

# DH-IPC-HDBW4431E-ASE

4MP IR mini 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.

#### 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.

## 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

- 1/3" 4Megapixel progressive scan CMOS
- · H.265&H.264 triple-stream encoding
- · 25/30fps@4M(2688×1520)
- · Smart Detection supported
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- · Multiple network monitoring: Web viewer, CMS(DSS/PSS) & **DMSS**
- · 2.8mm fixed lens (3.6mm, 6mm optional)
- · 1/1 Alarm in/out, 1/1 audio in/out
- · Max. IR LEDs Length 30m
- · Micro SD memory, IP67, IK10, PoE













warning message to inspect the camera.

#### 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, allowing the camera to operate in the harshest environments.

#### 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.



Technical Specification					White Balance	Auto/Natural/Street Lamp/Outdoor/Manual	
Camera					Gain Control	Auto/Manual	
Image Sensor		1/3"4Megapixel progressive scan CMOS				Noise Reduction	3D DNR
Effective Pixels		2688(H)x1520(V)				Motion Detetion	Off / On (4 Zone, Rectangle)
RAM/ROM		512MB/32MB				Region of Interest	Off / On (4 Zone)
Scanning System		Progressive				_	
Electronic Shutter Speed		Auto/Manual, 1/3(4)~1/100000s				Electronic Image Stabilization (EIS)	N/A
Minimum Illumination		0.06Lux/F1.6( Color,1/3s,30IRE) 0.4Lux/F1.6( Color,1/30s,30IRE) 0Lux/F1.6(IR on)				Smart IR	Support
S/N Ratio		More than 50				Defog	Support
IR Distance		Distance up to	o 30m (98ft)			Digital Zoom	16x
IR On/Off Control		Auto/ Manual				Flip	0°/90°/180°/270°/Corridor mode
IR LEDs		18				Mirror	Off / On
Lens						Privacy Masking	Off / On (4 Area, Rectangle)
Lens Type		Fixed				Audio	
Mount Type		Board-in				Compression	G.711a/ G.711Mu/ AAC/ G.726
Focal Length		2.8mm (3.6m	m, 6mm optic	nal)		Network	
Max. Aperture		F1.6 (F1.6, F1.	6)			Ethernet	RJ-45 (10/100Base-T)
Angle of View		H: 104° (83°, 5	55°), V: 55° (45	°, 31°)			HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP;
Optical Zoom Focus Control		N/A Fixed				Protocol	FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP
Close Focus Dis	stance	0.9m (1.5m, 3.1m)				Interoperability	ONVIF, PSIA, CGI
	Lens	Detect	Observe	Recognize	Identify		
DORI Distance	2.8 mm	56m(184ft)	22m(72ft)	11m(36ft)	6m(20ft)	Streaming Method	Unicast / Multicast
DONI Distance	3.6 mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)	Max. User Access	10 Users /20 Users
Pan/Tilt/Ro	6.0 mm	120m(394ft)	48m(157ft)	24m(79ft)	12m(39ft)	Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
	Pan/Tilt/Rotation		Fil+.O°~CF°. Do	tation.0°~2FF	• 0	Web Viewer	IE, Chrome, Firefox, Safari
			Γilt:0°∼65°; Ro	tation:U ~355		Management Software	Smart PSS, DSS, Easy4ip
Intelligence						Smart Phone	IOS, Android
IVS		Tripwire, Intru			_	Certifications	ios, Android
	ligent Functions	Face Detection	n,People cour	nting,Scene c	hange	Certifications	CE (EN 60950:2000)
Video Compression	Video		5/H.264+/H.26	64		Certifications	UL:UL60950-1 FCC: FCC Part 15 Subpart B
Streaming Capability		3 Streams				Interface	
Resolution		4M(2688×1520)/3M(2304×1296)/ 1080P(1920×1080)/1.3M(1280x960)/ 720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)				Video Interface	N/A
						Audio Interface	1/1 channel In/Out
Frame Rate		Main Stream: 4M(1~25/30fps)				RS485	N/A
		Sub Stream: D1(1~25/30fps)				Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC
		Third Stream: 720P(1~25/30fps)				Electrical	
Bit Rate Control  Bit Rate		CBR/VBR H.264: 24K ~ 10240Kbps				Power Supply	DC12V, PoE (802.3af)(Class 0)
		H.265: 14K ~ 9				Power Consumption	<5W
Day/Night		Auto(ICR) / Color / B/W				rower consumption	JVV
BLC Mode		BLC / HLC / WDR(120dB)					

## Eco savvy 3.0 | DH-IPC-HDBW4431E-ASE(Only For Project)

## Environmental

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

#### Construction

Casing	Metal
Dimensions	Ф109.9mm×81mm (4.33"×3.19")
Net Weight	0.41kg (0.91lb)
Gross Weight	0.53 kg (1.17lb)

Gross Weight		0.33 kg (1.17lb)					
Ordering Information							
Туре	Part Number	Description					
	DH-IPC- HDBW4431EP-ASE- 0360B	4MP IR Mini Dome Network Camera,PAL					
	DH-IPC- HDBW4431EN-ASE- 0360B	4MP IR Mini Dome Network Camera,NTSC					
	IPC-HDBW4431EP- ASE-0360B	4MP IR Mini Dome Network Camera,PAL					
	IPC-HDBW4431EN- ASE-0360B	4MP IR Mini Dome Network Camera,NTSC					
	DH-IPC- HDBW4431EP-ASE- 0280B	4MP IR Mini Dome Network Camera,PAL					
4MP camera	DH-IPC- HDBW4431EN-ASE- 0280B	4MP IR Mini Dome Network Camera,NTSC					
4WII Calliela	IPC-HDBW4431EP- ASE-0280B	4MP IR Mini Dome Network Camera,PAL					
	IPC-HDBW4431EN- ASE-0280B	4MP IR Mini Dome Network Camera,NTSC					
	DH-IPC- HDBW4431EP-ASE- 0600B	4MP IR Mini Dome Network Camera,PAL					
	DH-IPC- HDBW4431EN-ASE- 0600B	4MP IR Mini Dome Network Camera,NTSC					
	IPC-HDBW4431EP- ASE-0600B	4MP IR Mini Dome Network Camera,PAL					
	IPC-HDBW4431EN- ASE-0600B	4MP IR Mini Dome Network Camera,NTSC					
	PFB203W	Wall mount					
	PF152-E	Pole mount					
Accessories (optional)	PFA136	Junction box					
	LR1002	ePoE Over Coax Converter					

## **Accessories**

## **Optional:**











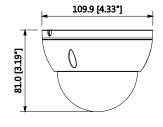
PFA136 Junction Box

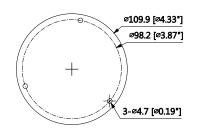
PFB203W Wall Mount

LR1002 Pole Mount ePoE Over Coax Converter Rain shade

Junction Mount	Pole Mount
PFA136	PFB203W + PFA152-E
Wall Mount	
PFB203W	
	Pole Mount with Rain Shade
	PFA136W + PFA152-E+PFA200W
Wall Mount with Rain Shade	
PFA136W+PFA200W	

## Dimensions (mm/inch)







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Rain shade

PFA200W