

DH-IPC-HFW1230T-ZS-S4

2MP Entry IR Vari-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 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.

Motion Detection

When moving objects appear in the monitoring image, Dahua Motion Detection (General) technology triggers alarm or records.

Smart Illumination

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

- 2MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2MP (1920 × 1080)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 50 m.
- ROI, SMART H.264 +/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Abnormality detection: Motion detection, privacy masking, no SD card, SD card full, SD card error, network disconnection, IP conflict, and illegal access.
- Supports max. 256 GB SD card.
- 12V DC/PoE power supply.
- IP67 protection.



Cyber Security

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading 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 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 | 1/2.8" CMOS |
| Max. Resolution | 1920 (H) × 1080 (V) |
| ROM | 16 MB |
| RAM | 128 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.008 Lux@F1.7 (Color, 30 IRE) 0.0008 Lux@F1.7 (B/W, 30 IRE) 0 Lux (Illuminator on) |
| S/N Ratio | > 56 dB |
| Illumination Distance | 50 m (164.04 ft) (IR) |
| Illuminator On/Off Control | Auto; Manual |
| Illuminator Number | 2 (IR) |
| Pan/Tilt/Rotation Range | Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360° |

Lens

| | | | | | |
|----------------------|--|----------------------|---------------------|--------------------|-------------------|
| Lens Type | Motorized vari-focal | | | | |
| Lens Mount | φ14 | | | | |
| Focal Length | 2.8 mm–12 mm | | | | |
| Max. Aperture | F1.7 | | | | |
| Field of View | Horizontal: 101°–33.5°; Vertical: 52.5°–19°; Diagonal: 125°–38.5° | | | | |
| Iris Control | Fixed | | | | |
| Close Focus Distance | 0.8 m (2.6 lb) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | W | 48 m (157.48 ft) | 19 m (62.34 ft) | 10 m (32.81 ft) | 5m (16.40 ft) |
| | T | 131 m (429.79 ft) | 52 m (170.60 ft) | 26 m (85.30 ft) | 13m (42.65 ft) |

Video

| | |
|-------------------|---|
| Video Compression | H.265; H.264; H.264B; MJPEG (Only supported by the sub stream) |
| Smart Codec | Smart H.265+; Smart H.264+ |
| Video Frame Rate | Main stream:1920 × 1080@1–25/30 fps Sub stream: 704 × 576@1–25 fps/704 × 480@1–30 fps *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 | 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–6144 kbps H.265: 12 kbps–6144 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 |
| Image Rotation | 0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower) |
| Mirror | Yes |
| Privacy Masking | 4 areas |

Alarm

| | |
|-------------|---|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; security exception; defocus detection |
|-------------|---|

Network

| | |
|---------------------|--|
| Network Port | RJ-45 (10/100 Base-T) |
| SDK and API | Yes |
| 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 |
| Network Protocol | IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; SMTP; FTP; DHCP; DNS; NTP; Multicast; DDNS |
| Interoperability | ONVIF (Profile S/Profile T); CGI; P2P; Milestone |
| User/Host | 6 |
| Storage | FTP; Micro SD card (Support max. 256 G) |
| Browser | IE Chrome Firefox |
| Management Software | Smart PSS; DSS; DMSS |
| Mobile Client | IOS; Android |

Certification

| | |
|----------------|---|
| Certifications | CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B |
|----------------|---|

Power

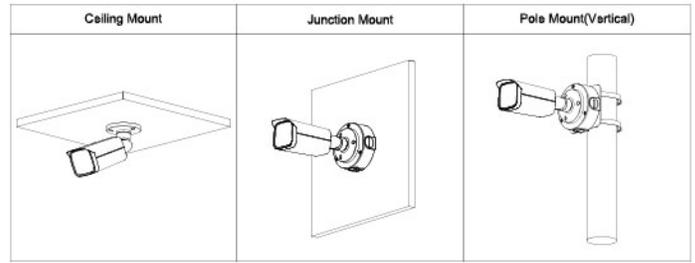
| | |
|-------------------|---|
| Power Supply | 12V DC/PoE (802.3af) |
| Power Consumption | Basic: 1.8W (12 V DC); 2.3W (PoE) Max. (H.265 + ICR + IR intensity): 4.3 W (12V DC); 5.5 W (PoE) |

Environment

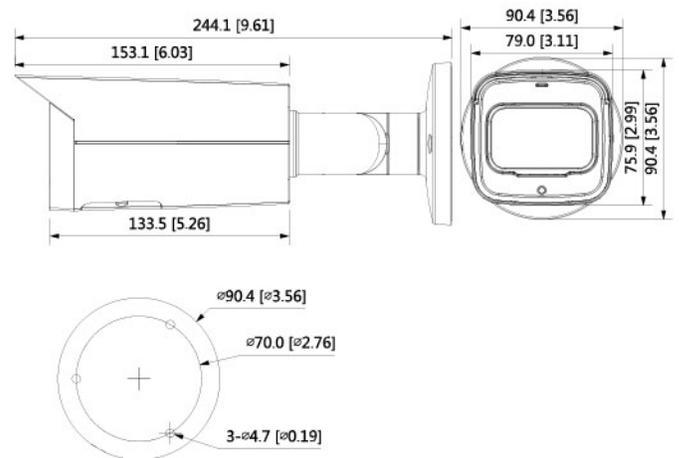
| | |
|-----------------------|-------------------------------------|
| Operating Temperature | -30 °C to +60 °C (-22 °F to 140 °F) |
| Operating Humidity | ≤95% |
| Storage Temperature | NA |
| Protection | IP67 |
| Storage Conditions | -40°C to +60°C (-40°F to +140°F) |

Structure

| | |
|--------------------|--------------------------------------|
| Casing | Metal |
| Product Dimensions | 244.1 mm × Ø90.4 mm (9.61" × Ø3.56") |
| Net Weight | 0.86 kg (1.90 lb) |
| Gross Weight | 1.12 kg (2.47 lb) |



Dimensions (mm[inch])



Ordering Information

| Type | Model | Description |
|------------------------|-----------------------|--|
| 2MP Camera | DH-IPC-HFW1230T-ZS-S4 | 2MP Entry IR Vari-focal Dome Network Camera |
| Accessories (Optional) | PFA130-E | Junction Mount Bracket |
| | PFA130-E+PFA152-E | Pole Mount Bracket |
| | PFM321D | 12V DC 1A Power Adapter |
| | LR1002-1ET/1EC | Single-port Long Reach Ethernet over Coax Extender |
| | PFM900-E | Integrated Mount Tester |
| | PFM114 | TLC SD Card |

Accessories

Optional:

| | | |
|---|---|---|
|  |  |  |
| PFA130-E Junction Mount Bracket | PFA130-E+PFA152-E Pole Mount Bracket | PFM321D DC12V1A Power Adapter |
|  |  |  |
| LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender | PFM900-E Integrated Mount Tester | PFM114 TLC SD Card |