

DH-IPC-HFW1431S-S

4MP Lite IR Fixed-focal Bullet Network Camera



- \cdot 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440)@25/30fps, Max. supports 4MP (2688 × 1520)@20 fps
- H.265 codec, high compression ration, ultra-low bit rate
- Built-in IR LED, max IR distance: 30 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
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnected, IP conflict, illegal access, voltage detection
- Supports max. 256 GB Micro SD card
- 12V DC/PoE power supply
- IP67 protection



Series Overview

With upgraded H.265 encoding technology, Dahua Lite series network camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better color image in the condition of low illumination. It supports SD card storage, dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 (Supported by some select models).

Functions

Smart H.265+ & Smart H.264+

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart encoding technology realizes the higher efficiency than (H.265 & H.264), providing high-quality video, and reducing the cost of storage and transmission.

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.

Starlight

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

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 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.



Lite Series | DH-IPC-HFW1431S-S-S2

Technical Specification

Camera	
Image Sensor	1/3" 4Megapixel progressive CMOS
Max. Resolution	2688 (H) × 1520 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100000 s
S/N Ratio	> 56 dB
Min. Illumination	0.008 Lux@F2.0
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°
Lens	
Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm 3.6 mm

3.6 mm F2.0

F2.0 2.8 mm:

3.6 mm :

Fixed

Detect

56 m

80 m

2.8 mm: 0.9 m (2.95 ft)

3.6 mm: 1.6 m (3.61 ft)

(183.73 ft) (73.49 ft)

Observe

22.4 m

32.0 m

(262.47 ft) (104.99 ft) (52.49 ft)

Horizontal:102.0° × Vertical 55.0° × Diagonal 121.0°

Horizontal 84.0° × Vertical 45.0° × Diagonal 100.0°

Recognize

11.2 m

16.0 m

(36.75 ft)

Identify

5.6 m

8.0 m

(18.37 ft)

(26.25 ft)

Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (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)
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	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(Rol)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2688 \times 1520 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; tripwire; intrusion; voltage detection; security exception
Alarm Event Network	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage
	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage
Network	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception
Network Network	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T)
Network Network SDK and API	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes 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;
Network Network SDK and API Cyber Security	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes 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 IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE;
Network Network SDK and API Cyber Security Protocol	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes 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 IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour ONVIF(Profile S/Profile G/Profile T);CGI; P2P;
Network Network SDK and API Cyber Security Protocol Interoperability	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes 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 IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPOE; 802.1x; Bonjour ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec
Network Network SDK and API Cyber Security Protocol Interoperability User/Host	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTP5; 802.1x; trusted boot; trusted execution; trusted upgrade IPv4; IPv6; HTTP; HTTP5; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec 20
Network Network SDK and API Cyber Security Protocol Interoperability User/Host Storage	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes 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 IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec 20 FTP; SFTP; Micro SD Card (support max. 256 GB); NAS IE Chrome
Network Network SDK and API Cyber Security Protocol Interoperability User/Host Storage Browser	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception RJ-45 (10/100 Base-T) Yes 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 IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec 20 FTP; SFTP; Micro SD Card (support max. 256 GB); NAS IE Chrome Firefox

2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 ×

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Max. Aperture

Field of View

Close Focus Distance

Lens

2.8 mm

3.6 mm

Iris Type

DORI

Distance

Video CompressionH.265; H.264; H.264B; MJPEG(only supported by sub stream)Smart CodecSmart H.265+/ Smart H.264+Video Frame RateMain stream: 2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps) Stream CapabilityStream Capability2 streams		
Main stream: 2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)	Video Compression	
2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)	Smart Codec	Smart H.265+/ Smart H.264+
Stream Capability 2 streams	Video Frame Rate	2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps)
	Stream Capability	2 streams

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Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
Power	
Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 5W
Environment	
Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than \leq 95% RH
Strorage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection	IP67
Structure	
Casing	Metal
Dimensions	166.2 mm × Φ70 mm (6.54" × Φ2.76")
Net Weight	0.48 kg (1.1 lb)
Gross Weight	0.57 kg (1.3 lb)

Accessories

Optional:



Junction Box

-

1 at 17

LR1002-1ET/1EC

Single-port Long

Reach Ethernet over

Coax Extende



PFM900-E

Integrated Mount

Tester

PFA152-E Pole Mount



PFM321D DC12V1A Power Adapter



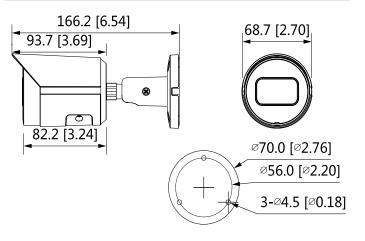
PFM114 TLC SD Card

Pole Mount	Junction Mount
PFA134+PFA152-E	PFA134

Ordering Information

Туре	Part Number	Description
4MP Camera	DH-IPC- HFW1431SP-S-S2	4MP Lite IR Fixed-focal Bullet Network Camera, PAL
HWI Camera	DH-IPC- HFW1431SN-S-S2	4MP Lite IR Fixed-focal Bullet Network Camera, NTSC
	PFA134	Junction Box
	PFA152-E	Pole Mount
Accessories	PFM321D	DC12V1A Power Adapter
(optional)	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Dimensions (mm[inch])



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