

# DH-IPC-HFW1431S1-S4

## 4MP Entry IR Fixed-focal Eyeball Network Camera



- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440) @25/30 fps, and supports max. 4MP (2688 × 1520) @20 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max. IR distance: 30 m
- ROI, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Image flip, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Abnormality detection: Motion detection, video tampering, network disconnection, IP conflict, illegal access, voltage detection
- 12V DC/PoE power support
- IP67, protection



### System Overview

With features of simple installation, easy operation, and high performance-cost ratio, Dahua Entry Series 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+ & 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 (General) technology triggers alarm or records.

#### Wide Dynamic Range (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.

#### Smart IR

Dahua Smart IR technology can display image in the environment of low illuminance or completely dark environment. According to the distance of the targets, the camera adjusts IR LEDs intensity automatically to display the details of the moving target.

#### 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 works normal after soaking in 1 m deep water for 30 minutes.

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

**Technical Specification**

**Camera**

|                          |  |
|--------------------------|--|
| Image Sensor             | 1/3"4Megapixel progressive CMOS                              |
| Effective Pixels         | 2688 (H) x1520 (V)   |
| ROM                      | 128 MB   |
| RAM                      | 128 MB   |
| Scanning System          | Progressive  |
| Electronic Shutter Speed | Auto/Manual 1/3 s-1/100000 s                                 |
| Min. Illumination        | 0.03 Lux @ F2.0  |
| IR Distance              | 30 m (98.4 ft)   |
| IR On/Off Control        | Auto/Manual  |
| IR LEDs Number           | 1  |
| Pan/Tilt/Rotation Range  | Horizontal: 0°-360°<br>Vertical: 0°-90°<br>Rotation: 0°-360° |

**Lens**

|                      |   |                      |                      |                     |                     |
|----------------------|---|----------------------|----------------------|---------------------|---------------------|
| Lens Type            | Fixed   |                      |                      |                     |                     |
| Mount Type           | M12   |                      |                      |                     |                     |
| Focal Length         | 2.8 mm<br>3.6 mm  |                      |                      |                     |                     |
| Max. Aperture        | F2.0  |                      |                      |                     |                     |
| Field of View        | 2.8 mm:<br>Horizontal: 93°<br>Vertical: 53°<br>Diagonal: 111°<br>3.6 mm:<br>Horizontal: 81°<br>Vertical: 44°<br>Diagonal: 95° |                      |                      |                     |                     |
| Iris Type            | Fixed aperture  |                      |                      |                     |                     |
| Close Focus Distance | 2.8 mm: 0.8 m (2.6 ft)<br>3.6 mm: 1.4 m (4.6 ft)  |                      |                      |                     |                     |
| DORI Distance        | Lens  | Detect               | Observe              | Recognize           | Identify            |
|                      | 2.8mm   | 50.0 m<br>(183.7 ft) | 22.4 m<br>(73.5 ft)  | 11.2 m<br>(36.7 ft) | 15.1 m<br>(18.4 ft) |
|                      | 3.6mm   | 80.0 m<br>(262.5 ft) | 32.0 m<br>(105.0 ft) | 16.0 m<br>(52.5 ft) | 8.0 m<br>(26.2 ft)  |

**Video**

|                   |  |
|-------------------|--|
| Video Compression | H.265; H.264; H.264B; MJPEG  |
| Smart Codec       | Yes  |
| Video Frame Rate  | Main Stream:<br>2688 x 1520 (1 fps-20 fps)<br>2560 x 1440 (1 fps-25/30 fps)<br>Sub Stream:<br>704 x 576 (1 fps-20/25 fps)<br>704 x 480 (1 fps-20/30 fps)   |
| Stream Capability | 2 streams  |
| Resolution        | 2688 x 1520 (2688 x 1520); 2560 x 1440 (2560 x 1440);<br>2304 x 1296 (2304 x 1296); 1080p (1920 x 1080); 1.3M<br>(1280 x 960); 720p (1280 x 720); D1 (704 x 576/704 x<br>480); VGA (640 x 480); CIF (352 x 288/352 x240) |
| Bit Rate Control  | CBR; VBR   |

|                         |   |
|-------------------------|---|
| Video Bit Rate          | H.264: 32 Kbps-6144 Kbps<br>H.265: 12 Kbps-6144 Kbps                |
| Day/Night               | Auto(ICR)/Color/B/W   |
| BLC                     | Yes   |
| HLC                     | Yes   |
| WDR                     | 120 dB  |
| White Balance           | Auto/natural/street lamp/outdoor/manual/regional<br>custom          |
| Gain Control            | Manual/Auto   |
| Noise Reduction         | 3D DNR  |
| Motion Detection        | OFF/ON (4 areas, rectangular)                                       |
| Region of Interest(RoI) | Yes (4 areas)   |
| Smart IR                | Yes   |
| Image Rotation          | 0°/90°/180°/270° (Support 90°/270° with 2688 x 1520<br>resolution.) |
| Mirror                  | Yes   |
| Privacy Masking         | 4 areas   |

**Network**

|                     |  |
|---------------------|--|
| Network             | RJ-45 (10/100 Base-T)  |
| Protocol            | HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP;<br>DHCP; DNS; DDNS; PPPoE; IPv4/v6; QoS; UPnP; NTP;<br>RTMP; Multicast; HTTPS; SFTP; 802.1x; ICMP; IGMP |
| Interoperability    | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec; P2P  |
| User/Host           | 20   |
| Edge Storage        | Dahua Cloud; FTP; NAS  |
| Browser             | IE<br>Chrome<br>Firefox  |
| Management Software | Smart PSS; DSS; DMSS   |
| Mobile Phone        | IOS; Android   |

**Certification**

|                |  |
|----------------|--|
| Certifications | CE-LVD: EN60950-1<br>CE-EMC: Electromagnetic Compatibility Directive<br>2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B |
|----------------|--|

**Power**

|                   |                      |
|-------------------|----------------------|
| Power Supply      | 12V DC/POE (802.3af) |
| Power Consumption | < 5.0W               |

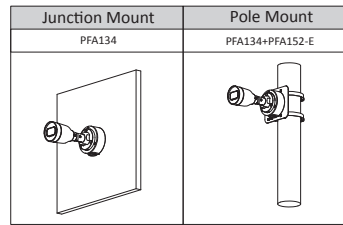
**Environment**

|                      |  |
|----------------------|--|
| Operating Conditions | -40°C to +55°C (-40°F to +131°F) /less than95% |
| Storage Conditions   | -40°C to +60°C (-40°F to +140°F)               |
| Ingress Protection   | IP67   |

# Entry Series | DH-IPC-HFW1431S1-S4

## Structure

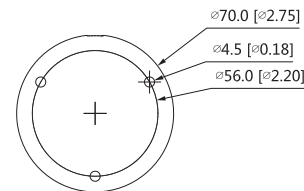
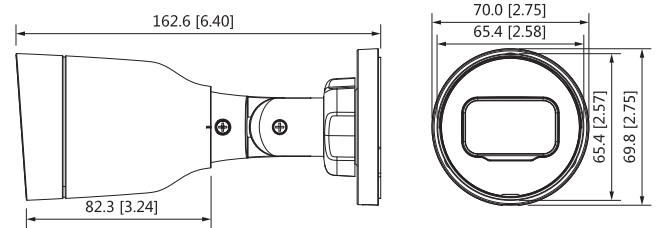
|              |                                  |
|--------------|----------------------------------|
| Casing       | Metal +Plastic                   |
| Dimensions   | 162.6 mm × Φ70 mm (6.4" × Φ2.8") |
| Net Weight   | 0.22 kg (0.5 lb)                 |
| Gross Weight | 0.35 kg (0.8 lb)                 |



## Ordering Information

| Type                   | Part Number          | Description   |
|------------------------|----------------------|---|
| 4MP Camera             | DH-IPC-HFW1431S1P-S4 | 4MP Entry IR Fixed-focal Bullet Network Camera,PAL  |
|                        | DH-IPC-HFW1431S1N-S4 | 4MP Entry IR Fixed-focal Bullet Network Camera,NTSC |
| Accessories (optional) | PFA134               | Junction Box  |
|                        | PFA152-E             | Pole Mount  |
|                        | PFM321D              | DC12V1A Power Adapter                               |
|                        | LR1002-1ET/1EC       | Single-port Long Reach Ethernet over Coax Extender  |
|                        | PFM900-E             | Integrated Mount Tester                             |

## Dimensions (mm[inch])



## Accessories

### Optional:



PFA134  
Junction Box



PFA152-E  
Pole Mount



PFM321D  
DC12V1A Power  
Adapter



LR1002-1ET/1EC  
Single-port Long  
Reach ethernet over  
coax Extender



PFM900-E  
Integrated Mount  
Tester