

# DH-IPC-HDBW1431E-S

4MP WDR IR Mini-Dome Network Camera



## **System Overview**

The IR Megapixel Fixed camera delivers 2MP/4MP/5MP resolution with a 2.8mm/3.6mm fixed lens.The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

## **Functions**

#### 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.

## Intelligent Video analysis (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

#### 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.

- · 1/3" 4Megapixel progressive CMOS
- · H.265& H.264 dual-stream encoding
- · 20fps@4M(2688×1520) &25/30fps@3M(2304×1296)
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- $\cdot$  Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · Micro SD card slot, up to 128GB
- · 2.8 mm fixed lens (3.6 mm optional)
- · Max IR LEDs Length 30m
- · IP67, IK10, PoE













#### Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30m (98ft).

#### Protection (IP67, IK10, wide voltage)

The camera allows for ±10% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV 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.

#### 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% burnidity.

## Image flip

Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

## Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.





Technical S <sub>I</sub>	pecification				
Camera					
Image Sensor		1/3" 4Mega	1/3" 4Megapixel progresive CMOS		
Effective Pixels		2688(H)x1520(V)			
RAM/ROM		512MB/32N	512MB/32MB		
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s			
Minimum Illumination		0.08Lux/F2.0( Color,1/3s,30IRE) 0.3Lux/F2.0( Color,1/30s,30IRE) 0Lux/F2.0(IR on)			
S/N Ratio		More than 50dB			
IR Distance		Distance up	Distance up to 30m(98ft)		
IR On/Off Control		Auto/ Manu	Auto/ Manual		
IR LEDs		24			
Lens					
Lens Type		Fixed	Fixed		
Mount Type		Board-in	Board-in		
Focal Length		2.8mm (3.6	2.8mm (3.6mm optional)		
Max. Aperture		F2.0/F2.0	F2.0/F2.0		
Angle of View		H:104°/87°, V:57°/48°			
Focus Control		Fixed	Fixed		
Close Focus Distance		N/A	N/A		
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	63(207ft)	25(82ft)	13(43ft)	6(20ft)
	3.6 mm	80(262ft)	32(105ft)	16(52ft)	8(26ft)
PTZ					
Pan/Tilt Range		Pan:0° ~355	Pan:0° ~355° ;Tilt:0° ~65° ;Rotation:0° ~355°		
Intelligence					
IVS		Tripwire, Int	Tripwire, Intrusion		
Video					
Compression		H.265+/H.2	H.265+/H.265/H.264+/H.264		
Streaming Capability		2 Streams			
Resolution		1080P(1920	4M(2688x1520/2560x1440)/3M(2304×1296)/ 1080P(1920×1080)/720P(1280×720)/ D1(704×576/704×480)/ CIF(352×288/352×240)		
Frame Pato		4M(1 ~ 20fp	4M(1 ~ 20fps)/3M (1 ~ 25/30fps)		
Frame Rate		D1/CIF(1 ~ 25/30fps)			
Bit Rate Control		CBR/VBR			
Bit Rate			H.265: 12K ~ 8448Kbps H.264: 32K ~ 10240Kbps		
Day/Night			Auto(ICR) / Color / B/W		
BLC Mode		BLC / HLC /	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		
Digital Zoom	16x		
Flip	0°/90°/180°/270°		
Mirror	Off / On		
Privacy Masking	Off / On (4 Area, Rectangle)		
Audio			
Compression	N/A		
Network			
Ethernet	RJ-45 (10/100Base-T)		
Protocol	HTTP;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;SNMP;QoS;UPnP;NTP		
Interoperability	ONVIF, PSIA, CGI		
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		
Interface			
Video Interface	N/A		
Audio Interface	N/A		
RS485	N/A		
Alarm	N/A		
Electrical			
Power Supply	DC12V PoE(802.3af)(Class 0)		
Power Consumption	<4.6W		



### 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" x 3.19")
Net Weight	0.34Kg (0.75lb)
Gross Weight	0.47Kg (1.04lb)

Ordering Information				
Туре	Part Number	Description		
4MP camera	DH-IPC-HDBW1431EP-S -0280B	4MP WDR IR Mini-Dome Network Camera, 2.8mm,PAL		
	DH-IPC-HDBW1431EN-S -0280B	4MP WDR IR Mini-Dome Network Camera, 2.8mm,NTSC		
	IPC-HDBW1431EP-S -0280B	4MP WDR IR Mini-Dome Network Camera, 2.8mm,PAL		
	IPC-HDBW1431EN-S -0280B	4MP WDR IR Mini-Dome Network Camera, 2.8mm,NTSC		
	DH-IPC-HDBW1431EP-S -0360B	4MP WDR IR Mini-Dome Network Camera, 3.6mm,PAL		
	DH-IPC-HDBW1431EN-S -0360B	4MP WDR IR Mini-Dome Network Camera, 3.6mm,NTSC		
	IPC-HDBW1431EP-S -0360B	4MP WDR IR Mini-Dome Network Camera, 3.6mm,PAL		
	IPC-HDBW1431EN-S -0360B	4MP WDR IR Mini-Dome Network Camera, 3.6mm,NTSC		
Accessories (optional)	PFA136	Junction box		
	PFB203W	Wall mount		
	PFA152-E	Pole mount		
	PFA200W	Rain shade		

## **Accessories**

## **Optional:**









PFA136 Function Box

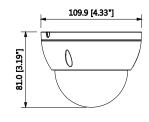
PFB203W Wall mount

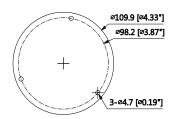
PFA152-E Pole mount

PFA200W Rain Shade

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

# Dimensions (mm/inch)





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