

DH-IPC-HDBW5231E-ZE-HDMI

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

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness.

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.

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

- 1/2.8" 2Megapixel progressive scan CMOS
- · H.265&H.264 triple-stream encoding
- · 25/30fps@1080P(1920×1080)
- · WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2.7mm ~13.5mm motorized lens
- HDMI 1.4a support
- \cdot 1/1 Alarm in/out, 1/1 audio in/out
- Max. IR LEDs Length 50m
- · Micro SD memory, IP67, IK10, PoE+



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 ±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-HDBW5231E-ZE-HDMI

Technical Specification

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Camera						
Image Sensor		1/2.8" 2Megapixel progressive scan CMOS				
Effective Pixels	fective Pixels		1920(H)x1080(V)			
RAM/ROM		512MB/32MB				
Scanning System		Progressive				
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s				
Minimum Illum	nination	0.006Lux/F1.6 0.05Lux/F1.6 (0Lux/F1.6 (IR o	Color,1/30s,30			
S/N Ratio		Less than 50dB				
IR Distance		Distance up to	50m(164ft)			
IR On/Off Cont	rol	Auto/Manual				
IR LEDs		3				
Lens						
Lens Type		Motorized				
Mount Type		Board-in				
Focal Length		2.7~13.5mm m	otorized			
Max. Aperture	-		F1.6			
Angle of View	Angle of View		H: 101° ~ 31°, V: 54° ~ 17°			
Optical Zoom		, 5x				
Focus Control		Motorized				
Close Focus Dis	stance	0.3m(0.98ft)				
	Lens	Detect	Observe	Recognize	Identify	
DORI	W	44m(144ft)	18m(59ft)	9m(29ft)	4m(13ft)	
Distance	т	143m(469ft)	57m(187ft)	28m(92ft)	14m(46ft)	
Pan/Tilt/Ro	tation					
Pan/Tilt/Rotati	ion Range	Pan:0°~355°; Tilt:0°~65°; Rotation:0°~355°				
Intelligence	2					
IVS		Tripwire Intrus	ion Object Ab	andoned/Mis	sinø	
		Tripwire, Intrusion, Object Abandoned/Missing				
Advanced Intel	ligent Functions	Face Detection				
Video						
Compression		H.265/H.264/H	I.264B/H.264H	/MJPEG(sub s	tream)	
Smart Codec		Support H.265	+/H.264+			
Streaming Cap	ability	3 Streams				
Resolution		1080P(1920×1080)/ 1.3M(1280×960)/ 720P(1280×720)/ D1(704×576/704×480)/ CIF(352×288/352×240)				
Frame Rate		Main Stream: 1080P(1~25/30fps)				
		Sub Stream: D1 (1 ~ 25/30fps)				
		Third Stream: 1080P(1~25/30fps)				
Bit Rate Contro	bl	CBR/VBR				

Bit Rate	H.264: 24~ 9472Kbps H.265: 14~ 5632Kbps
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 Detection	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;RTCP;SMTP; FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP;S NMP;TLS
Interoperability	ONVIF Profile S&G, API
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, Easy4ip
Smart Phone	IOS, Android
Certifications	
Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B

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Interface	
Video Interface	1 port(HDMI 1.4a)
Audio Interface	1/1 channel In/Out
RS485	N/A
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12V
Electrical	
Power Supply	DC12V, AC24V, PoE(802.3at)(Class 4)
Power Consumption	DC12V:4.4W 12.3W(IR on) PoE:5.0W 11.8W(IR on)
Environmental	
Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH
Storage Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10
Construction	
Casing	Metal
Dimensions	Ф159.1mm*117.9mm
Net Weight	0.95Kg (2.09lb)
Gross Weight	1.2Kg (2.65lb)

Description

WDR, PAL

WDR,NTSC

WDR, PAL

WDR,NTSC

Junction Box

Wall mount

In-ceiling mount

Ceiling mount

Pole mount

Mount adapter

2MP IR Dome Network Camera,

Accessories

Optional:



PFA138

PFA101

Mount adapter

Junction box



PFB210W

PFB300C

Ceiling mount

Wall mount

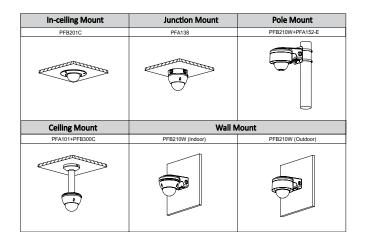


PFA152-E Pole mount

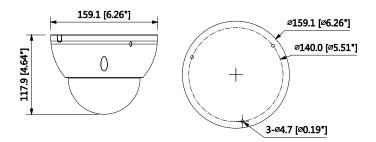




PFB201C In-ceiling mount



Dimensions (mm/inch)





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Ordering Information

Туре

2MP camera

Accessories

Accessories

(optional)

(included)

Part Number

ZE-HDMI

ZE-HDMI

HDMI

HDMI

PFA138

PFB210W

PFB201C

PFB300C

PFA152-E

PFA101

DH-IPC-HDBW5231EP-

DH-IPC-HDBW5231EN-

IPC-HDBW5231EP-ZE-

IPC-HDBW5231EN-ZE-