# DH-IPC-HDW1420S

## 4MP IR Eyeball Network Camera



- 1/3” 3Megapixel progressive CMOS
- H.264+ & H.264 dual-stream encoding
- 20fps@4M(2688×1520) &25/30fps@3M(2304×1296)
- DWDR, Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.8 mm fixed lens (3.6mm optional)
- Max IR LEDs Length 30m
- IP67, PoE




### System Overview

The IR Megapixel Fixed Eyeball camera delivers 4MP resolution with a choice of 2.8mm or 3.6mm lens options. The camera's elegant blend of aesthetics combined with its compact form factor provides an excellent choice for a variety of small to mid-size, indoor/outdoor applications at an affordable price.

### Functions

True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens

Regions of interest

Regions of Interest (ROI) is a user defined feature that allows the operator to monitor specific areas of a scene while still maintaining overall situational awareness of less important areas

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object. Smart IR technology prevents IR LEDS from whiting out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30m (98ft).

Image flip

Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

Protection

Supporting ±10% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides protectection against the camera and its structure from the effects of lightning.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer

Smart H.264+

Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/3" 3Megapixel progresive CMOS |
| Effective Pixels | 2688(H) x1520(V) |
| RAM/ROM | 256MB/16MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual, 1/3(4)~1/100000s |
| Minimum Illumination | 0.4Lux/F2.2(Color), 0Lux/F2.2(IR on) |
| S/N Ratio | More than 56dB |
| IR Distance | Distance up to 30m(98ft) |
| IR On/Off Control | Auto/ Manual |
| IR LEDs | 12 |

### Lens

| | | | | | |
|---|---|---|---|---|---|
| Lens Type | Fixed | | | | |
| Mount Type | Board-in | | | | |
| Focal Length | 2.8 mm (3.6 mm optional) | | | | |
| Max. Aperture | F2.0/F2.2 | | | | |
| Angle of View | H:106°/83°, V:56°/44° | | | | |
| Focus Control | Fixed | | | | |
| Close Focus Distance | N/A | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 2.8 mm | 63m(207ft) | 25m(82ft) | 13m(43ft) | 6m(20ft) |
| | 3.6 mm | 80m(262ft) | 32m(105ft) | 16m(52ft) | 8m(26ft) |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan:0° ~360° ;Tilt:0° ~90° ;Rotation:0° ~360° |

### Video

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|---|---|
| Compression | H.264+/H.264 |
| Streaming Capability | 2 Streams |
| Resolution | 4M(2688x1520/2560x1440)/3M(2304×1296)/ 1080P(1920×1080)/720P(1280×720)/ D1(704×576/704×480)/ CIF(352×288/352×240) |
| Frame Rate | 4M(1 ~ 20fps)/3M (1 ~ 25/30fps)/2M (1 ~ 25/30fps) |
| | D1/CIF(1 ~ 25/30fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H264H:80K ~ 10240Kbps |
| Day/Night | Auto(ICR) / Color / B/W |
| BLC Mode | BLC / HLC / DWDR |
| White Balance | Auto/Natural/Street Lamp/Outdoor/Manual |
| Gain Control | Auto/Manual |
| Noise Reduction | 3D DNR |
| Motion Detetion | Off / On (4 Zone, Rectangle) |
| Region of Interest | Off / On (4 Zone) |
| Electronic Image | Support |
| Smart IR | Support |
| Digital Zoom | 16x |
| Flip | 0°/90°/180°/270° |
| Mirror | Off / On |
| Privacy Masking | Off / On (4 Area, Rectangle) |

### Audio

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|---|---|
| Compression | N/A |

### Network

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|---|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | HTTP;HTTPs;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP; DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP; Bonjour;802.1x;Multicast;ICMP;IGMP; |
| Interoperability | ONVIF, PSIA, CGI |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 10 Users/20 Users |
| Edge Storage | NAS(Network Attached Storage),Local PC for instant recording |
| Web Viewer | IE, Chrome, Firefox, Safari |
| Management Software | Smart PSS, DSS,Easy4ip |
| Smart Phone | iPhone, iPad, Android Phone |

### Certifications

| | |
|---|---|
| Certifications | CE (EN 60950:2000)<br>UL:UL60950-1<br>FCC: FCC Part 15 Subpart B |

### Interface

| | |
|---|---|
| Video Interface | N/A |
| Audio Interface | N/A |
| RS485 | N/A |
| Alarm | N/A |

### Electrical

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|---|---|
| Power Supply | DC12V PoE (802.3af)(Class 0) |
| Power Consumption | <4.3W |

## Environmental

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|---|---|
| Operating Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Strorage Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Ingress Protection | IP67 |
| Vandal Resistance | N/A |

## Construction

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|---|---|
| Casing | Metal+Plastic |
| Dimensions | Φ108mm×84.9mm(4.25''x3.15'') |
| Net Weight | 0.23Kg(0.51lb) |
| Gross Weight | 0.387Kg(0.85lb) |

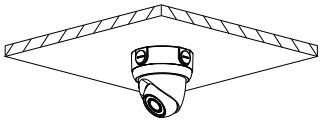
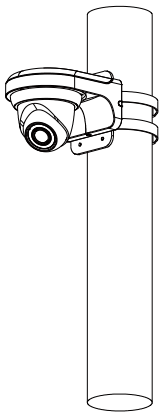
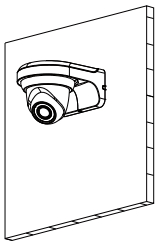
## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 3MP camera | DH-IPC-HDW1420SP-0280B | 4MP IR Eyeball Network Camera, 2.8mm,PAL |
| | DH-IPC-HDW1420SN-0280B | 4MP IR Eyeball Network Camera, 2.8mm,NTSC |
| | IPC-HDW1420SP-0280B | 4MP IR Eyeball Network Camera, 2.8mm,PAL |
| | IPC-HDW1420SN-0280B | 4MP IR Eyeball Network Camera, 2.8mm,NTSC |
| | DH-IPC-HDW1420SP-0360B | 4MP IR Eyeball Network Camera, 3.6mm,PAL |
| | DH-IPC-HDW1420SN-0360B | 4MP IR Eyeball Network Camera, 3.6mm,NTSC |
| | IPC-HDW1420SP-0360B | 4MP IR Eyeball Network Camera, 3.6mm,PAL |
| | IPC-HDW1420SN-0360B | 4MP IR Eyeball Network Camera, 3.6mm,NTSC |
| Accessories (optional) | PFA136 | Junction box |
| | PFB203W | Wall mount |
| | PFA152 | Pole mount |

## Accessories

**Optional:**




| Junction Mount | Pole Mount |
|---|---|
| PFA136 | PFB203W + PFA152 |
|  |  |
| **Wall Mount** | |
| PFB203W | |
|  | |

## Dimensions (mm/inch)

