**dahua** TECHNOLOGY

# DH-IPC-HDW1230T-ZS-S4

## 2MP Entry IR Vari-focal Eyeball Netwok Camera

- 2MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 2MP (1920 × 1080) @25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max. IR distance: 40 m
- ROI, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Abnormality detection: no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, Motion detection, video tampering, security exception
- Supports max. 256 GB SD card
- 12V DC/PoE power support
- IP67 protection

| 2Mp | H.265+ | Motion Detection | | IP67 |

## System 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 Codec

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 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.

### 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.

### 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 ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

**O**nvif

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.7" 2Megapixel progressive CMOS |
| Effective Pixels | 1920 (H) × 1080 (V) |
| ROM | 16 MB |
| RAM | 64 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100000 s |
| Min. Illumination | 0.008 Lux @ F1.7 |
| IR Distance | 40 m (131.2 ft) |
| IR On/Off Control | Auto/Manual |
| IR LEDs Number | 2 |
| Pan/Tilt/Rotation Range | Pan: 0°–355°<br>Tilt: 0°–78°<br>Rotation: 0°–360° |

### Lens

| | |
|---|---|
| Lens Type | Motorized vari-focal |
| Mount Type | φ14 |
| Focal Length | 2.8 mm–12 mm |
| Max. Aperture | F1.7 |
| Field of View | Pan: 106°–33°<br>Tilt: 56°–19°<br>Diagonal: 127°–38° |
| Iris Type | Fixed |
| Close Focus Distance | 0.8 m  (2.6 ft) |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | W | 44.0 m (144.4 ft) | 17.6 m (57.7 ft) | 8.8 m (28.9 ft) | 4.4 m (14.4 ft) |
| | T | 153.1 m (502.3 ft) | 61.2 m (200.8 ft) | 30.6 m (100.4 ft) | 15.3 m (50.2 ft) |

### Video

| | |
|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG |
| Smart Codec | Yes |
| Video Frame Rate | Main Stream:<br>1920 × 1080 (1 fps–25/30 fps)<br>Sub stream:<br>704 × 576 (1 fps–25 fps)<br>704 × 480 (1 fps–30 fps) |
| 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<br>H.265: 12 Kbps–7424 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 | 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 1080p resolution and lower.) |
| Mirror | Yes |
| Privacy Masking | 4 areas |

### Network

| | |
|---|---|
| Network | RJ-45 (10/100 Base-T) |
| Protocol | IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; SMTP; FTP; DHCP; DNS; NTP; Multicast |
| Interoperability | ONVIF (Profile S); CGI; Genetec; P2P |
| User/Host | 6 |
| Edge Storage | Dahua Cloud; FTP; Micro SD card (support max. 256 GB) |
| 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 2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B |

### Power

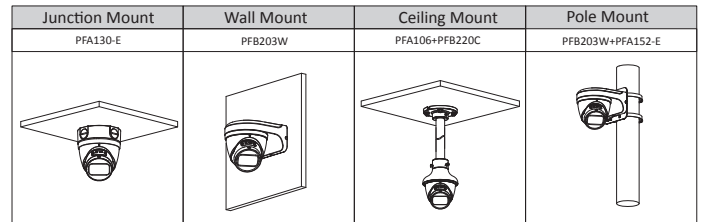| | |
|---|---|
| Power Supply | 12V DC/PoE (802.3af) |
| Power Consumption | < 6.5W |

### Environment

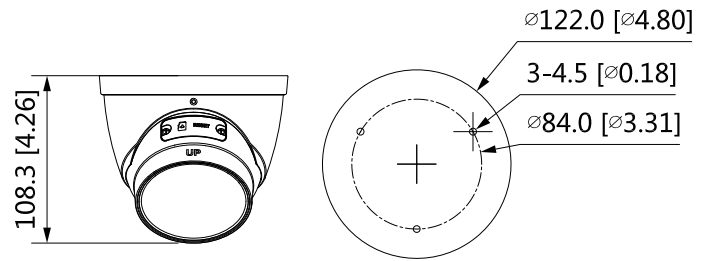| | |
|---|---|
| Operating Conditions | -30°C to +60°C (-22°F to +140°F)/less than ≤ 95% RH |
| Strorage Conditions | -40°C to +60°C (-40°F to +140°F) |
| Ingress Protection | IP67 |

## Structure

| | |
|---|---|
| Casing | Metal |
| Dimensions | 108.3 mm × Φ122 mm (4.3" × Φ4.8") |
| Net Weight | 0.68 kg (1.5 lb) |
| Gross Weight | 0.87 kg (1.9 lb) |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 2MP Camera | DH-IPC-HDW1230TP-ZS-S4 | 2MP Entry IR vari-focal Eyeball Netwok Camera,PAL |
| | DH-IPC-HDW1230TN-ZS-S4 | 2MP Entry IR Vari-focal Eyeball Netwok Camera,NTSC |
| Accessories (optional) | PFA130-E | Junction Box |
| | PFB203W | Wall Mount |
| | PFA106 | Mount Adapter |
| | PFB220C | Ceiling Mount |
| | PFA152-E | Pole Mount |
| | PFM321D | DC12V1A Power Adapter |
| | LR1002-1ET/1EC | Single-port Long Reach Ethernet over Coax Extender |
| | PFM900-E | Integrated Mount Tester |
| | PFM114 | TLC SD Card |

| Junction Mount | Wall Mount | Ceiling Mount | Pole Mount |
|---|---|---|---|
| PFA130-E | PFB203W | PFA106+PFB220C | PFB203W+PFA152-E |

## Dimensions (mm[inch])

∅122.0 [∅4.80]
3-4.5 [∅0.18]
∅84.0 [∅3.31]
108.3 [4.26]

## Accessories

**Optional:**

PFA130-E Junction Box
PFB203W Wall Mount
PFA106 Mount Adapter
PFB220C Ceiling Mount
PFA152-E Pole Mount
PFM321D DC12V1A Power Adapter
LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender
PFM900-E Integrated Mount Tester
PFM114 TLC SD Card