

DH-IPC-HDBW5541R-ASE

5MP WDR IR Dome AI Network Camera





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 and smart IR 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.

- · 1/2.7" 5Megapixel progressive scan CMOS
- · H.265 & H.264 triple-stream encoding
- · 20 fps@2592 × 1944, 50/60 fps@1080P (1920 × 1080)
- \cdot WDR (120 dB), Day/Night (ICR), 3D DNR, AWB, AGC, BLC
- \cdot Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- · 2.8 mm fixed lens (3.6 mm, 6.0 mm optional)
- \cdot 1/1 Alarm in/out, 1/1 audio in/out
- \cdot Max. IR LEDs Length 50 m
- · 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 $\pm 30\%$ 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.



Pro Al Series | DH-IPC-HDBW5541R-ASE

Technical Specification

Video

Compression Smart Codec

Streaming Capability

Camera					
Image Sensor		1/2.7" 5Megapixel progressive scan CMOS			
Effective Pixels		2592 (H) × 1944 (V)			
RAM/ROM		512 MB/128 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3 s-1/100000 s			
Minimum Illumination		0.005 Lux@F1.6			
IR Distance		Distance up to 50 m (164 ft)			
IR On/Off Control		Auto/Manual			
IR LEDs		1			
Lens					
Lens Type		Fixed-focal			
Mount Type		Board-in			
Focal Length		2.8 mm, 3.6 mm, 6.0 mm			
Max. Aperture		F1.6			
Angle of View		H: 102°, V: 71°/H: 84°, V: 58°/H: 51°, V: 37°			
Aperture Type		Fixed			
Close Focus Distance		0.9 m (2.95 ft)/1.6 m (5.25 ft)/3.1 m (10.17 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	56m(184ft)	22m(72ft)	11m(36ft)	6m(20ft)
	3.6mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)
	6.0mm	120m(394ft)	48m(157ft)	24m(79ft)	12m(39ft)
Pan/Tilt/Rotation					
Pan/Tilt/Rotation Range		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					
Event Trigger		Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly			
General Intelligence		Object Abandoned/Missing			
Heat Map		Yes			

H.265,H.264,H.264B,H.264H, MJPEG (sub stream)

Yes

3 Streams

Resolution	2592 × 1944/2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/CIF (352 × 288/352 × 240)			
	Main Stream: 2592 × 1944 (1 fps–20 fps) 2560 × 1440 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps)			
Frame Rate	Sub Stream: D1 (1 fps–20/30 fps) D1 (1 fps–50 fps)			
	Third Stream: 1080P (1 fps–17 fps)			
Bit Rate Control	CBR/VBR			
Bit Rate	H.264: 32 Kbps-8192 Kbps H.265: 19 Kbps-8192Kbps			
Day/Night	Auto (ICR)/Color/B/W			
BLC Mode	BLC/HLC/WDR (120 dB)			
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual			
Gain Control	Auto/Manual			
Noise Reduction	3D DNR			
Motion Detection	Off/On (4 Zone, Rectangle)			
Region of Interest	Off/On (4 Zone)			
Electronic Image Stabilization (EIS)	N/A			
Smart IR	Yes			
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, DMSS			
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			

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Interface

Gross Weight

5MP camera

Туре

Ordering Information

Part Number

HDBW5541RP-ASE

IPC-HDBW5541RP-

DH-IPC-

DH-IPC-HDBW5541RN-ASE

ASE

Audio Interface	1/1 channel In/Out				
RS485	N/A				
Alarm	1 channel In: 5mA 5V DC 1 channel Out: 300mA 12V DC				
Electrical					
Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)				
Power Consumption	<6W				
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)				

0.62 kg (1.37 lb)

Description

WDR, PAL

WDR, NTSC

5MP WDR IR Dome AI Network Camera,

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5MP WDR IR Dome AI Network Camera,

Accessories

Junction box

Optional:





PFA123

Junction box





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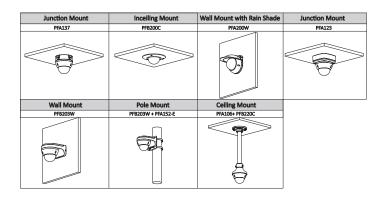
Wall Mount

Pole Mount Mount Adapter

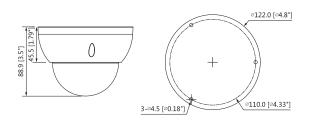
PFB220C Ceiling Mount



ePoE Over Coax Converter



Dimensions (mm[inch])





WDR, PAL 5MP WDR IR Dome AI Network Camera, IPC-HDBW5541RN-ASE WDR, NTSC PFA137 Junction box PFB200C Inceiling Mount PFA200W Rain Shade PFA123 Junction box Accessories (optional) PFB203W Wall Mount PFA152-E Pole Mount PFA106 Mount Adapter PFB220C Ceiling Mount

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