

DH-IPC-HDBW2831R-ZS-S2

8MP Lite IR Vari-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: 40 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.

Protection (IP67, IK10, 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.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J). Wide voltage: The camera allows $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Lite Series | DH-IPC-HDBW2831R-ZS-S2

Technical Specification

Camora					
Camera		1/2 7" SMaganival prograssiva CMACS			
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		0.008 Lux@F1.5			
S/N Ratio		>56 dB			
Illumination Distance		40 m (131.2 ft)			
Illuminator On/Off Control		Auto/Manual			
Illuminator Numl	ber	2 (IR LED)			
Pan/Tilt/Rotation Range		Pan: 0°–355° Tilt: 0°–67° Rotation: 0°–355°			
Lens					
Lens Type		Motorized va	ri-focal		
Mount Type		ф14			
Focal Length		2.7 mm-13.5 mm			
Max. Aperture		F1.5			
Field of View		Horizontal: 113°–31° Vertical: 58°–17° Diagonal: 138°–36°			
Iris Type		Fixed			
Close Focus Distance		0.8m–0.8m (2.62 ft–2.62 ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	85.3 m (279.9 ft)	34.1 m (111.9 ft)	17 m (55.8 ft)	8.5 m (27.9 ft)
	Т	280 m (918.6 ft)	112 m (367.5 ft)	56 m (183.7 ft)	28 m (91.9 ft)
Smart Event					
IVS		Tripwire; intrusion			
Video					
Video Compression		H.265; H.264; H.264B; MJPEG (only supported by the sub stream)			
Smart Codec		Smart H.265+/ Smart H.264+			
Video Frame Rate		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

Stream Capability

Bit Rate ControlCBR/VBRVideo Bit Rate1,264: 32 kbps-8192 kbpsDay/NightAuto(ICR)/Color/B/WBLCVesHLCVesWDR120 dBWhite BalanceAuto/Manual/street lamp/outdoor/manual/regional outsomGain ControlAuto/ManualNoise ReductionSF/ON (4 areas, rectangular)Region of Interest(Rol)Yes (4 areas)MirrorYes (4 areas)Indage RotationYes (2 areas)MirrorYes (2 areas)Marm EventSisconnection; Pr conflict; motion detection; video ampring; tripwire; intrusion; illegal access; voltage actectoris sfet yexceptionNetworkResonnection; Pr conflict; motion detection; video ampring; tripwire; intrusion; illegal access; voltage actectoris sfet yexceptionNetworkResonnection; Pr conflict; motion detection; video ampring; tripwire; intrusion; illegal access; voltage actectori; sfet yexceptionSust and APISesonnection; Pr conflict; motion detection; video ampring; tripwire; intrusion; illegal access; voltage actectori; sfet yexceptionSust and APISesonnection; Pr conflict; motion detection; video ampring; tripwire; intrusion; illegal access; voltage actectori; safet yexceptionSust and APISesonnection; Procofilet; motion detection; video ampring; tripwire; intrusion; illegal access; voltage actection; safet yexception; illegal access; voltageSust and APISesonnection; Procofilet; motion detection; video access; PMAChiltening; generation and importing of X.Sog PMAChiltening; segneration and importing of X.Sog PMAChiltening; segneration and importing of X.Sog PMA	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)		
Video Bit KateH.265: 12 kbps-8192 kbpsDay/NightAuto(ICR)/Color/B/WBLCYesHLCYesWDR120 dBWhite BalanceAuto/natural/street lamp/outdoor/manual/regional customGain ControlAuto/ManualNoise Reduction3D NRMotion DetectionOFF/ON (4 areas, rectangular)Region of Interest(ROI)Yes (4 areas)Image Rotation0°/90'/180°/270° (Supports 90'/270° with 3840 × 2160 resolution and lower.)MirrorYesPrivacy Masking4 areasAlarm EventNo SD card; SD card full; SD card error; network disconnection; PP conflict; motion detection; video tampering; tripwire; intrusion; illegal access; voltage detection; safety exceptionNetworkRI-45 (10/100 Base-T)SDK and APIYesProtocolVideo encryption; firmware encryption; configuration encryption; pliges; twSSE; account lockout; security logs; perffiction; sydog: 1rtripres; plict; pristoges; pristoges; execution; trisded upgradeProtocolIpv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP, DHCP; DNS; DDNS; QoS; UPNP;	Bit Rate Control	CBR/VBR		
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FilterInterfact of the second sec	Day/Night	Auto(ICR)/Color/B/W		
NumberInterfereWDR120 dBWhite BalanceAuto/natural/street lamp/outdoor/manual/regional customGain ControlAuto/ManualNoise Reduction3D NRMotion DetectionOFF/ON (4 areas, rectangular)Region of Interest(Rol)Yes (4 areas)Smart IlluminationYesImage Rotation0°/90°/180°/270° (Supports 90°/270° with 3840 × 2160 resolution and lower.)MirrorYesPrivacy Masking4 areasAlarmNo SD card; SD card full; SD card error; network disconnection; IP conflict; motion detection; video tampering; tripwire; intrusion; illegal access; voltage detection; safety exceptionNetworkRI-45 (10/100 Base-T)SDK and APIYesVideo encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; I/MAC filtering; generation and importing of X.500 execution; trusted upgradeProtocolPr44; IPVG; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP, DHCP; DNS; DDNS; QOS; UPRP	BLC	Yes		
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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 executior; trusted upgrade Protocol IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP;	Network			
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Protocol RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP;	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		
	Protocol	RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP;		
Interoperability ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec	Interoperability	• • • • • • • • •		
User/Host 20	User/Host	20		
Storage FTP; SFTP; Micro SD Card (support max. 256 GB); NAS	Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS		
IE Browser Chrome Firefox	Browser	Chrome		
Management Software Smart PSS; DSS; DMSS	Management Software	Smart PSS; DSS; DMSS		
Mobile Phone IOS; Android	Mobile Phone	IOS; Android		

Lite Series | DH-IPC-HDBW2831R-ZS-S2

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	< 7.4W			
Environment				
Operating Conditions	-30° C to +60°C (−22°F to +140°F)/less than \leq 95% RH			
Storage Temperature	-40°C to +60°C (-40°F to +140°F)			
Protection	IP67; IK10			
Structure				
Casing	Metal			
Dimensions	Φ122 mm × 88.9 mm (Φ4.80" × 3.50")			
Net Weight	0.47 kg (1.1 lb)			
Gross Weight	0.63 kg (1.4 lb)			

Ordering Information

Туре	Part Number	Description	
8MP Camera	DH-IPC-HDBW2831RP-ZS-S2	8MP Lite IR Vari-focal Dome Network Camera,PAL	
	DH-IPC-HDBW2831RN-ZS-S2	8MP Lite IR Vari-focal Dome Network Camera,NTSC	
Accessories (optional)	PFA137	Junction Box	
	PFB203W	Wall Mount	
	PFA152-E	Pole Mount	
	PFA200W	Rain Shade	
	PFA106	Mount Adapter	
	PFB220C	Celling Mount	
	PFB200C	In-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



PFB203W

Wall Mount



PFA152-E Pole Mount



PFA200W Rain Shade



PFA106 unt Adapter







PFM321D

DC12V1A Power

Adapter



LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender

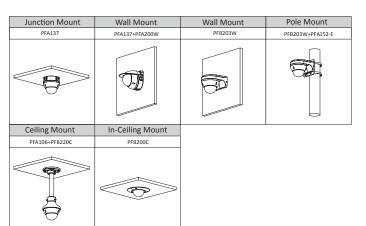


PFB200C

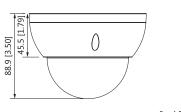
In-Celling Mount

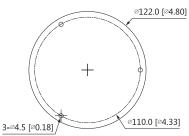
PFM900-E Integrated Mount Tester





Dimensions (mm[inch])





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