

DH-IPC-HFW4431E-S-S4

4MP WDR IR Mini Bullet Network Camera



- 1/3" 4Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 25/30fps@4Mp(2688×1520)
- Smart Detection supported
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 3.6mm fixed lens (6mm optional)
- Max. IR LEDs Length 40m
- Micro SD memory 256GB, IP67, PoE,



System Overview

Eco-savvy products by upgrading H.265 encoding technology, bringing high efficient video compression. It saves bandwidth and storage, energy-saving design to enhance the monitoring system. Meanwhile, the series offers features such as starlight, Smart IR technology, intelligent image analysis techniques. It provides excellent image quality and intelligent and efficient event reminders. This series provides IP67 weatherproof and IK10 vandal-proof protection feature. Give customers more value

Functions

Starlight Technology

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.01 lux).

Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

Environmental

With a temperature range of -40 °C to +60 °C (-40°F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Protection

Supporting ±30% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 2KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Smart H.265+

Deliver high quality video without straining the network, Smart H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265.

Technical Specification

Camera

| | |
|--------------------------|--|
| Image Sensor | 1/3" 4Megapixel progressive scan CMOS |
| Effective Pixels | 2688(H)x1520(V) |
| RAM/ROM | 512MB/32MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual, 1/3(4)~1/10000s |
| Minimum Illumination | 0.01Lux/F2.0(Color,1/3s,30IRE) 0.3Lux/F2.0(Color,1/30s,30IRE) 0Lux/F2.0(IR on) |
| IR Distance | Distance up to 40m (131ft) |
| IR On/Off Control | Auto/ Manual |
| IR LEDs | 2 |

Lens

| | | | | | |
|----------------------|----------------------------|-------------|------------|-----------|-----------|
| Lens Type | Fixed | | | | |
| Mount Type | Board-in | | | | |
| Focal Length | 3.6mm (6mm optional) | | | | |
| Max. Aperture | F2.0 (F2.0) | | | | |
| Angle of View | H: 81° (51°), V: 44° (29°) | | | | |
| Optical Zoom | N/A | | | | |
| Aperture Type | Fixed | | | | |
| Close Focus Distance | 1.4m/2.8m | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 3.6 mm | 80m(262ft) | 32m(105ft) | 16m(52ft) | 8m(26ft) |
| | 6.0 mm | 120m(394ft) | 48m(157ft) | 24m(79ft) | 12m(39ft) |

Pan/Tilt/Rotation

| | |
|-------------------------|--|
| Pan/Tilt/Rotation Range | Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360° |
|-------------------------|--|

Intelligence

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|--------------------------------|---|
| IVS | Tripwire, Intrusion, Object Abandoned/Missing |
| Advanced Intelligent Functions | Face Detection |

Video

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|----------------------|--|
| Compression | H.265+/H.265/H.264+/H.264 |
| Streaming Capability | 3 Streams |
| Resolution | 4M(2688×1520)/3M(2304×1296)/ 1080P(1920×1080)/1.3M(1280×960)/ 720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240) |
| Frame Rate | Main Stream: 4M(1~25/30fps) |
| | Sub Stream: D1(1~25/30fps) |
| | Third Stream: 1080P(1~14/4fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264: 192~10240Kbps H.265: 80~8192Kbps |
| Day/Night | Auto(ICR) / Color / B/W |
| BLC Mode | BLC / HLC / WDR(120dB) |

| | |
|--------------------------------------|---|
| White Balance | Auto/Natural/Street Lamp/Outdoor/Manual |
| Gain Control | Auto/Manual |
| Noise Reduction | 3D DNR |
| Motion Detetion | Off / On (4 Zone, Rectangle) |
| Region of Interest | Off / On (4 Zone) |
| Electronic Image Stabilization (EIS) | N/A |
| Smart IR | Support |
| Defog | N/A |
| Digital Zoom | 16x |
| Flip | 0°/90°/180°/270° |
| Mirror | Off / On |
| Privacy Masking | Off / On (4 Area, Rectangle) |

Audio

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|-------------|-----|
| Compression | N/A |
|-------------|-----|

Network

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|---------------------|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | HTTP; HTTPS; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP |
| Interoperability | ONVIF, PSIA, CGI |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 10 Users /20 Users |
| Edge Storage | NAS Local PC for instant recording Mirco SD card 256GB |
| Web Viewer | IE, Chrome, Firefox, Safari |
| Management Software | Smart PSS, DSS, Easy4ip |
| Smart Phone | IOS, Android |

Certifications

| | |
|----------------|--|
| Certifications | CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B |
|----------------|--|

Interface

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|-----------------|-----|
| Video Interface | N/A |
| Audio Interface | N/A |
| RS485 | N/A |
| Alarm | N/A |

Electrical

| | |
|-------------------|-------------------------------|
| Power Supply | DC12V, PoE (802.3af)(Class 0) |
| Power Consumption | <8.2W |

Environmental

| | |
|----------------------|---|
| Operating Conditions | -40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH |
| Storage Conditions | -40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH |
| Ingress Protection | IP67 |
| Vandal Resistance | N/A |

Construction

| | |
|--------------|-------------------------------------|
| Casing | Metal |
| Dimensions | 180mm×70mm×70mm (7.09"×2.76"×2.76") |
| Net Weight | 0.43kg (0.95lb) |
| Gross Weight | 0.56 kg (1.23lb) |

Ordering Information

| Type | Part Number | Description |
|------------------------|-----------------------------|--|
| 4MP camera | DH-IPC-HFW4431EP-S-0360B-S4 | 4MP IR Mini Bullet Network Camera, WDR, PAL |
| | DH-IPC-HFW4431EN-S-0360B-S4 | 4MP IR Mini Bullet Network Camera, WDR, NTSC |
| | IPC-HFW4431EP-S-0360B-S4 | 4MP IR Mini Bullet Network Camera, WDR, PAL |
| | IPC-HFW4431EN-S-0360B-S4 | 4MP IR Mini Bullet Network Camera, WDR, NTSC |
| | DH-IPC-HFW4431EP-S-0600B-S4 | 4MP IR Mini Bullet Network Camera, WDR, PAL |
| | DH-IPC-HFW4431EN-S-0600B-S4 | 4MP IR Mini Bullet Network Camera, WDR, NTSC |
| | IPC-HFW4431EP-S-0600B-S4 | 4MP IR Mini Bullet Network Camera, WDR, PAL |
| | IPC-HFW4431EN-S-0600B-S4 | 4MP IR Mini Bullet Network Camera, WDR, NTSC |
| Accessories (optional) | PFA121 | Junction box |
| | PFA152-E | Pole Mount |

Accessories

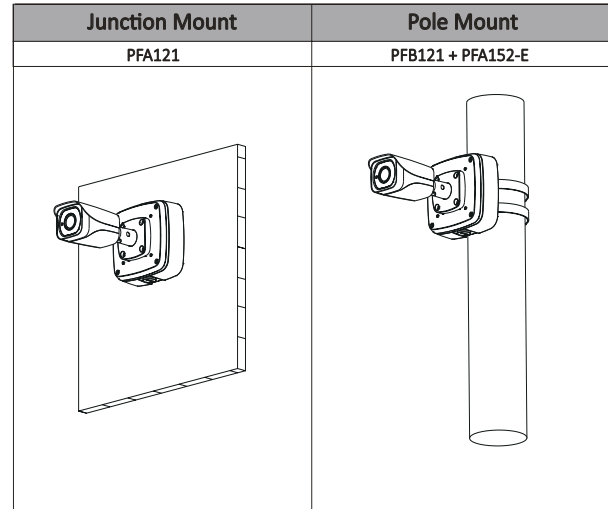
Optional:



PFA121
Junction box



PFA152-E
Pole Mount



Dimensions (mm/inch)

