CGI; P2P; RTMP |
| User/Host | 6 (Total bandwidth: 36 M) |
| Storage | Micro SD card (support max. 256 GB); FTP; SFTP; NAS |
| Browser | IE; Chrome; Firefox |
| Management Software | DMSS |
| Mobile Client | iOS; Android |

## Certification

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

## Power

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|---|---|
| Power Supply | 100–240 VAC |
| Power Consumption | Basic: 5.2 W (100–240 VAC ) Max. (Illuminator+IPC): 48.3 W (100–240 VAC ) |

## Environment

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|---|---|
| Operating Temperature | −20 °C to +50 °C (−4 °F to +122 °F) |
| Operating Humidity | ≤ 95% |
| Storage Temperature | −20 °C to +50 °C (−4 °F to +122 °F) |
| Protection | IP65 |

## Structure

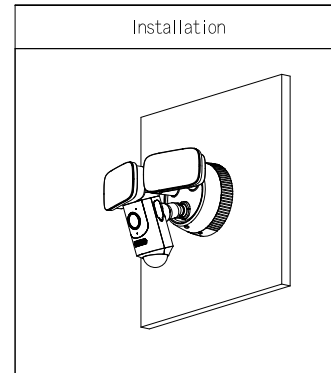| | |
|---|---|
| Casing | Metal + Plastic |
| Product Dimensions | 270.7 mm × 217.2 mm × 195.6 mm (10.66" × 8.55" × 7.70") (L × W × H) |
| Net Weight | 1.40 kg (3.08 lb) |
| Gross Weight | 1.88 kg (4.14 lb) |

## Ordering Information

| Type | Model | Description |
|---|---|---|
| 4MP Camera | DH-IPC-WL46AP-0280B | 4MP Fixed-focal Floodlight Network Camera |
| | DH-IPC-WL46AN-0280B | 4MP Fixed-focal Floodlight Network Camera |
| Accessories (Optional) | TF-P100 | MicroSD Memory Card |

## Accessories

Optional:



TF-P100
MicroSD Memory Card



## Dimensions (mm[inch])