

DH-IPC-HDBW5442R-ASE-NI

4MP WDR Dome AI Network Camera



Dahua AI series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua AI series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc. The complete lineup of Dahua AI includes network (PTZ) cameras, network video recorders, servers, and platform management products. Beyond seeing the world, the power of AI allows devices to perceive the environment and understand the world in a better way.

System Overview

Pro AI series contains Face Capture, 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 Capture

Face capture 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 guickly 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.

- · 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



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 ±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-HDBW5442R-ASE-NI

Technical Specification

Video

Compression

Resolution

Frame Rate

Streaming Capability

Camera					
Image Sensor		1/1.8" 4Megapixel progressive scan CMOS			
Effective Pixels		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		0.0002Lux@ F1.0			
Lens					
Lens Type		Fixed			
Mount Type		Board-in			
Focal Length		3.6 mm			
Max. Aperture		F1.0			
Angle of View		H: 93°, V: 50°			
Optical Zoom		N/A	N/A		
Aperture Type		Fixed	Fixed		
Close Focus Distance		2.0 m (6.56 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
DONIDIStance	3.6mm	70 m (230 ft)	28 m (91 ft)	14m(46ft)	7m(23ft)
Pan/Tilt/Rotation					
Pan/Tilt/Rotation	Range	Pan: 0°–355°; Tilt: 0°–75°; Rotation: 0°–355°			
Artificial Intelligence					
Face Capture		Support face image capture			
Perimeter Protection		Tripwire, Intrusion (Human & Vehicle classification)			
People Counting		Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection			
General Intelligence					
Event Trigger		Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access,Storage anomaly			
General Intelligence		Object Abandoned/Missing			

H.265+, H.265, H.264+, H.264, H.264B, H.264H,

2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/

Main Stream: 2688 × 1520 (1 fps-25/30 fps)

2560 × 1440 (1 fps-25/30 fps) 1920 × 1080 (1 fps-50/60 fps)

MJPEG (sub stream)

CIF (352 × 288/352 × 240)

Sub Stream: D1 (1 fps-25/30 fps) D1 (1 fps-50/60 fps)

Third Stream: 1080P (1 fps-16 fps)

3 Streams

Region of interest	011/011 (4 20112)		
Electronic Image Stabilization (EIS)	N/A		
Defog	Support		
Digital Zoom	N/A		
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	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPoE, IPv4/v6, SNMP, QoS, UPnP, NTP, ICMP, HTTPS, IGMP, 802.1x		
Interoperability	ONVIF (Profile S/Profile G), CGI, Milstone, Genetec, P2P		
Streaming Method	Unicast/Multicast		
Max. User Access	20 Users		
Edge Storage	NAS FTP 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			
Video Interface	N/A		
Audio Interface	1/1 channel In/Out		
RS485	N/A		
Alarm	1 channel In: 5mA 5V DC 1 channel Out: 300mA 12V DC		

CBR/VBR

Color/B/W

Auto/Manual

Off/On (4 Zone)

3D DNR

H.264: 32 Kbps-8192 Kbps

H.265: 19 Kbps-8192 Kbps Day/Night: Electronic

BLC/HLC/WDR (140 dB)

Off/On (4 Zone, Rectangle)

Auto/Natural/Street Lamp/Outdoor/Manual

Bit Rate Control

Bit Rate

Day/Night

BLC Mode White Balance

Gain Control

Noise Reduction

Motion Detetion Region of Interest

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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)/10%RH-95%RH				
Strorage 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)				

Ordering Information

Туре	Part Number	Description		
4MP camera	DH-IPC- HDBW5442RP- ASE-NI	4MP WDR Dome AI Network Camera, WDR, PAL		
	DH-IPC- HDBW5442RN- ASE-NI	4MP WDR Dome Al Network Camera, WDR, NTSC		
	IPC-HDBW5442RP- ASE-NI	4MP WDR Dome Al Network Camera, WDR, PAL		
	IPC-HDBW5442RN- ASE-NI	4MP WDR Dome Al 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		

Accessories

Junction box

Optional:





PFA123 Junction box





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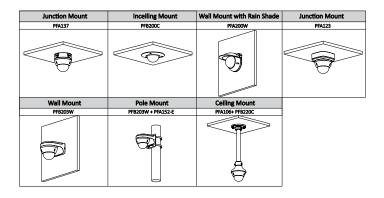
PFB203W PFA152-E Wall Mount Pole Mount

PFA106 Mount Adapter

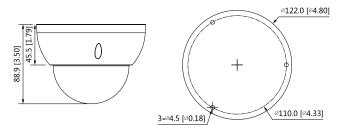
PFB220C Ceiling Mount



ePoE Over Coax Converter



Dimensions (mm[inch])





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