

# DH-IPC-HFW5831E-Z5E

8MP WDR IR Bullet 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

 $4 \mbox{K}$  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  $4 \mbox{K}$  surveillance with four times the  $1080 \mbox{P}$  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 CMOS
- · H.265&H.264 dual-stream encoding
- · 15fps@4K(3840×2160),25/30fps@3Mp(2304×1296)
- · Day/Night(ICR), 3DNR, AWB, AGC, BLC
- · Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 7mm ~35mm 5x zoom lens
- · 2/1 Alarm in/out, 1/1 audio in/out
- · Max. IR LEDs Length 100m
- · 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-HFW5831E-Z5E

Technical Specification						Day/Night	Auto(ICR) / Color / B/W
Camera					BLC Mode	BLC/HLC/WDR	
Image Sensor		1/2.5" 8Megapixel progressive scan CMOS				White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Effective Pixels		3840(H)x2160(V)				Gain Control	Auto/Manual
RAM/ROM		512MB/32MB				Noise Reduction	3D DNR
Scanning System		Progressive				Motion Detetion	Off / On (4 Zone, Rectangle)
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s				Region of Interest	Off / On (4 Zone)
Minimum Illumination		0.05Lux/F1.4 (Color,1/3s,30IRE) 0.2Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)				Electronic Image Stabilization (EIS)	N/A
S/N Ratio		More than 50dB				Smart IR	Support
IR Distance		Distance up to 100m (328ft)				Defog	N/A
IR On/Off Control		Auto/ Manual				Digital Zoom	16x
IR LEDs		4				Flip	0°/90°/180°/270°
Lens						Mirror	Off / On
Lens Type		Motorized/ Auto Iris(HALL)				Privacy Masking	Off / On (4 Area, Rectangle)
Mount Type		Board-in				Audio	
Focal Length		7mm~35mm				Compression	G.711a/ G.711Mu/ AAC/ G.726
Max. Aperture		F1.4				Network	
Angle of View		H:38°~14°, V:22°~8°				Ethernet	RJ-45 (10/100Base-T)
Optical Zoom		5x					HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP;
Focus Control		Motorized				Protocol	FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP
Close Focus Dis	stance	0.6m				Interoperability	ONVIF, PSIA, CGI
DORI	Lens	Detect	Observe	Recognize	Identify	Streaming Method	Unicast / Multicast
Distance	W T	234m(767ft)	94m(308ft) 306m(1004ft)	47m(154ft)	23m(75ft) 76m(251ft)	Max. User Access	10 Users /20 Users
Pan/Tilt/Ro					70111(23111)	Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Pan/Tilt/Rotation Range		Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°				Web Viewer	IE, Chrome, Firefox, Safari
Intelligence						Management Software	Smart PSS, DSS, Easy4ip
IVS		Tripwire, Intrus	sion, Object Aba	ndoned/Missin	g	Smart Phone	IOS, Android
Advanced Intelligent Functions Face Detection			in			Certifications	
Video Compression		H.265+/H.265/H.264+/H.264				Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
Streaming Capability		3 Streams				Interface	. SS. FCC Fare 13 Support D
Resolution		4K(3840×2160)/ 6M(3072×2048)/5M(3072×1728)/ 5M(2592×1944)/ 4M(2688×1520)/ 3M(2048x1536)/ 3M(2304×1296)/ 1080P(1920×1080)/1.3M(1280x960)/ 720P(1280×720)/ D1(704×576/704×480)/ VGA(640x480)/ CIF(352×288/352×240)				Video Interface	1 Port(For adjustment only)
						Audio Interface	1/1 channel In/Out
Frame Rate		Main Stream: 4K(1~15fps)/3M(1~25/30fps)				RS485	N/A
		Sub Stream: D1(1~25/30fps)				Alarm	2/1 channel In/Out2 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC
		Third Stream: 720P(1~25/30fps)				Electrical	
	Bit Rate Control						
Bit Rate Contro	ol	CBR/VBR				Power Supply	DC12V, PoE (802.3af)(Class 0)

#### Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Strorage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

#### Construction

Casing	Metal
Dimensions	273.2mm×95.0mm×95.0mm (10.76"×3.74"×3.74")
Net Weight	1.11Kg (2.44lb)
Gross Weight	1.51Kg (3.33lb)

Ordering Information				
Туре	Part Number	Description		
	DH-IPC- HFW5831EP-Z5E	8MP IR Bullet Network Camera, WDR, PAL		
OMAD and a second	DH-IPC- HFW5831EN-Z5E	8MP IR Bullet Network Camera, WDR, NTSC		
8MP camera	IPC-HFW5831EP- Z5E	8MP IR Bullet Network Camera, WDR, PAL		
	IPC-HFW5831EN- Z5E	8MP IR Bullet Network Camera, WDR, NTSC		
	PFA121	Junction box		
Accessories (optional)	PFA152-E	Pole Mount		
	LR1002	ePoE Over Coax Converter		

## Accessories

## **Optional:**







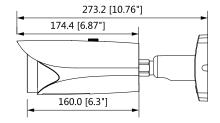
PFA121 Junction box

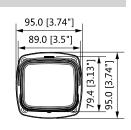
PFA152-E Pole Mount

LR1002 ePoE Over Coax Converter

Junction Mount	Pole Mount
PFA121	PFA121 + PFA152-E

## Dimensions (mm/inch)





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