

DH-IPC-HFW2431S-S-S2

4MP Lite IR Fixed-focal Bullet Network Camera



- 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.

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

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. With UL CAP Certification, TÜV Rheinland Protected Privacy IoT Product Certification, and ETSI EN 303645 Certification, Dahua network camera better meets the demands of cyber security and privacy protection.

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



Technical	Specification						2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 ×
Camera						Resolution	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
Image Sensor		1/3" 4Mega	oixel progressi	ive CMOS			× 240)
Max. Resolution		2688 (H) × 15	520 (V)			Bit Rate Control	CBR/VBR
ROM		128 MB				Video Bit Rate	H.264: 32 kbps-6144 kbps H.265: 12 kbps-6144 kbps
RAM		128 MB				Day/Night	Auto(ICR)/Color/B/W
Scanning Syst	em	Progressive				BLC	Yes
Electronic Shu	ıtter Speed	Auto/Manua	l 1/3 s–1/100	000 s		HLC	Yes
S/N Ratio		> 56 dB				WDR	120 dB
Min. Illuminat	ion	0.008 Lux@F1.6				White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Illumination D	istance	30 m (98.43	ft)			Gain Control	Auto/Manual
Illuminator Or	n/Off Control	Auto/Manua	ıl			Noise Reduction	3D NR
Illuminator Nu	ımber	1 (IR LED)				Motion Detection	OFF/ON (4 areas, rectangular)
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–90°	•			Region of Interest(RoI)	Yes (4 areas)
		Rotation: 0°-	Rotation: 0°–360°			Smart Illumination	Yes
Lens Lens Type		Fixed-focal				Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution and lower.)
Mount Type		M12				Mirror	Yes
		2.8 mm				Privacy Masking	4 areas
Focal Length		3.6 mm				Alarm	
Max. Apertur	e	F1.6 F1.6					No SD card; SD card full; SD card error; network
Field of View		2.8 mm: Horizontal:102.0° × Vertical 55.0° × Diagonal 121.0° 3.6 mm: Horizontal 84.0° × Vertical 45.0° × Diagonal 100.0°				Alarm Event	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception
Iris Type		Fixed				Network	
Close Focus D	istance	2.8 mm: 0.9				Network	RJ-45 (10/100 Base-T)
	Lens	Detect	3.6 mm: 1.6 m (3.61 ft) Detect Observe Recognize		Identify	SDK and API	Yes
DORI		56 m	22.4 m	11.2 m	5.6 m		Video encryption; firmware encryption; configuration
Distance	2.8 mm	(183.73 ft) 80 m	(73.49 ft) 32.0 m	(36.75 ft) 16.0 m	(18.37 ft) 8.0 m	Cyber Security	encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of
	3.6 mm	(262.47 ft)	(104.99 ft)	(52.49 ft)	(26.25 ft)		X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Smart eve	nt						IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP;
IVS		Tripwire; intr	usion			Protocol	RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE;
Video							802.1x; Bonjour
Video Compression		H.265; H.264; H.264B; MJPEG(only supported by sub stream)				Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec
Smart Codec		Smart H.265+/ Smart H.264+				User/Host	20
Video Frame Rate		Main stream				Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
		2560 × 1440 Sub stream:	2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps)			Browser	IE Chrome Firefox
		704 × 480 (1 fps-30 fps)				Management Software	Smart PSS; DSS; DMSS
Stream Capability		2 streams				Mobile Phone	IOS; Android

Certification

Cartifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive
Certifications	2014/30/EU
	FCC: 47 CFR FCC Part 15, Subpart B
	LIL/CLIL·LIL60950-1 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)

Ordering Information			
Туре	Part Number	Description	
4MP Camera	DH-IPC- HFW2431SP-S-S2	4MP Lite IR Fixed-focal Bullet Network Camera, PAL	
	DH-IPC- HFW2431SN-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	

Accessories

Optional:



PFA134 Junction Box

LR1002-1ET/1EC

Single-port Long

Reach Ethernet over

Coax Extende



PFA152-E Pole Mount



PFM321D DC12V1A Power Adapter



PFM900-E Integrated Mount Tester



PFM114 TLC SD Card

Pole Mount	Junction Mount
PFA134+PFA152-E	PFA134
03-3	0>3)

Dimensions (mm[inch])

