

## DH-IPC-HDBW2831R-ZS-S2

8MP Lite IR Vari-focal Dome Network Camera



- 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















#### **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.

#### 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, 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.



Technical Specification							3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048);		
Camera						Resolution	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)		
Image Sensor		1/2.7" 8Megapixel progressive CMOS							
Max. Resolution		3840 (H) × 2160 (V)					(040 ^ 460), CII (332 ^ 266) 332 ^ 240)		
ROM		128 MB				Bit Rate Control	CBR/VBR		
RAM		256 MB				Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 12 kbps–8192 kbps		
Scanning System		Progressive				Day/Night	Auto(ICR)/Color/B/W		
Electronic Shutter Speed		Auto/Manual	1/3 s-1/100,0	00 s		BLC	Yes		
Min. Illumination		0.008 Lux@F	1.5			HLC	Yes		
S/N Ratio		>56 dB				WDR	120 dB		
Illumination Dista	ance	40 m (131.2 ft)				White Balance	Auto/natural/street lamp/outdoor/manual/regional custom		
Illuminator On/O	ff Control	Auto/Manual				Gain Control	Auto/Manual		
Illuminator Numb	oer	2 (IR LED)				Noise Reduction	3D NR		
Pan/Tilt/Rotation	n Range	Pan: 0°–355° Tilt: 0°–67°				Motion Detection	OFF/ON (4 areas, rectangular)		
, ,		Rotation: 0°–355°				Region of Interest(RoI)	Yes (4 areas)		
Lens						Smart Illumination	Yes		
Lens Type		Motorized vari-focal				Image Rotation	$0^\circ/90^\circ/180^\circ/270^\circ$ (Supports $90^\circ/270^\circ$ with $3840\times2160$ resolution and lower.)		
Mount Type		ф14				Mirror	Yes		
Focal Length		2.7 mm–13.5 mm				Privacy Masking	4 areas		
Max. Aperture		F1.5				Alarm	Alarm		
Field of View		Horizontal: 113°–31° Vertical: 58°–17° Diagonal: 138°–36°				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		
Iris Type		Fixed				Network	Network		
Close Focus Dista	ince	0.8m-0.8m (2.62 ft-2.62 ft)				Network	RJ-45 (10/100 Base-T)		
	Lens	Detect	Observe	Recognize	Identify	SDK and API	Yes		
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)	JDK ullu Al I	Video encryption; firmware encryption; configuration		
	Т	280 m (918.6 ft)	112 m (367.5 ft)	56 m (183.7 ft)	28 m (91.9 ft)	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		
Smart Event							execution; trusted upgrade		
IVS		Tripwire; intrusion				Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP;		
Video							NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour		
Video Compression		H.265; H.264; H.264B; MJPEG (only supported by the 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		
		Main stream: 3840 × 2160 (1 fps–15 fps) 2688 × 1520 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps)				Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS		
Video Frame Rate						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

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B

#### Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 7.4W

#### Environment

Operating Conditions	$-30^{\circ}$ C to +60°C ( $-22^{\circ}$ 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	Ф122 mm × 88.9 mm (Ф4.80" × 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		
	PFA137	Junction Box		
	PFB203W	Wall Mount		
	PFA152-E	Pole Mount		
	PFA200W	Rain Shade		
	PFA106	Mount Adapter		
Accessories	PFB220C	Celling Mount		
(optional)	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:







PFA152-E

Pole Mount

PFA137 Junction Box

PFB203W Wall Mount



PFA200W

PFA106



Rain Shade Mount Adapter









PFB200C In-Celling Mount

PFM321D DC12V1A Power Adapter

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



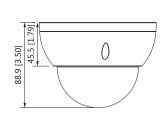
PFM900-E Integrated Mount Tester

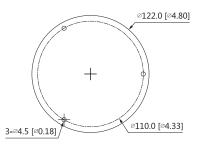


PFM114 TLC SD Card

Junction Mount	Wall Mount	Wall Mount	Pole Mount
PFA137	PFA137+PFA200W	PFB203W	PFB203W+PFA152-E
Ceiling Mount	In-Ceiling Mount		
PFA106+PFB220C	PFB200C		
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### Dimensions (mm[inch])





Rev 001.001