# DH-IPC-HDW5241H-AS-PV

## 2MP WDR IR Eyeball AI Network Camera

· 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS

· H.265 & H.264 triple-stream encoding

· 25/30 fps@1080P (1920 × 1080)

· WDR (120 dB), Day/Night (ICR), 3D DNR, AWB, AGC, BLC

· Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS

· 2.8 mm fixed lens (3.6 mm, 6 mm optional)

· 1/1 Alarm in/out, 1/1 audio in/out (Built-in MIC, Built-in Speaker)

· Max. IR LEDs Length 50 m

· Micro SD memory, IP67

### System Overview

Pro AI series contains Face Detection, Perimeter Protection and People Counting functions.Powered by deep-learning Artificial Intelligence algorithms, significantly improved accuracy. Meanwhile, the series features starlight and smart IR technology. This series fully protected from dust and water, certified to IP67 standard.

### Functions

#### Perimeter Protection

Dahua's Perimeter Protection functions significantly improved accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or to a mobile client reduces system requirements and resources resulting in greater surveillance system efficiency.

#### People Counting

People Counting function uses advanced image processing technology to capture depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting accuracy.

#### Active Deterrence

Active deterrence is to warn off intruders actively with white light and siren even before users are aware of the incidence. Once an intursion is detected, the white light will turn on and the siren will buzzer to alert the intruder. The white light can be set to Normally on or Flash, the content of siren is configurable.

#### Protection(IP67, wide voltage)

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) , the camera is the choice for installation in even the most unforgiving environments.

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS |
| Effective Pixels | 1920 (H) × 1080 (V) |
| RAM/ROM | 512 MB/128 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual, 1/3 s–1/100000 s |
| Minimum Illumination | 0.002 Lux@F1.6 |
| IR Distance | Distance up to 50 m (164 ft) |
| IR On/Off Control | Auto/Manual |
| IR LEDs | 1 IR, 1 LED |

### Lens

| | |
|---|---|
| Lens Type | Fixed-focal |
| Mount Type | Board-in |
| Focal Length | 2.8 mm, 3.6 mm, 6.0 mm |
| Max. Aperture | F1.6 |
| Angle of View | H: 106°, V: 57°/H: 87°, V: 46°/H: 53°, V: 30° |
| Aperture Type | Fixed |
| Close Focus Distance | 0.6 m (1.97 ft)/1.2 m(3.94 ft)/2.5 m(8.20 ft) |

| | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | 2.8mm | 39m(128ft) | 15m(49ft) | 8m(26ft) | 4m(13ft) |
| DORI Distance | 3.6mm | 55m(180ft) | 22m(72ft) | 11m(36ft) | 6m(20ft) |
| | 6.0mm | 83m(272ft) | 33m(108ft) | 17m(56ft) | 8m(26ft) |

### Pan/Tilt/Rotation

| | |
|---|---|
| Pan/Tilt/Rotation Range | Pan: 0˚–360˚; Tilt: 0˚–78˚; Rotation: 0˚–360˚ |

### Artificial Intelligence

| | |
|---|---|
| Perimeter Protection | Tripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gathering |
| People Counting | Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection |

### General Intelligence

| | |
|---|---|
| Event Trigger | Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly |
| General Intelligence | Object Abandoned/Missing |
| Heat Map | Yes |

### Video

| | |
|---|---|
| Compression | H.265,H.264,H.264B,H.264H, MJPEG (sub stream) |
| Smart Codec | Yes |
| Streaming Capability | 3 Streams |

| | |
|---|---|
| Resolution | 1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/ CIF (352 × 288/352 × 240) |
| Frame Rate | Main Stream: 1080P (1 fps–25/30 fps) |
| | Sub Stream: D1 (1 fps–25/30 fps) |
| | Third Stream: 1080P (1 fps–6 fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264: 32 Kbps–8192 Kbps<br>H.265: 19 Kbps–7424 Kbps |
| Day/Night | Auto (ICR)/Color/B/W |
| BLC Mode | BLC/HLC/WDR (120 dB) |
| White Balance | Auto/Natural/Street Lamp/Outdoor/Manual |
| Gain Control | Auto/Manual |
| Noise Reduction | 3D DNR |
| Motion Detection | Off/On (4 Zone, Rectangle) |
| Region of Interest | Off/On (4 Zone) |
| Electronic Image Stabilization (EIS) | N/A |
| Smart IR | Yes |
| Defog | Yes |
| Flip | 0°/90°/180°/270° |
| Mirror | Off/On |
| Privacy Masking | Off/On (4 Area, Rectangle) |

### Audio

| | |
|---|---|
| Compression | G.711a, G.711Mu, G.726, AAC, G.723 |

### Network

| | |
|---|---|
| Ethernet | RJ-45 (10/100 Base-T) |
| 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;PPPoE;802.1x;SNMP |
| Interoperability | ONVIF (Profile S/Profile G/Profile T), CGI, Milstone, Genetec, P2P |
| Streaming Method | Unicast/Multicast |
| Max. User Access | 20 Users |
| Edge Storage | NAS;FTP;SFTP<br>Micro SD card 256 GB |
| Web Viewer | IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12) |
| Management Software | Smart PSS, DSS, DMSS |
| Smart Phone | iOS, Android |

### Certifications

| | |
|---|---|
| Certifications | CE-LVD: EN60950-1<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 |

## Interface

| | |
|---|---|
| Audio Interface | 1/1 channel In/Out, Built-in MIC, Built-in Speaker |
| RS485 | N/A |
| Alarm | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC |

## Electrical

| | |
|---|---|
| Power Supply | DC 12V (±30%), PoE (802.3af) (Class 0) |
| Power Consumption | <7W |

## Environmental

| | |
|---|---|
| Operating Conditions | -30° C to +60° C (-22° F to +140° F)/Less than 95% RH |
| Storage Conditions | -30° C to +60° C (-22° F to +140° F) |
| Ingress Protection | IP67 |

## Construction

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|---|---|
| Casing | Metal, plastic |
| Dimensions | Φ122 mm × 113.5 mm (4.80" × 4.47") |
| Net Weight | 0.49 kg (1.08 lb) |
| Gross Weight | 0.65 kg (1.43 lb) |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 2MP camera | DH-IPC-HDW5241HP-AS-PV | 2MP WDR IR Eyeball AI Network Camera, WDR, PAL |
| | DH-IPC-HDW5241HN-AS-PV | 2MP WDR IR Eyeball AI Network Camera, WDR, NTSC |
| | IPC-HDW5241HP-AS-PV | 2MP WDR IR Eyeball AI Network Camera, WDR, PAL |
| | IPC-HDW5241HN-AS-PV | 2MP WDR IR Eyeball AI Network Camera, WDR, NTSC |
| Accessories (optional) | PFA130-E | Junction box |
| | PFA151 | Corner Mount |
| | PFB203W | Wall Mount |
| | PFA106 | Mount Adapter |
| | PFB220C | Ceiling Mount |
| | PFA152-E | Pole Mount |

## Accessories

**Optional:**

PFA130-E Junction box | PFA151 Corner Mount | PFB203W Wall Mount | PFA106 Mount Adapter

PFB220C Ceiling Mount | PFA152-E Pole Mount

| Junction Mount<br>PFA130-E | Corner Mount<br>PFA151+PFB203W |
|---|---|
| Wall Mount<br>PFB203W | Ceiling Mount<br>PFA106+PFB220C |
| Ceiling Mount | Pole Mount<br>PFB203W + PFA152-E |

## Dimensions (mm[inch])

113.5 [4.47]
∅122.0 [∅4.8]
∅84.0 [∅3.31]
3-∅4.5 [∅0.18]

Rev 001.001