

DH-IPC-HFW2431DG-4G-SP-LA-B

4MP IR Fixed-focal Bullet 4G Solar Power Network Camera



System 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 and IK10 (Supported by some select models).

Functions

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.

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.

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.

- 4-MP 1/3" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light/IR LED.
- Sound and light alarm linkage. When the alarm is triggered, the sound and light will be linked.
- Built in high-performance 4G Module that suits all mobile networks.
 Installation is no longer limited to wired networks. Please test the local 4G network with the camera before use.
- Built-in PIR sensor that detects human body through passive infrared which is sensitive to body temperature.
- Built-in 8 GB eMMC memory chip that protects key records from being lost.
- Supports solar power, making it ideal for use in locations that have exposure to sunlight.
- Standalone with built-in solar panel and battery, battery cycle life can last up to 10 days at the rate of 1-hour remote live view per day.
- Abnormality detection: Motion detection, video tampering, audio detection, SD card full, SD card error, network disconnection, IP conflict and illegal access.
- Supports max. 256 G Micro SD card; built in MIC and speaker; support two-way talk.
- IP67 protection.



Protection (IP67)

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.

Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Lite Series | DH-IPC-HFW2431DG-4G-SP-LA-B

Technical Specification	on
Camera	
Image Sensor	1/3" CMOS
Max. Resolution	2688 (H) × 1520 (V)
ROM	128MB
RAM	256MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100,000 s
Min. Illumination	0.01 Lux@F1.6 (Color,30IRE) 0.001 Lux@F1.6 (B/W,30IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	IR: 50 m (164.04 ft) Warm light: 30 m (98.43 ft)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	1 (IR LED); 1 (Warm light)
Angle Adjustment	Pan: 0°–360° Tilt: –60°–0° Rotation: 0°–360°
Built-in Battery	Support 10000 mAh rechargeable lithium battery
PIR Sensor Distance	10 m (the height of device is 2.5 m, placed horizontally) 5 m (the height of the device is 2 m, placed at an angle of 30° from the horizontal)
Battery	
Battery Type	Lithium-ion
Capacity	10 Ah
Max. Charging Voltage	4.2 V
Operating Temperature	0 °C to +50 °C (+32 °F to +122 °F)
Battery Voltage	3.0 V to 4.2 V
Cycle Lifetime	Sleep Mode(Recommend): About 10 days (at the rate of 1-hour remote live view per day) General Mode: About 15 hours(when the battery is fully charged)
Battery Life	More than 500 cycles
Battery Weight	Approx. 190 g (0.42 lb)
Solar Module	
Maximum Power	5 W
Cell type	Monocrystalline
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Dimensions	230 mm × 150 mm × 2 mm (9.1" × 5.9" × 0.1") (L × W × H)
Standard testing condition	AM = 1.5, 25 °C (77 °F), 1000 W/m², SMQ + 12%
Lens	
Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm

Max. Aperture		2.8 mm: F1.6 3.6 mm: F1.6 6 mm: F1.6				
Field of View		2.8 mm: H: 102°; V: 54°; D:121° 3.6 mm: H: 84°; V: 42°; D:101° 6 mm: H: 52°; V: 48°; D:61°				
Iris Control		Fixed				
Close Focus Distance		2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.7 m (5.58 ft) 6 mm: 3.2 m (10.50 ft)				
	Lens	Detect	Observe	Recognize	Identify	
	2.8 mm	63.6 m (208.66 ft)	25.4 m (83.33 ft)	12.7 m (41.67 ft)	6.4 m (21.00 ft)	
DORI Distance	3.6 mm	85.4 m (280.18 ft)	34.2 m (112.20 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)	
	6 mm	124.0 m (406.82 ft)	49.6m (162.73 ft)	24.8m (81.36 ft)	12.4m (40.68 ft)	
Video						
Video Compr	ression	H.265; H.264 by the sub str	; H.264H; H.264 ream)	4B; MJPEG (On	ly supported	
Video Frame	Rate	Main stream: 2688 × 1520 @(1–25/30 fps) sub stream: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps)				
Stream Capability		2 streams				
Resolution		4M (2688 × 1520); 4M (2560 × 1440); 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)				
Bit Rate Control		CBR/VBR				
Video Bit Rate		H.264: 32 kbps-8192 kbps H.265: 32 kbps-8192 kbps				
Day/Night		Auto(ICR)/Color/B/W				
BLC		Yes				
HLC		Yes				
WDR		120 dB				
Scene Self-ac (SSA)	laptation	Yes				
White Balanc	e	Auto; natural custom	; street lamp; o	utdoor; manua	ll; regional	
Gain Control		Auto				
Noise Reduct	ion	3D NR				
Motion Dete	ction	OFF/ON (4 ar	eas, rectangula	r)		
Region of Inte	erest (Rol)	Yes (4 areas)				
Smart Illumir	ation	Yes				
Mirror		Yes				
Privacy Mask	acy Masking 4 areas					
Audio						
Built-in MIC	uilt-in MIC Yes					

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Built-in Speaker	Yes
Audio Compression	G.711a;G.711Mu; G.726; PCM
Alarm	
Alarm Event	SD card error; SD card full; IP conflict; illegal access; motion detection; video tampering; audio detection; security exception; PIR alarm; low battery alarm; light alarm; sound alarm
Network	
Network Port	RJ-45 (10/100 Base-T)
Frequency	4G: FDD-LTE: B1/2/3/4/5/7/8/12/17/28/66 TDD-LTE: B38/40 Applicable region: Latin America 3G: WCDMA: B1/2/3/4/5/8 Applicable region: Latin America 2G: GSM/GPRS/EDGE: B2/3/5/8 Applicable region: Latin America
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
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; P2P
Interoperability	ONVIF (Profile S/Profile G); CGI
User/Host	20 (Total bandwidth: 80 M)
Storage	Bulit in eMMC (8 GB); FTP;SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE8,9,11 Chrome Firefox
Management Software	DSS; DMSS
Mobile Client	iOS; Android
Certification	
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FCC: 47 CFR FCC Part 15; Subpart B
Port	
USB	1 Micro USB Port
Power	
Power Supply	MicroUSB/5 VDC
Power Consumption	Sleep Mode: 0.03 W General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 W
Environment	
Operating Temperature	0 °C to +50 °C (+32 °F to +122 °F)
Operating Humidity	≤ 95%

Storage Temperature	0 °C to +50 °C (+32 °F to +122 °F)
Protection	IP67
Structure	
Casing	Metal + plastic
Product Dimensions	247 mm × 219 mm×179 mm (9.72" × 8.62" × 7.05") (L × W × H)
Packaging Dimensions	238 mm×181 mm×296 mm (9.37"×7.13"×11.65") (L × W × H)
Net Weight	1250 g (2.80 lb)
Gross Weight	1610 g (3.50 lb)

Ordering Information

Туре	Model	Description
4MP Camera	DH-IPC-HFW2431DGP-4G- SP-NL668LA-B-0280B	4MP IR Fixed-focal Bullet 4G Solar Power Network Camera
	DH-IPC-HFW2431DGP-4G- SP-NL668LA-B-0360B	4MP IR Fixed-focal Bullet 4G Solar Power Network Camera
	DH-IPC-HFW2431DGP-4G- SP-NL668LA-B-0600B	4MP IR Fixed-focal Bullet 4G Solar Power Network Camera
Accessories	PFB121W	Wall Mount Bracket
	PFA162	Universal Joint
	PFA150	Pole Mount Bracket
	PFA121	Water-proof Junction Box
	PFA152-E	Pole Mount Bracket
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

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Accessories

Included:





Optional:



PFA162 Universal Joint



PFA152-E Pole Mount Bracket



PFA150 Pole Mount Bracket



PFM900-E Integrated Mount Tester



PFA121 Water-proof Junction Box



TF-P100 MicroSD Memory Card



Dimensions (mm[inch])

