

DH-IPC-HFW3241DF-AS-4G

2MP IR Fixed focal Bullet WizSense 4G Network Camera



Wiz Sense

Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

With advanced deep learning algorithm, Dahua WizSense 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

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.

SMD

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

4G

With a built-in high-performance 4G mobile network module, the camera can be directly registered to cloud platforms after a 4G SIM card has been inserted into it. It can be installed anywhere without the hassle of network cables. Users can perform real-time monitoring and remote control of the camera from a mobile client through 4G network.

- 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+, AI 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.
- Intelligent detection: Intrusion, tripwire (support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, privacy masking, no SD card, SD card full, SD card error, network disconnection, IP conflict, and illegal access.
- Support low power push alarm function; support the intergration of solar energy.
- Support the camera to get the power information through 485 link, and OSD overlay display.
- Alarm: 2 in,2 out; audio: 1 in, 1 out; 1 RS-485; supports max. 256 G Micro SD card.
- 12 VDC power supply.
- IP67 protection.
- SMD 3.0.



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.

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% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

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.

Technical Specification

Camera

| | |
|----------------------------|---|
| Image Sensor | 1/2.8" CMOS |
| Effective Pixels | 1920 (H) × 1080 (V) |
| ROM | 128 MB |
| RAM | 512 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.002 Lux@F1.6(Color,30IRE) 0.0002 Lux@F1.6(B/W,30IRE) 0 lux (Illuminator on) |
| S/N Ratio | > 56 dB |
| Illumination Distance | 50 m (273 ft) (IR) |
| Illuminator On/Off Control | Auto; Manual |
| Illuminator Number | 2 (IR LED) |
| Pan/Tilt/Rotation Range | Pan: 0°–360° Tilt: –60°–0° Rotation: 0°–360° |

Lens

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|----------------------|---|-------------------|-------------------|------------------|-----------------|
| Lens Type | Fixed-focal | | | | |
| Mount Type | M12 | | | | |
| Focal Length | 2.8mm; 3.6mm; 6mm | | | | |
| Max. Aperture | 2.8mm:F1.6 3.6mm:F1.6 6mm:F1.6 | | | | |
| Field of View | 2.8 mm: Horizontal 107° × Vertical 56° × Diagonal 127° 3.6 mm: Horizontal 88° × Vertical 44° × Diagonal 105° 6 mm: Horizontal 54° × Vertical 29° × Diagonal 63° | | | | |
| Iris Type | Fixed | | | | |
| Close Focus Distance | 2.8 mm: 0.7 m (2.5 ft) 3.6 mm: 1.3 m (4.25 ft) 6 mm: 2.8 m (9.15 ft) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 2.8 mm | 43.9 m (144 ft) | 17.5 m (57.4 ft) | 8.8 m (28.8 ft) | 4.4 m (14.4 ft) |
| | 3.6 mm | 58.9 m (193 ft) | 23.6 m (77.4 ft) | 11.8 m (38.4 ft) | 5.9 m (19.4 ft) |
| | 6 mm | 88.3 m (289.6 ft) | 35.3 m (115.8 ft) | 17.7 m (58 ft) | 8.8 m (28.8 ft) |

Professional, Intelligent

| | |
|----------------------------|---|
| Intelligent Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos |
| SMD 3.0 | Less false alarm, longer detection distance |
| IVS (Perimeter Protection) | Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human) |
| Smart Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos |

Video

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|--------------------------|--|
| 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+ |
| AI Coding | AI Coding AI H.265; AI H.264 |
| Video Frame Rate | Main stream: 1920 × 1080@(1 fps–30 fps) Sub stream: 704 × 576@(1 fps–25 fps)/704 × 480@(1 fps–30 fps) Third stream:1920 × 1080@(1 fps–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 | 3 streams |
| Resolution | 1080p (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288) |
| Bit Rate Control | CBR; VBR |
| Video Bit Rate | H.264:512kbps-8192kbps H.265:256kbps-7424kbps |
| 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) |
| Image Rotation | 0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution and lower) |
| Mirror | Yes |
| Privacy Masking | 8 areas |

Audio

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|-------------------|------------------------------------|
| Audio Compression | PCM; G.711a; G.711Mu; G.726; G.723 |
| Built-in MIC | Yes |

Alarm

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|-------------|--|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; SMD; security exception |
|-------------|--|

Network

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|----------------|---|
| Network | RJ-45 (10/100 Base-T) |
| SDK and API | Yes |
| Cyber Security | Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade |

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|---------------------|--|
| Network Protocol | IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP |
| Interoperability | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone |
| User/Host | 20 (Total bandwidth: 64 M) |
| Storage | FTP; SFTP; Micro SD card (support max. 256 GB); NAS |
| Browser | IE: IE8/9/11 Chrome Firefox |
| Management Software | Smart PSS; DSS; DMSS |
| Mobile Client | iOS; Android |
| 4G | 4G_LTE: B1/B3/B5/B7/B8/B20/B28/B38/B40/B41 3G_WCDMA : B1/B5/B8 2G_GSM : B3/B5/B8 |

Certification

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

Port

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| RS-485 | 1 (baud rate range: 1200 bps–115200 bps) |
| Audio Input | 1 channel (RCA port) |
| Audio Output | 1 channel (RCA port) |
| Alarm Input | 2 channels in: 5 mA 3 V–5 VDC |
| Alarm Output | 2 channels out: 300 mA 12 VDC |

Power

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| Power Supply | 12 VDC |
| Power Consumption | Basic: 3.3 W (12 VDC); Max. (WDR+H.265+IR+4G): 5.9W (12 VDC) |

Environment

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|-----------------------|--------------------------------------|
| Operating Temperature | -30 °C to +60 °C (-22 °F to +140 °F) |
| Operating Humidity | ≤ 95% |
| Storage Temperature | -30 °C to +70 °C (-22 °F to +163 °F) |
| Protection | IP67 |

Structure

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|--------------|--|
| Casing | Metal + plastic |
| Dimensions | 227.6 mm × 204.2 mm × 87.2 mm (9.0" × 8.0" × 3.4") |
| Net Weight | 945 g (2.1 lb) |
| Gross Weight | 1440 g (3.1 lb) |

Ordering Information

| Type | Model | Description |
|-------------|-------------------------|--|
| 2MP Camera | DH-IPC-HFW3241F-AS-4G | 2MP IR Fixed focal Bullet WizSense 4G Network Camera |
| | PFB121W | Wall Mount Bracket |
| Accessories | PFB121W+PFA121+PFA152-E | Pole Mount Bracket |
| | PFB110W | Celling Mount Bracket |
| | PFM321D | 12 VDC 1A Power Adapter |
| | LR1002-1ET/1EC | Single-port Long Reach Ethernet over Coax Extender |
| | PFM900-E | Integrated Mount Tester |
| | PFM114 | TLC SD Card |

Accessories

Standard:



PFB121W
Wall Mount Bracket

Optional:



PFB121W+PFA121+PFA152-E
Pole Mount Bracket



PFB110W
Celling Mount Bracket



PFM321D
12V DC 1 A Power
Adapter



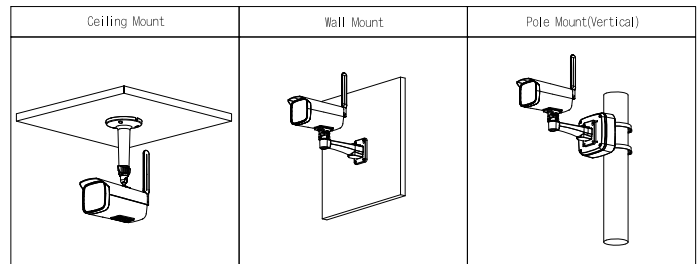
LR1002-1ET/1EC
Single-port Long
Reach Ethernet over
Coax Extender



PFM900-E
Integrated Mount Tester



PFM114
TLC SD Card



Dimensions (mm[inch])

