

# DH-IPC-HFW1639TC-A-IL

6MP Entry Smart Dual Light Fixed-focal Bullet 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+

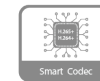
With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

### Image Flip

For narrow and long scenes, Dahua image flip technology flips the image by 90°/180°/270° to realize better surveillance in rotation mode.

\* The parameters and datasheets below can only be applied to 1639-S6 series.

- 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 6 MP (3200 × 1800) @20 fps, and supports 2688 × 1520@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in Multi-core Light, the max. IR distance is 30 m and the max. warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, DWDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Built in Mic.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- Supports human detection.



## 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 ±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               | 1/2.7" CMOS                                                                                 |
| Max. Resolution            | 3200 (H) × 1800 (V)                                                                         |
| ROM                        | 128 MB                                                                                      |
| RAM                        | 256 MB                                                                                      |
| Scanning System            | Progressive                                                                                 |
| Electronic Shutter Speed   | Auto/Manual 1/3 s–1/100,000 s                                                               |
| Min. Illumination          | 0.007 lux@F1.6 (Color, 30 IRE);<br>0.0007 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)<br>Up to 30 m (98.43 ft) (Warm light)                            |
| Illuminator On/Off Control | Auto; Manual                                                                                |
| Illuminator Number         | 1 (Multi-core (IR + warm) light)                                                            |
| Angle Adjustment           | 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        | F1.6                                                                |
| Field of View        | 2.8 mm: H: 110°; V: 58°; D: 132°<br>3.6 mm: H: 91°; V: 46°; D: 110° |
| 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                                                                                                                                                                                                                                                                                                                                                                          | 63.6 m<br>( 208.66 ft) | 25.4 m<br>( 93.33 ft)  | 12.7 m<br>( 41.67 ft) | 6.4m<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: 3200 × 1800@(1–20 fps)/2688 × 1520@(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               | 6M (3200 × 1800); 4M (2880 × 1620/2688 × 1520); 3M (2048 × 1536/2304 × 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         | VBR; CBR                                                                                                                                                                                                                                                                |
| Video Bit Rate           | H.264: 32 kbps–8192 kbps;<br>H.265: 12 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/Manual                                                                                                                                                                                                                                                             |
| Noise Reduction          | 3D NR                                                                                                                                                                                                                                                                   |
| Motion Detection         | OFF/ON (4 areas, rectangular)                                                                                                                                                                                                                                           |
| Region of Interest (RoI) | Yes (4 areas)                                                                                                                                                                                                                                                           |
| Smart Illumination       | Yes                                                                                                                                                                                                                                                                     |
| Smart Dual Light         | Yes                                                                                                                                                                                                                                                                     |
| Image Rotation           | 0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)                                                                                                                                                                                               |
| Mirror                   | Yes                                                                                                                                                                                                                                                                     |
| Privacy Masking          | 4 areas                                                                                                                                                                                                                                                                 |

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

|             |                                                                                                                                         |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Alarm       |                                                                                                                                         |
| Alarm Event | Network disconnection; IP conflict; illegal access; motion detection; video tampering; audio detection; 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        | 20 (Total bandwidth: 48 M)                                                                                          |
| Storage          | FTP                                                                                                                 |

|                       |                                                                                                                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Browser               | IE; Chrome; Firefox                                                                                                                                                                      |
| Management Software   | Smart PSS Lite; DSS; DMSS; DoLynk Care                                                                                                                                                   |
| Mobile Client         | iOS;Android                                                                                                                                                                              |
| 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 |
| 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.: 4 W (12 VDC), 5.3 W (PoE) (H.265 + intelligence on+ DWDR + illuminator intensity)                                                             |
| Environment           |                                                                                                                                                                                          |
| Operating Temperature | −40 °C to +60 °C (−40 °F to +140 °F)                                                                                                                                                     |
| Operating Humidity    | ≤95%(RH), non-condensing                                                                                                                                                                 |
| Storage Temperature   | −40 °C to +60 °C (−40 °F to +140 °F)                                                                                                                                                     |
| Storage Humidity      | ≤95%(RH), non-condensing                                                                                                                                                                 |
| Protection            | IP67                                                                                                                                                                                     |
| Structure             |                                                                                                                                                                                          |
| Casing Material       | Metal                                                                                                                                                                                    |
| Product Dimensions    | 173.3 mm × 70.0 mm × 70.0 mm (6.82" × 2.76" × 2.76")<br>(L × W × H)                                                                                                                      |
| Net Weight            | 0.44 kg (0.97 lb)                                                                                                                                                                        |
| Gross Weight          | 0.55 kg (1.21 lb)                                                                                                                                                                        |

| Ordering Information   |                       |                                                              |
|------------------------|-----------------------|--------------------------------------------------------------|
| Type                   | Model                 | Description                                                  |
| IP CAMERA              | DH-IPC-HFW1639TC-A-IL | 6MP Entry Smart Dual Light Fixed-focal Bullet Network Camera |
| Accessories (Optional) | G3416GW               | G3/4" Water Joint                                            |
|                        | DH-PFA130-E           | Water-proof Junction Box                                     |
|                        | DH-PFA151             | Corner mount bracket                                         |
|                        | DH-PFA152-E           | Pole Mount Bracket                                           |
|                        | DH-PFA134             | Junction box                                                 |
|                        | DH-PFM321-EN          | DC12V1A power adapter                                        |
|                        | DH-PFM321D-EN         | DC12V 1A power adapter                                       |
|                        | DH-PFM320D-EN         | DC12V2A power adapter                                        |
|                        | PFM900-E              | Integrated Mount Tester                                      |

Accessories

Optional:



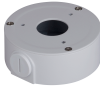
DH-PFA130-E  
Water-proof Junction Box



DH-PFA151  
Corner mount bracket



DH-PFA152-E  
Pole Mount Bracket



DH-PFA134  
Junction box



DH-PFM321-EN  
DC12V1A power adapter



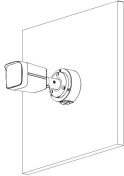
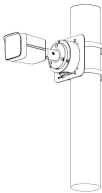
DH-PFM321D-EN  
DC12V 1A power adapter



DH-PFM320D-EN  
DC12V2A power adapter



PFM900-E  
Integrated Mount Tester

| Ceiling Mount                                                                        | Wall Mount                                                                            | Pole Mount (Vertical)                                                                 |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |

Dimensions (mm[inch])

