

# DH-IPC-HDW1439V-IL-K

## 4MP Entry Smart Dual Light Fixed-focal Eyeball Network Camera



### 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 Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

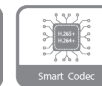
#### Human Detection

Dahua intelligent algorithms extract moving human targets from videos and filters out alarms that are triggered by non-human targets to increase the accuracy and effectiveness of alarms.

#### 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.

- 4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2560 × 1440)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED and warm light, the max. IR illumination distance is 30 m and warm light distance is 30 m.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- ROI, SMART H.264 +/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Abnormality detection: Motion detection, video tampering, network disconnection, IP conflict and illegal access.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- Supports human detection.



#### WDR

With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

#### 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.

#### Protection (IP67, Wide Voltage)

**IP67:** The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normally after soaking in 1 m deep water for 30 minutes.

**Wide voltage:** The camera allows  $\pm 30\%$  (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

|                            |                                                                                         |
|----------------------------|-----------------------------------------------------------------------------------------|
| Camera                     |                                                                                         |
| Image Sensor               | 1/2.9" CMOS                                                                             |
| Max. Resolution            | 2560 (H) × 1440 (V)                                                                     |
| ROM                        | 128 MB                                                                                  |
| RAM                        | 128 MB                                                                                  |
| Scanning System            | Progressive                                                                             |
| Electronic Shutter Speed   | Auto/Manual 1/3 s–1/100,000 s                                                           |
| Min. Illumination          | 0.006 lux@F1.6 (Color,30 IRE)<br>0.0006 lux@F1.6 (B/W,30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio                  | >56 dB                                                                                  |
| Illumination Distance      | Up to 30 m (98.43 ft) (IR LED)<br>Up to 30 m (98.43 ft) (Warm light)                    |
| Illuminator On/Off Control | Auto;Manual                                                                             |
| Illuminator Number         | 1 (IR LED); 1 (Warm light)                                                              |
| Angle Adjustment           | Pan: 0°–360°<br>Tilt: 0°–78°<br>Rotation: 0°–360°                                       |

|                      |                                                                   |
|----------------------|-------------------------------------------------------------------|
| Lens                 |                                                                   |
| Lens Type            | Fixed-focal                                                       |
| Lens Mount           | M12                                                               |
| Focal Length         | 2.8 mm;3.6 mm                                                     |
| Max. Aperture        | F1.6                                                              |
| Field of View        | 2.8 mm: H: 94°; V: 52°; D: 111°<br>3.6 mm: H: 78°; V: 41°; D: 94° |
| Iris Control         | Fixed                                                             |
| Close Focus Distance | 2.8 mm: 1.1 m (3.61 ft)<br>3.6 mm: 1.7 m (5.58 ft)                |

|               |                                                                                                                                                                                                                                                                                                                                                                                  |                       |                       |                      |                     |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|----------------------|---------------------|
| DORI Distance | Lens                                                                                                                                                                                                                                                                                                                                                                             | Detect                | Observe               | Recognize            | Identify            |
|               | 2.8 mm                                                                                                                                                                                                                                                                                                                                                                           | 64.0 m<br>(209.97 ft) | 25.6 m<br>(83.98 ft)  | 12.8 m<br>(41.99 ft) | 6.4 m<br>(21.00 ft) |
|               | 3.6 mm                                                                                                                                                                                                                                                                                                                                                                           | 85.4 m<br>(280.18 ft) | 34.2 m<br>(112.20 ft) | 17.1 m<br>(56.10 ft) | 8.5 m<br>(27.89 ft) |
|               | *DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/ project design tool. |                       |                       |                      |                     |

|                 |                                                                                                                 |
|-----------------|-----------------------------------------------------------------------------------------------------------------|
| Intelligence    |                                                                                                                 |
| Human Detection | Support the classification and accurate detection of human                                                      |
| Smart Search    | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos |

|                   |                                                                        |
|-------------------|------------------------------------------------------------------------|
| Video             |                                                                        |
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream) |
| Smart Codec       | Smart H.265+; Smart H.264+                                             |

|                          |                                                                                                                                                                                                                                                  |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video Frame Rate         | Main stream: 2560 × 1440@(1–25/30 fps)<br>Sub stream: 704 × 576@(1–25 fps)/704 × 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               | 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)                                                                              |
| Bit Rate Control         | CBR/VBR                                                                                                                                                                                                                                          |
| Video Bit Rate           | H.264: 32 kbps–4096 kbps<br>H.265: 12 kbps–4096 kbps                                                                                                                                                                                             |
| Day/Night                | Auto(ICR)/Color/B/W                                                                                                                                                                                                                              |
| BLC                      | Yes                                                                                                                                                                                                                                              |
| HLC                      | Yes                                                                                                                                                                                                                                              |
| WDR                      | 120 dB                                                                                                                                                                                                                                           |
| White Balance            | Auto; natural; street lamp; outdoor; manual; regional custom                                                                                                                                                                                     |
| Gain Control             | Auto;Manual                                                                                                                                                                                                                                      |
| 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          | 4 areas                                                                                                                                                                                                                                          |

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|-------------|------------------------------------------------------------------------------------------------------------------------|
| Alarm       |                                                                                                                        |
| Alarm Event | Network disconnection; IP conflict; illegal access; motion detection; video tampering; SMD (human); security exception |

|                     |                                                                                                                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------|
| Network             |                                                                                                                     |
| Network Port        | RJ-45 (10/100 Base-T)                                                                                               |
| SDK and API         | Yes                                                                                                                 |
| Network Protocol    | IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; P2P |
| Interoperability    | ONVIF (Profile S; Profile T); CGI                                                                                   |
| User/Host           | 6 (Total bandwidth: 24 M)                                                                                           |
| Storage             | FTP                                                                                                                 |
| Browser             | IE; Chrome; Firefox                                                                                                 |
| Management Software | Smart PSS Lite; DSS; DMSS                                                                                           |
| Mobile Client       | iOS;Android                                                                                                         |

|                |                                                                                                                                                                                          |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cyber Security | Configuration encryption;trusted execution;Digest;security logs;HTTPS;trusted upgrade;WSSE;trusted boot;account lockout;generation and importing of X.509 certification;video encryption |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Certification

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| Certifications | CE-LVD: EN62368-1<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU |
|----------------|---------------------------------------------------------------------------------|

Power

|                   |                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| Power Supply      | 12 VDC/PoE (802.3af)                                                                                                         |
| Power Consumption | Basic: 2 W (12 VDC); 2.9 W (PoE)<br>Max. (H.265 + intelligence on+ WDR + illuminator intensity): 4.6 W (12 VDC); 5.7 W (PoE) |

Environment

|                       |                                      |
|-----------------------|--------------------------------------|
| Operating Temperature | −40 °C to +60 °C (−40 °F to +140 °F) |
| Operating Humidity    | ≤95%                                 |
| Storage Temperature   | −40 °C to +60 °C (−40 °F to +140 °F) |
| Storage Humidity      | ≤95%                                 |
| Protection            | IP67                                 |

Structure

|                    |                                             |
|--------------------|---------------------------------------------|
| Casing Material    | Inner core: Metal+plastic<br>Cover: Plastic |
| Product Dimensions | 100.9 mm × Φ109.9 mm (3.97" × Φ4.33")       |
| Net Weight         | 0.33 kg (0.73 lb)                           |
| Gross Weight       | 0.45 kg (0.99 lb)                           |

Ordering Information

| Type                      | Model              | Description                                                   |
|---------------------------|--------------------|---------------------------------------------------------------|
| 4MP Camera                | DH-IPC-HDW1439V-IL | 4MP Entry Smart Dual Light Fixed-focal Eyeball Network Camera |
| Accessories<br>(Optional) | PFA13G             | Junction Box                                                  |
|                           | PFB205W-E          | Wall Mount Bracket                                            |
|                           | PFA152-E           | Pole Mount Bracket                                            |
|                           | PFA109             | Mount Adapter                                                 |
|                           | PFB220C            | Ceiling Mount Bracket                                         |
|                           | PFM321D            | 12 VDC 1A Power Adapter                                       |
|                           | PFM900-E           | Integrated Mount Tester                                       |

Accessories

Optional:



PFA13G  
Junction Box



PFB205W-E  
Wall Mount  
Bracket



PFA152-E  
Pole Mount  
Bracket



PFA109  
Mount  
Adapter



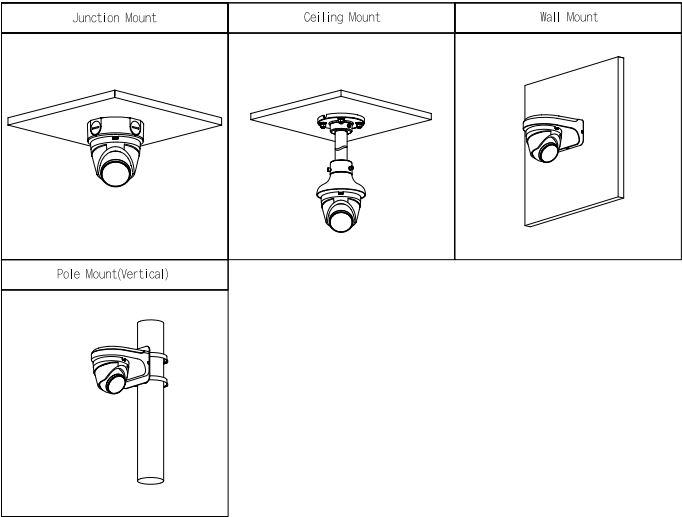
PFB220C  
Ceiling Mount  
Bracket



PFM321D  
12 VDC 1 A  
Power Adapter



PFM900-E  
Integrated  
Mount Tester



Dimensions (mm[inch])

