

DH-IPC-HDBW5831R-ZE

8MP WDR IR Dome Network Camera



System Overview

With upgraded H.265 encoding technology, Eco-savvy series brings high efficient video compression capability. It can save bandwidth and storage. Meanwhile, the series features starlight, smart IR technology and intelligent image analysis techniques. This series supports reminder function, meanwhile fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

Functions

ePoE technology

The ePoE technology of Dahua, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Dahua ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

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.

Wide Dynamic Range

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.

- · 1/2.5" 8Megapixel progressive scan STARVIS™ CMOS
- · H.265&H.264 dual-stream encoding
- · 15fps@4K(3840×2160),25/30fps@3M(2304×1296)
- · Day/Night(ICR), 3DNR, AWB, AGC, BLC
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2.7mm ~12mm motorized lens
- · Max. IR LEDs Length 50m
- · Micro SD card memory, IP67,IK10, PoE



Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

Protection(IP67, IK10, wide voltage)

The camera allows for $\pm 30\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV 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.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec 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 H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.





Eco Savvy 3.0 | DH-IPC-HDBW5831R-ZE

Technical Specification

Technical Specification					
Camera					
Image Sensor		1/2.5" 8Megapixel progressive scan CMOS			
Effective Pixels		3840(H)x2160(V)			
RAM/ROM		512MB/32MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s			
Minimum Illumination		0.05Lux/F1.4 (Color,1/3s,30IRE) 0.2Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)			
S/N Ratio		More than 50dB			
IR Distance		Distance up to 50m (164ft)			
IR On/Off Control		Auto/ Manual			
IR LEDs		2			
Lens					
Lens Type		Motorized/ Auto Iris(DC)			
Mount Type		Board-in			
Focal Length		2.7mm~12mm			
Max. Aperture		F1.4			
Angle of View		H:110°~40° , V:58°~23°			
Optical Zoom		4x			
Focus Control		Motorized			
Close Focus Distance		0.3m			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	85m(280ft)	34m(112ft)	17m(56ft)	8.5m(28ft)
	Т	228m(748ft)	91m(299ft	46m(151ft)	23m(75ft)
Pan/Tilt/Rot					
Pan/Tilt/Rotation Range		Pan:0°~355°; Tilt:0°~75°; Rotation:0°~355°			
Intelligence					

intelligence				
IVS	Tripwire, Intrusion, Object Abandoned/Missing			
Advanced Intelligent Functions	Face Detection			
Video				
Compression	H.265+/H.265/H.264+/H.264			
Streaming Capability	3 Streams			
Resolution	4K(3840×2160)/ 6M(3072×2048)/5M(3072×1728)/ 5M(2592×1944)/ 4M(2688×1520)/ 3M(2048×1536)/ 3M(2304×1296)/ 1080P(1920×1080)/1.3M(128 0×960)/ 720P(1280×720)/ D1(704×576/704×480)/ VGA(640×480)/ CIF(352×288/352×240)			
	Main Stream: 4K(1~15fps)/3M(1~25/30fps)			
Frame Rate	Sub Stream: D1(1~25/30fps)			
	Third Stream: 720P(1~25/30fps)			
Bit Rate Control	CBR/VBR			
Bit Rate	H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps			

IDM /

Day/Night	Auto(ICR) / Color / B/W			
BLC Mode	BLC / HLC / WDR			
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			
Defog	N/A			
Digital Zoom	16x			
Flip	0°/90°/180°/270°			
Mirror	Off / On			
Privacy Masking	Off / On (4 Area, Rectangle)			
Audio				
Compression	G.711a/ G.711Mu/ AAC/ G.726			
Network				
Ethernet	RJ-45 (10/100Base-T)			
Protocol	HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP			
Interoperability	ONVIF, PSIA, CGI			
Streaming Method	Unicast / Multicast			
Max. User Access	10 Users /20 Users			
Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB			
Web Viewer	IE, Chrome, Firefox, Safari			
Management Software	Smart PSS, DSS, Easy4ip			
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	1/1 channel In/Out			
RS485	N/A			
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC			
Electrical				
Power Supply	DC12V, PoE(802.3af)(Class 0)			
Power Consumption	<8.5W			

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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	Φ122mm×88.9mm (4.8"×3.5")			
Net Weight	0.5kg (1.1lb)			
Gross Weight	0.58kg (1.29lb)			

Ordering Information

Туре	Part Number	Description	
8MP camera	DH-IPC- HDBW5831RP-ZE	8MP IR Dome Network Camera, WDR, PAL	
	DH-IPC- HDBW5831RN-ZE	8MP IR Dome Network Camera, WDR, NTSC	
	IPC-HDBW5831RP- ZE	8MP IR Dome Network Camera, WDR, PAL	
	IPC-HDBW5831RN- ZE	8MP IR Dome Network Camera, WDR, NTSC	
Accessories (optional)	PFB203W	Wall mount	
	PFA137	Junction box	
	PFB200C	In-ceiling mount	
	PFA152-E	Pole Mount	
	LR1002	ePoE Over Coax Converter	

Accessories

Optional:





Pole Mount





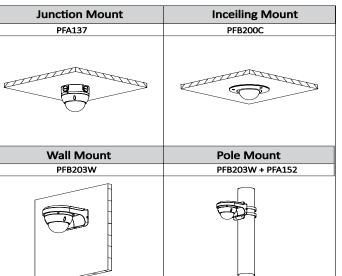
PFA137 Junction Box

PFB203W Wall Mount

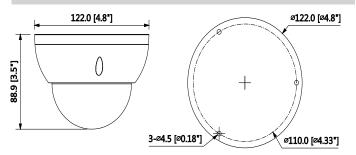
PFB200C In-ceiling Mount



LR1002 ePoE Over Coax Converter



Dimensions (mm/inch)





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