

DH-IPC-HDBW2831E-S-S2

8MP Lite IR Fixed-focal Dome Network Camera



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 and IK10 (Supported by some select models).

Functions

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces 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.

- 8MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 8MP (3840 × 2160) @15 fps, and supports 2688×1520 (2688 × 1520) @25/30 fps
- H.265 codec, high compression rate, 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 disconnection, IP conflict, illegal access, voltage detection
- Supports max. 256 GB Micro SD card
- 12V DC/PoE power supply
- IP67, IK10 protection



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

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Technical Specification

Camera					
Image Sensor		1/2.7" 8Megapixel progressive CMOS			
Max. Resolution		3840 (H) × 2160 (V)			
ROM		128 MB			
RAM		256 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s			
Min. Illumination		0.009 Lux@F2.0			
S/N Ratio		>56 dB			
Illumination Distance		30 m (98.43 ft)			
Illuminator On/Off Control		Auto/Manual			
Illuminator Number		3 (IR LED)			
Pan/Tilt/Rotation Range		Pan: 0°–355° Tilt: 0°–65° Rotation: 0°–355°			
Lens					
Lens Type		Fixed-focal			
Mount Type		M12			
Focal Length		2.8 mm 3.6 mm			
Max. Aperture		F2.0 F2.0			
Field of View		2.8 mm: Horizontal 105° × Vertical 56° × Diagonal 125° 3.6 mm: Horizontal 87° × Vertical 47° × Diagonal 104°			
Iris Type		Fixed			
Close Focus Distance		2.8 mm: 1.0 m (3.3 ft) 3.6 mm: 1.9 m (6.2 ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8mm	74.7 m (245.1 ft)	29.9 m (98.1 ft)	14.9 m (48.9 ft)	7.5 m (24.6 ft)
	3.6mm	106.7 m (350.1 ft)	42.7 m (140.1 ft)	21.3 m (69.6 ft)	10.7 m (35.1 ft)
Smart Event					
IVS		Tripwire; intrusion			

inpwire, inclusion	
H.265; H.264; H.264B; MJPEG (only supported by the sub stream)	
Smart H.265+/ Smart H.264+	
Main stream: 3840 × 2160 (1 fps–15 fps) 2688 × 1520 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps) 704 × 480 (1 fps–30 fps)	
2 streams	

Resolution	3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048); 3072 ×1728 (3072 × 1728); 2592 × 1944 (2592 × 1944); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 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–8192 kbps H.265: 12 kbps–8192 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(RoI)	Yes (4 areas)		
Smart Illumination	Yes		
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 3840 \times 2160 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; motion detection; video tampering; tripwire; intrusion; illegal access; voltage detection; safety exception		
Network			
Network	RJ-45 (10/100 Base-T)		
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		
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour		
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec		
User/Host	20		
Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS		
Browser	IE Chrome Firefox		
Management Software	Smart PSS; DSS; DMSS		
Mobile Phone	IOS; Android		

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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	< 6.2W			
Environment				
Power Consumption	-40°C to +60°C (-40°F to +140°F)/less than \leq 95% RH			
Storage Temperature	-40°C to +60°C (-40°F to +140°F)			
Protection Grade	IP67; IK10			
Structure				
Casing	Metal			
Dimensions	81 mm × Φ109.9 mm (3.19" × Φ4.33")			
Net Weight	0.350 kg (0.77 lb)			
Gross Weight	0.491 kg (1.08 lb)			

Ordering Information

Туре	Part Number	Description	
8MP Camera	DH-IPC-HDBW2831EP-S-S2	8MP Lite IR Fixed-focal Dome Network Camera,PAL	
	DH-IPC-HDBW2831EN-S-S2	8MP ILite IR Fixed-focal Dome Network Camera,NTSC	
Accessories (optional)	PFA136	Junction Box	
	PFA200W	Rain Shade	
	PFB203W	Wall Mount	
	PFA152-E	Pole Mount	
	PFA106	Mount Adapter	
	PFB220C	Celling Mount	
	PFM321D	DC12V1A Power Adapter	
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender	
	PFM900-E	Integrated Mount Tester	
	PFM114	TLC SD Card	

Accessories

Optional:



Junction Box



PFA200W

Rain Shade

PFA106

Mount Adapter



PFB203W Wall Mount



PFA152-E Pole Mount



LR1002-1ET/1EC

Single-port Long

Reach Ethernet over

Coax Extender



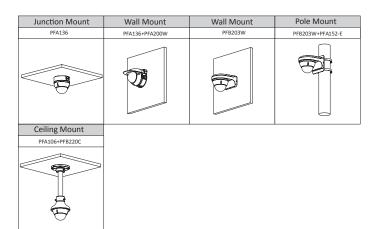
PFB220C Celling Mount

Integrated Mount Tester

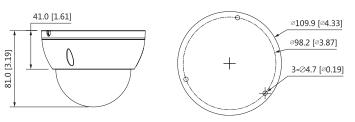
PFM321D DC12V1A Power Adapter



PFM114 TLC SD Card



Dimensions (mm[inch])



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