

# DH-IPC-HDBW5449R-ASE-NI

4MP Pro AI Full-color Fixed-focal Dome Network Camera



- 1/1.8" 4Megapixel progressive scan CMOS
- H.265 & H.264 triple-stream encoding
- · 25/30 fps@2688 × 1520, 50/60 fps@1080 (1920 × 1080)
- WDR (140 dB), Day/Night (Electronic), 3D DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- 3.6 mm fixed lens
- 1/1 Alarm in/out, 1/1 audio in/out
- Micro SD memory, IP67, IK10



### System Overview

Pro AI series contains Face Detection, Perimeter Protection and People Counting functions.Powered by deep-learning Artificial Intelligence algorithms, significantly improved accuracy. Meanwhile, the series features starlight technology. This series fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

### Functions

### **Face Detection**

Face Detection is a software application that automatically captures faces from within a digital image or a video frame from a video source. Dahua cameras use advanced deep learning algorithms and are trained by a large number of face data sources, enabling the camera to locate faces quickly and accurately from the video source and capture facial images.

### **Perimeter Protection**

Dahua's Perimeter Protection functions significantly improved accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or to a mobile client reduces system requirements and resources resulting in greater surveillance system efficiency.

### **People Counting**

People Counting function uses advanced image processing technology to capture depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting accuracy.

### 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.

### 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.

### **Full-color Starlight**

The camera adopts F1.0 large aperture lens and 1/1.8" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera presents an impressive low light performance with an exceptional balance between noise reduction and the blur of moving object.



# Pro Al Series | DH-IPC-HDBW5449R-ASE-NI

## **Technical Specification**

#### Camera

Camera					
Image Sensor		1/1.8" 4Megapixel progressive scan CMOS			
Effective Pixels		2688 (H) × 15	2688 (H) × 1520 (V)		
RAM/ROM		1 GB/128 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3 s-1/100000 s			
Minimum Illumination		0.001 Lux @I	0.001 Lux @F1.0		
Lens					
Lens Type		Fixed-focal			
Mount Type		Board-in	Board-in		
Focal Length		3.6 mm	3.6 mm		
Max. Aperture		F1.0	F1.0		
Angle of View		H: 93°, V: 50°	H: 93°, V: 50°		
Aperture Type		Fixed	Fixed		
Close Focus Distance		2.0 m (6.56 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
DON Distance	3.6mm	70 m (230 ft)	28 m (91 ft)	14m(46ft)	7m(23ft)
Pan/Tilt/Rotati	on				
Pan/Tilt/Rotation	Range	Pan: 0°–355°;	Pan: 0°–355°; Tilt: 0°–75°; Rotation: 0°–355°		
Artificial Intelligence					
Face Detection		Support face image capture			
Perimeter Protection		Tripwire; intrusion (Recognition of vehicle and people); fast moving; loitering detection; parking detection and people gathering			
People Counting		Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection			
General Intelligence					

Motion detection, Video tampering , Scene Event Trigger changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly General Intelligence Object Abandoned/Missing Heat Map Yes Video H.265, H.264, H.264B, H.264H, Compression MJPEG(sub stream) Smart Codec Yes Streaming Capability 3 Streams 2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × Resolution 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/ CIF (352 × 288/352 × 240)

	Main Stream: 2688 × 1520 (1 fps–25/30 fps) 2560 × 1440 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps)
Frame Rate	Sub Stream: D1 (1 fps–25/30 fps) D1 (1 fps–50/60 fps)
	Third Stream: 1080P (1 fps-16 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps-8192 Kbps H.265: 19 Kbps-8192 Kbps
Day/Night	Day/Night: Electronic Color/B/W
BLC Mode	BLC/HLC/WDR (140 dB)
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)
Defog	Yes
Flip	0°/90°/180°/270°
Mirror	Off/On
Privacy Masking	Off/On (4 Area, Rectangle)
Audio	
Compression	G.711a, G.711Mu, G.726, AAC, G.723
Network	
Ethernet	RJ-45 (10/100 Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milstone, Genetec; P2P
Streaming Method	Unicast/Multicast
Max. User Access	20 Users
Edge Storage	NAS; FTP; SFTP Micro SD card 256 GB
Web Viewer	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)
Management Software	Smart PSS, DSS, P2P
Smart Phone	iOS, Android
Certifications	
Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
Interface	
Audio Interface	1/1 channel In/Out
Alarm	1 channel In: 5mA 5V DC 1 channel Out: 300mA 12V DC

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#### Electrical

Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)
Power Consumption	<4.4W
Environmental	
Operating Conditions	-30° C to +60° C (-22° F to +140° F)/Less than 95% RH
Storage Conditions	-30° C to +60° C (-22° F to +140° F)
Ingress Protection	IP67
Vandal Resistance	IK10
Construction	
Casing	Metal
Dimensions	Φ122.0 mm × 88.9 mm (4.80" × 3.50")
Net Weight	0.46 kg (1.01 lb)
Gross Weight	0.62 kg (1.37 lb)

### Accessories

Junction box

### **Optional:**



PFB200C

Inceiling Mount

Pole Mount



Rain Shade

Mount Adapter



Junction box







PFB220C

Ceiling Mount

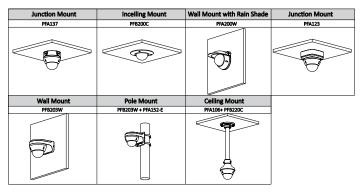


Wall Mount

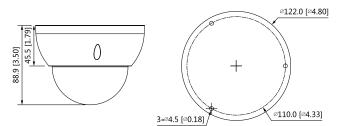
LR1002

ePoE Over Coax Converter





### Dimensions (mm[inch])





Ordering Information				
Туре	Part Number	Descriptior		
	DH-IPC-	AMP Pro AL		

4MP camera	DH-IPC- HDBW5449RP- ASE-NI	4MP Pro Al Full-color Fixed-focal Dome Network Camera, WDR, PAL	
	DH-IPC- HDBW5449RN- ASE-NI	4MP Pro AI Full-color Fixed-focal Dome Network Camera, WDR, NTSC	
	IPC-HDBW5449RP- ASE-NI	4MP Pro Al Full-color Fixed-focal Dome Network Camera, WDR, PAL	
	IPC-HDBW5449RN- ASE-NI	4MP Pro Al Full-color Fixed-focal Dome Network Camera, WDR, NTSC	
Accessories (optional)	PFA137	Junction box	
	PFB200C	Inceiling Mount	
	PFA200W	Rain Shade	
	PFA123	Junction box	
	PFB203W	Wall Mount	
	PFA152-E	Pole Mount	
	PFA106	Mount Adapter	
	PFB220C	Ceiling Mount	