

# DH-IPC-HDBW2831R-ZS

8MP WDR IR Dome Network Camera



#### System Overview

The IR Megapixel Vari-focal camera delivers with a 2.7mm - 13.5mm or 3.7mm - 11 mm varifocal lens. The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

#### Functions

#### Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

#### 4K Technology

4K technology as a revolutionary breakthrough in image, which enhance the expressive image of essence, allowing users to experience the best picture quality brought about by the visual feast . For the purposes of 4K surveillance with four times the 1080P resolution, presented to the user with more details . Under the same scenario by raising the pixels , reduce the camera cost.

#### Intelligent Video Analysis (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

- · 1/1.8" 8Megapixel progressive CMOS
- · H.265 & H.264 dual-stream encoding
- ·25/30fps@8MP(3840×2160)
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- $\cdot$  Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- $\cdot$  Micro SD card slot, up to 128GB
- $\cdot$  3.7~11mm motorized lens
- $\cdot$  Max IR LEDs Length 30m
- IP67, IK10, PoE



#### Wide Dynamic Range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

#### Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30m (98ft).

#### Protection (IP67, IK10, wide voltage)

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

#### Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity.

#### Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.



# Lite Series | DH-IPC-HDBW2831R-ZS

## **Technical Specification**

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Camera					
Image Sensor		1/1.8" 8Megapixel progressive CMOS			
Effective Pixels		3840(H) x2160(V)			
RAM/ROM		512MB/128MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s			
Minimum Illumination		0.004Lux/F1.9( Color,1/3s,30IRE) 0.09Lux/F1.9 Color,1/30s,30IRE) 0Lux/F1.9(IR on)			
S/N Ratio		More than 50dB			
IR Distance		Distance up to 30m(98ft)			
IR On/Off Control		Auto/ Manual			
IR LEDs		2			
Lens					
Lens Type		Motorized			
Mount Type		Board-in			
Focal Length		3.7mm~11mm			
Max. Aperture	-		F1.9		
Angle of View		H:112°~46°, V:60°~26°			
Focus Control		Fixed			
Close Focus Dist	ance	0.2m(0.66ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	83m(272ft)	33m(108ft)	17m(56ft)	8m(26ft)
	Т	190m(623ft)	76m(249t)	38m(125ft)	19m(62ft)
PTZ					
Pan/Tilt Range		Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355°			
Intelligence					
Event Trigger		Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal access, Storage anomaly			
IVS	IVS		Tripwire, Intrusion		
Video					
Compression		H.265/H.264H/MJPEG(Sub Stream)			
Smart Codec		Support H.265+/H.264+			
Streaming Capability		2 Streams			
Resolution		4K(3840×2160)/6M(3072×2048)/5M(2560×1920)/ 3M(2048x1536)/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)			
Frame Rate		Main Stream: 4K (1~25/30fps)			
		Sub Stream: D1(1~25/30fps)			
Bit Rate Control		CBR/VBR			
Bit Rate		H.264: 32Kbps~8192Kbps H.265: 16Kbps~8192Kbps			

Day/Night	Auto(ICR) / Color / B/W	
BLC Mode	BLC / HLC / WDR(120dB)	
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D DNR	
Motion Detetion	Off / On (4 Zone, Rectangle)	
Region of Interest	Off / On (4 Zone)	
Electronic Image Stabilization(EIS)	N/A	
Smart IR	Support	
Digital Zoom	16x	
Flip	0°/90°/180°/270°	
Mirror	Off / On	
Privacy Masking	Off / On (4 Area, Rectangle)	
Audio		
Compression	N/A	
Network		
Ethernet	RJ-45 (10/100Base-T)	
Protocol	HTTP;HTTPS;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP; FTP;DHCP;DNS;DDNS;PPPoE;IPV4/V6;QoS;UPnP; NTP;Bonjour;IEEE 802.1X;Multicast;ICMP;IGMP;TL S;NFS;SSH	
Interoperability	ONVIF, PSIA, CGI	
Streaming Method	Unicast / Multicast	
Max. User Access	10 Users / 20 Users	
Edge Storage	NAS Local PC for instant recording Micro SD Card 128GB	
Web Viewer	IE, Chrome, Firefox, Safari	
Management Software	Smart PSS, DSS, DMSS	
Smart Phone	IOS, Android	
Certifications		
Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B	
Interface		
Video Interface	N/A	
Audio Interface	N/A	
RS485	N/A	
Alarm	N/A	
Electrical		
Power Supply	DC12V PoE (802.3af)(Class 0)	
Power Consumption	<10.9W	

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#### Environmental

Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH		
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Ingress Protection	IP67		
Vandal Resistance	IK10		
Construction			
Casing	Metal		
Dimensions	ф122mm×88.9mm(4.80''x3.50'')		
Net Weight	0.49Kg (1.09lb)		
Gross Weight	0.66Kg(1.46lb)		

## **Ordering Information**

Туре	Part Number	Description		
8MP camera	DH-IPC- HDBW2831RP-ZS	8MP WDR IR Dome Network Camera, PAL		
	DH-IPC- HDBW2831RN-ZS	8MP WDR IR Dome Network Camera, NTSC		
	IPC-HDBW2831RP-ZS	8MP WDR IR Dome Network Camera, PAL		
	IPC-HDBW2831RN-ZS	8MP WDR IR Dome Network Camera, NTSC		
Accessories (optional)	PFA137	Junction box		
	PFB203W	Wall mount		
	PFA152-E	Pole mount		
	PFB200C	In-celling Mount		
	PFA200W	Rain shade		

### Accessories

#### **Optional:**







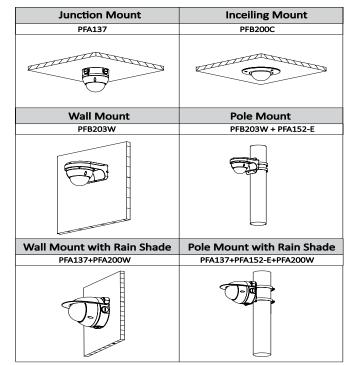


PFA137 Function Box Wall mount

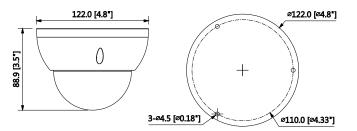
PFA152-E Pole mount In-celling Box

PFB200C

PFA200W Rain shade



#### Dimensions (mm/inch)





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