

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

Technical Specification Camera 1/3" CMOS Image Sensor Max. Resolution 2688 (H) × 1520 (V) ROM 128MB RAM 256MB Scanning System Progressive Auto/Manual 1/3 s-1/100,000 s **Electronic Shutter Speed** 0.01 Lux@F1.6 (Color,30IRE) 0.001 Lux@F1.6 (B/W,30IRE) Min. Illumination 0 lux (Illuminator on) S/N Ratio >56 dB IR: 50 m (164.04 ft) Illumination Distance Warm light: 30 m (98.43 ft) Illuminator On/Off Control Auto;Manual Illuminator Number 1 (IR LED); 1 (Warm light) Pan: 0°-360° Angle Adjustment Tilt: -60°-0° Rotation: 0°-360° Support 10000 mAh rechargeable lithium battery Built-in Battery 10 m (the height of device is 2.5 m, placed horizontally) **PIR Sensor Distance** 5 m (the height of the device is 2 m, placed at an angle of 30° from the horizontal) Battery Battery Type Lithium-ion 10 Ah Capacity 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 Sleep Mode(Recommend): About 10 days (at the rate of 1-hour remote live view per day) Cycle Lifetime General Mode: About 15 hours(when the battery is fully charged) More than 500 cycles Battery Life **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) 230 mm \times 150 mm \times 2 mm (9.1" \times 5.9" \times 0.1") (L \times W Dimensions × H) Standard testing condition AM = 1.5, 25 °C (77 °F), 1000 W/m², SMQ + 12% Lens Fixed-focal Lens Type 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		(100.02 10)	(202.70 10)	(01.0010)	(10.00 10)
Video Compression		H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)			
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 Balance		Auto; natural; street lamp; outdoor; manual; regional custom			
Gain Control		Auto			
Noise Reduction		3D NR			
Motion Detection		OFF/ON (4 areas, rectangular)			
Region of Interest (Rol)		Yes (4 areas)			
Smart Illumination		Yes			
Mirror		Yes			
Privacy Mask	ing	4 areas			
Audio					
Built-in MIC		Yes			

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Built-in SpeakerIseAudio Compression6.711a/G.711Mu; G.72G; PCMAlarmSo Card error, SD card full; IP conflict; Illegal access; motion detection; video tampering, audio detection; security exception; PIR alarm, low battery alarm; Ight alarm; sound alarmAlarm EventB-05 (10100 Base-T)Network PortB-45 (10100 Base-T)FrequencyGr SD-07E: B3/S/7//8/20/28 TD-07E: B3/S/8/7/8/20/28 SD/07E: B3/S/8/20/28 SD/07E: B3/S/8/20/28<					
AlarmAlarm EventSD card error; SD card full; P conflict; illegal access; motion detection, video tampering; audio detection, security exception; PR alarm; iow battery alarm; light alarm; sound alarmNetworkR4-55 (20/100 Base-T)FrequencyAd; FDD-TIT: BJ/3/5/7/4/20/28 TDD-TIT: BJ/3/5/7/4/20/28 Applicable regions: Europe, Asia-Pacific, Africa SG; GMCPMS/EDGE: BJ/5/8 Applicable regions: Europe, Asia-Pacific, Africa SG; MCRPMS/EDGE: BJ/5/8 Applicable regions: Europe, Asia-Pacific, Africa SG; MCRPMS/EDGE: BJ/5/8 Applicable regions: Europe, Asia-Pacific, Africa SG; MCRPMS/EDGE: BJ/5/8 Applicable regions:	Built-in Speaker	Yes			
InstrumentAlarm EventD card error; SD card full; IP conflict; illegal access; individue tampering; audio detection; isalarm; sound alarm; bow battery alarm; light alarm; sound alarm; sound alarm; SD card full; IP conflict; illegal access; isalarm; sound alarm; Sound alarm; SD card full; IP conflict; illegal access; isalarm; sound alarm; Sound alarm; SD card full; IP conflict; illegal access; alarm; SD card full; IP conflict; illegal access; isalarm; SD card full; IP conflict; illegal access; alarm; SD card full; IP conflict; illegal access; alarm; SD card full; IP conflict; illegal access; alarm; SD card full; IP conflict; illegal access; isalarm; SD card full; IP conflict; illegal access; Alarm; SD card full; IP conflict; illegal access; Alar; SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; illegal access; Adapted to Ego SD card full; IP conflict; IP card; Adapted to Ego SD card full; IP conflict; IP card; Adapted to Ego SD card full; IP conflict; I	Audio Compression	G.711a;G.711Mu; G.726; PCM			
Alarm Eventmotion detection; wide tampering: audio detection; slarm; sound alarmNetworkR-45 (10/100 Base-T)Network PortR-45 (10/100 Base-T)Frequency4G: FDD-TITE: BJ/3/5/7/8/20/28 TDD-TITE: BJ/3/5/7/8/20/28 SDD-TITE: BJ/3/6/14 Applicable regions: Europe, Asia-Pacific, Africa SG: GSM/CPRS/EDG:: BJ/5/8 Applicable regions: Europe, Asia-Pacific, Africa SG: SDD: SDD/SDD: SDD/SDD: SDD/SDD: SDD/SDD/SDD/SDD/SDD/SDD/SDD/SDD/SDD/SDD	Alarm				
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Image: Animal Stream	Network				
FrequencyFDP-IT:: B13/3/7/18/20/28 TDD-IT:: B33/40/41 Applicable regions: Europe, Asia-Pacific, Africa 3C: 	Network Port	RJ-45 (10/100 Base-T)			
Image: Construct of the second sec	Frequency	FDD-LTE: B1/3/5/7/8/20/28 TDD-LTE: B38/40/41 Applicable regions: Europe, Asia-Pacific, Africa 3G: WCDMA: B1/5/8 Applicable regions: Europe, Asia-Pacific, Africa 2G: GSM/GPRS/EDGE: B3/5/8			
Cyber Securityencryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; sylog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgradeNetwork ProtocolIPV4; 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; P20InteroperabilityONVIF (Profile S/Profile G); CGIUser/Host20 (Total bandwidth: 80 M)StorageBullt in eMMC (8 GB); FTP;SFTP; Micro SD card (support max. 256 GB); NASMobile ClientDSS; DMSSMobile ClientDSS; DMSSCertificationsCE-LVD: EN62368-1; CF-EMC: Electromagnetic Compatibility Directive 2014/S3/EU; EC: 47 CFR FCC Part 15; Subpart BPortUSBUSB1 Micro USB PortPower ConsumptionSleep Mode: 0.03 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 WPortentCentriforationEnvironmentO'C to +50 °C (+32 °F to +122 °F)	SDK and API	Yes			
Network ProtocolSMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPNP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2PInteroperabilityONVIF (Profile S/Profile G); CGIUser/Host20 (Total bandwidth: 80 M)StorageBulit in eMMC (8 GB); FTP; SFTP; Micro SD card (support max. 256 GB); NASBrowserEI: IE8,9,11 chrome FirefoxMobile ClientDSS; DMSSMobile ClientiOS; AndroidCertificationCE-IVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15; Subpart BPortUSBUSB1 Micro USB PortPower SupplyMicroUSB/S VDCPower ConsumptionSleep Mode: 0.03 W General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 WOperating Temperature0 °C to +50 °C (+32 °F to +122 °F)	Cyber Security	encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted			
IterationIterationUser/Host20 (Total bandwidth: 80 M)StorageBuilt in eMMC (8 GB); FTP;SFTP; Micro SD card (support max. 256 GB); NASBrowserIE: IE8,9,11 Chrome FirefoxManagement SoftwareDSS; DMSSMobile ClientIOS; AndroidCertificationCertificationCertificationsCE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; 	Network Protocol	SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;			
StorageBuilt in eMMC (8 GB); FTP; SFTP; Micro SD card (support max. 256 GB); NASBrowserE: IE8,9,11 Chrome FirefoxManagement SoftwareDSS; DMSSMobile ClientioS; AndroidCertificationE: LVD: EN62368-1; CE-ENC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FC: 47 CFR FCC Part 15; Subpart BPortUSSJose SupplyMicro USB PortPower ConsumptionSleep Mode: 0.03 W General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9, Wax. (4G pulling stream+IR+speaker+warning light): 4.9, Max. (4G pulling stream+IR+speaker+warning light):	Interoperability	ONVIF (Profile S/Profile G); CGI			
Storagemax. 256 GB); NASmax. 256 GB); NASBrowserIE: IE8,9,11 Chrome FirefoxManagement SoftwareDSS; DMSSMobile ClientiOS; AndroidCertificationCE-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 BPortUSB1 Micro USB PortPowerSleep Mode: 0.03 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 WPower ConsumptionSleep Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 WOperating Temperature0 °C to +50 °C (+32 °F to +122 °F)	User/Host	20 (Total bandwidth: 80 M)			
BrowserChrome FirefoxManagement SoftwareDSS; DMSSMobile ClientioS; AndroidCertificationCE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RD: Electromagnetic Compatibility Directive 2014/30/EU; CE-RD: Radio Equipment Directive 2014/53/EU; FC: 47 CFR FCC Part 15; Subpart BPortI Micro USB PortPowerMicro USB PortPower SupplyMicro USB FortPower ConsumptionSleep Mode: 0.03 W Seneral Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 WEnvironmentO°C to +50 °C (+32 °F to +122 °F)	Storage				
Mobile ClientiOS; AndroidICertificationIOS; AndroidCertificationsCE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FC: 47 CFR FCC Part 15; Subpart BPortIMicro USB PortIVSB1 Micro USB PortPowerSleep Mode: 0.03 W General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9Power ConsumptionSleep Mode: 0.03 W General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9ChritornmentO°C to +50°C (+32°F to +122°F)	Browser	Chrome			
Certification Certifications CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FC: 47 CFR FCC Part 15; Subpart B Port IMicro USB Port VSB 1 Micro USB Port Power MicroUSB/S 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 0°C to +50°C (+32°F to +122°F)	Management Software	DSS; DMSS			
Certifications CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FC: 47 CFR FCC Part 15; Subpart B Port 1 Micro USB Port USB 1 Micro USB Port Power MicroUSB/S 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 0 °C to +50 °C (+32 °F to +122 °F)	Mobile Client	iOS; Android			
CertificationsCE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FCC: 47 CFR FCC Part 15; Subpart BPort1 Micro USB PortUSB1 Micro USB PortPowerVPower SupplyMicroUSB/5 VDCPower ConsumptionSleep Mode: 0.03 W General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 wEnvironment0 °C to +50 °C (+32 °F to +122 °F)	Certification				
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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)	USB	1 Micro USB Port			
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)	Power				
Power Consumption General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9 W Environment 0 °C to +50 °C (+32 °F to +122 °F)	Power Supply	MicroUSB/5 VDC			
Operating Temperature 0 °C to +50 °C (+32 °F to +122 °F)	Power Consumption	General Mode: 2.6 W Max. (4G pulling stream+IR+speaker+warning light): 4.9			
	Environment				
Operating Humidity ≤ 95%	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-NL668EAU-B-0280B	4MP IR Fixed-focal Bullet 4G Solar Power Network Camera
	DH-IPC-HFW2431DGP-4G- SP-NL668EAU-B-0360B	4MP IR Fixed-focal Bullet 4G Solar Power Network Camera
	DH-IPC-HFW2431DGP-4G- SP-NL668EAU-B-0600B	4MP IR Fixed-focal Bullet 4G Solar Power Network Camera
	PFB121W	Wall Mount Bracket
	PFA162	Universal Joint
	PFA150	Pole Mount Bracket
Accessories	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



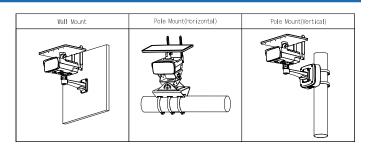
PFM900-E Integrated Mount Tester



PFA121 Water-proof Junction Box



TF-P100 MicroSD Memory Card



Dimensions (mm[inch])

