

DH-IPC-HDBW5231R-ZE

2MP 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.

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.006lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

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.

- · 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- · H.265&H.264 triple-stream encoding
- · 50/60fps@1080(1920×1080)
- · Smart Detection supported
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- · Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2.7mm ~13.5mm motorized lens
- \cdot 1/1 Alarm in/out, 1/1 audio in/out
- · Max. IR LEDs Length 50m
- · Micro SD 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-HDBW5231R-ZE

Technical Spe	cification			
Camera				
Image Sensor		1/2.8″ 2Mega	pixel progres	ssive scan CMO
Effective Pixels		1920(H) x 108	0(V)	
RAM/ROM		256MB/32ME	3	
Scanning System		Progressive		
Electronic Shutter Speed		Auto/Manual	, 1/3~1/10000	00s
Minimum Illumination		0.006Lux/F1.4 0.05Lux/F1.4 0Lux/F1.4 (IR	(Color,1/30s,	
S/N Ratio		More than 50	dB	
IR Distance		Distance up t	o 50m (164ft))
IR On/Off Control		Auto/ Manua	I	
IR LEDs		2		
Lens				
Lens Type		Motorized/ A	uto Iris(DC)	
Mount Type		Board-in		
Focal Length		2.7mm~13.5r	nm	
Max. Aperture		F1.4		
Angle of View		H: 101°~31°, V	:54°~17°	
Optical Zoom		5x		
Focus Control		Motorized		
Close Focus Distance		0.3m		
	Lens	Detect	Observe	Recognize

DORI

Distance

Pan/Tilt/Rotation Pan/Tilt/Rotation Range

Intelligence

Video

Compression

Resolution

Frame Rate

Bit Rate Control

Bit Rate

Streaming Capability

W

т

Advanced Intelligent Functions Face Detection

44m(144ft)

143m(469ft)

18m(59ft)

57m(187ft)

Pan:0°~355°; Tilt:0°~75°; Rotation:0°~355°

H.265+/H.265/H.264+/H.264

Sub Stream: D1(1~50/60fps) Third Stream: 1080P(1~25/30fps)

H.264: 24~9472Kbps

H.265: 14~5632Kbps

1080P(1920x1080)/1.3M(1280x960)/

720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240) Main Stream: 1080P(1~50/60fps)

3 Streams

CBR/VBR

Tripwire, Intrusion, Object Abandoned/Missing

9m(29ft)

28m(92ft)

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			
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)			

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Identify

4m(13ft)

14m(46ft)

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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
2MP camera	DH-IPC- HDBW5231RP-ZE	2MP IR Dome Network Camera,WDR, PAL
	DH-IPC- HDBW5231RN-ZE	2MP IR Dome Network Camera WDR,NTSC
	IPC-HDBW5231RP- ZE	2MP IR Dome Network Camera,WDR, PAL
	IPC-HDBW5231RN- ZE	2MP 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:

PFA152-E

Pole Mount



Wall Mount



PFA137

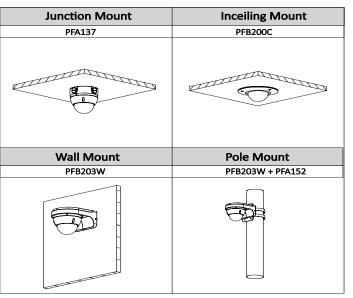
Junction Box



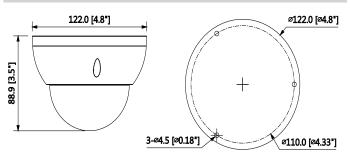
PFB200C In-ceiling Mount



LR1002 ePoE Over Coax Converter



Dimensions (mm/inch)





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