

DH-IPC-PDW2849-A180-S-PV

2x4MP Duo Splicing Fixed-focal Eyeball WizSense 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 2 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

EPTZ

With advanced target detection and tracking algorithms, Dahua EPTZ technology can simultaneously zoom in and track multiple humans and vehicles that trigger alarms. It provides rich details and a panoramic view at the same time.

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.

- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Outputs 180° wide angle splicing image.
- Outputs max. 8 MP (4096 × 1860)@20fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED and warm light, the max. IR distance is 25 m and the max. warm light distance is 20 m.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Max. 512 GB Micro SD card; built-in dual Mic; built-in speaker; supports two-way talk.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- SMD 3.0.



Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

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 $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

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|----------------------------|---|
| Image Sensor | 1/2.7" CMOS (x2) |
| Max. Resolution | 4096 (H) × 1860 (V) |
| ROM | 128 MB |
| RAM | 1 GB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.005 lux@F1.4 (Color, 30 IRE) 0.0005 lux@F1.4 (B/W, 30 IRE) 0 lux (Illuminator on) |
| S/N Ratio | >56 dB |
| Illumination Distance | 2.8 mm: Up to 25 m (82.02 ft) (IR) Up to 20 m (65.62 ft) (Warm light) |
| Illuminator On/Off Control | Auto; Manual |
| Illuminator Number | 2 (IR LED); 2 (Warm light) |
| Angle Adjustment | Pan: 0°–360° Tilt: 0°–77° Rotation: 0°–360° |

Lens

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|----------------------|-------------------------|
| Lens Type | Fixed-focal |
| Lens Mount | M12 |
| Focal Length | 2.8 mm |
| Max. Aperture | F1.4 |
| Field of View | 2.8 mm: H: 180°; V: 86° |
| Iris Control | Fixed |
| Close Focus Distance | 2.8 mm: 0.8 m (2.62 ft) |

| | Lens | Detect | Observe | Recognize | Identify |
|---------------|---|------------------------|-----------------------|-----------------------|----------------------|
| | 2.8 mm | 50.6 m (166.01 ft) | 20.2 m (66.27 ft) | 10.1 m (33.14 ft) | 5.1 m (16.73 ft) |
| DORI Distance | *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

| | |
|----------------------------|---|
| EPTZ | Enlarge and track the targets of intelligent alarms |
| IVS (Perimeter Protection) | Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human) |
| SMD | SMD 3.0 |
| 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+ |
| Video Frame Rate | Main stream: 4096 × 1860@(1–20 fps) Sub stream: 1200 × 536@(1–20 fps) Third stream: 1920 × 860@(1–20 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. |
| Streaming Capability | 3 streams |
| Resolution | 8M (4096 × 1860); 6M (3632 × 1632); 4M (3040 × 1368); 1200 × 536; 1920 × 860; 960 × 432; D1 (704 × 576/704 × 480) |
| Bit Rate Control | VBR; CBR |
| Video Bit Rate | H.264: 6 kbps–16384 kbps; H.265: 6 kbps–16384 kbps |
| Day/Night | Auto(ICR)/Color/B/W |
| BLC | Yes |
| HLC | Yes |
| WDR | 120 dB |
| Scene Self-adaptation (SSA) | Yes |
| 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 |
| Defog | Yes |
| Privacy Masking | 4 areas |

Audio

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| Built-in MIC | Yes, built-in dual Mic |
| Built-in Speaker | Yes, built-in speaker; Max power consumption: 2 W; max sound level at 10 cm: 110 dB * Test results from laboratory |
| Audio Compression | G.711a; G.711Mu; G.726; PCM |

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; audio detection; voltage detection; SMD; security exception |
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Network

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|------------------|--|
| 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; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP; P2P |

| | |
|---------------------|---|
| Interoperability | ONVIF (Profile S & Profile G & Profile T & Profile M); CGI |
| User/Host | 20 (Total bandwidth: 64 M) |
| Storage | FTP; SFTP; Micro SD card (support max. 512 GB); NAS |
| Browser | IE: IE 8 and later; Chrome; Firefox |
| Management Software | SmartPSS Lite; DSS; DMSS; DoLynk Care |
| Mobile Client | iOS;Android |
| Security | 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 |

Function

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|---------------|--|
| Light Warning | Warm light warning Flash/Solid on duration: 5 s–30 s Flash frequency: high, medium, low |
| Sound Warning | Offers 11 sound alarms and supports importing 10 custom sound alarms Sound: 0–100 Play times can be set from 1 to 10 |

Certification

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|----------------|--|
| Certifications | CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU |
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Power

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| Power Supply | 12 VDC (±30%); PoE (802.3af) |
| Power Consumption | Basic: 4.5 W (12 VDC); 5.3 W (PoE); Max.: 9.7 W (12 VDC); 11.2 W (PoE) (H.265 + WDR + light on + intelligence on) |

Environment

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|-----------------------|--|
| 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 |
| Anti-corrosion Level | Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection. |

Structure

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|--------------------|---------------------------------------|
| Casing Material | Metal |
| Product Dimensions | 135.2 mm × Φ122.0 mm (5.32" × Φ4.80") |
| Net Weight | 0.95 kg (2.09 lb) |
| Gross Weight | 1.11 kg (2.45 lb) |

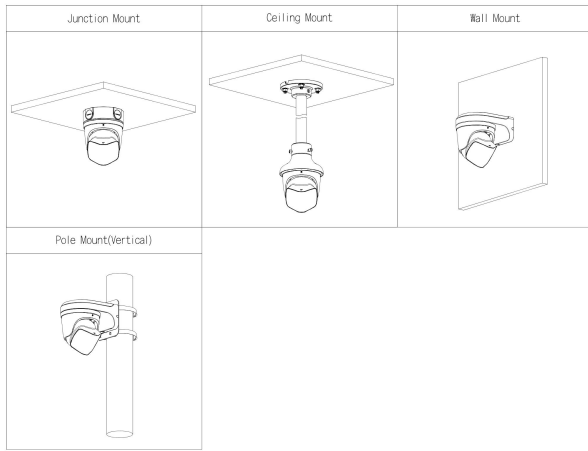
Ordering Information

| Type | Model | Description |
|------------------------|--------------------------|--|
| IP CAMERA | DH-IPC-PDW2849-A180-S-PV | 2x4MP Duo Splicing Fixed-focal Eyeball WizSense Network Camera |
| | DH-PFB220C | Ceiling Mount Bracket |
| Accessories (Optional) | DH-PFA109 | Mount Adapter |
| | DH-PFB305W | Wall Mount Bracket |
| | DH-PFA151 | Corner Mount Bracket |
| | DH-PFA150 | Pole Mount Bracket |
| | DH-PFA156 | Pole Mount Bracket |
| | DH-PFB2203W | Wall Mount Bracket |
| | DH-PFA137 | Junction Box |
| | DH-PFM321-EN | DC12V1A power adapter |
| | DH-PFM325D-1210EN | DC12V 1A Power Adapter |
| | DH-PFM320D-EN | DC12V2A power adapter |

Accessories

Optional:





Dimensions (mm[inch])

