

DH-IPC-HDBW5541R-S

5MP WDR IR 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 and smart IR technology. This series fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

Functions

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.

- \cdot 1/2.7" 5Megapixel progressive scan CMOS
- · H.265&H.264 triple-stream encoding
- · 20fps@2592×1944
- · WDR(120dB), Day/Night(ICR), 3D DNR, AWB, AGC, BLC
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- \cdot 2.8mm fixed lens (3.6mm/6mm optional)
- · Max. IR LEDs Length 40m
- · Micro SD memory, IP67, IK10



Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. Dahua face detection camera can extract six facial attributes and output the metadata for analysis.

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-S

Technical Specification

Camera					
Image Sensor		1/2.7" 5Megapixel progressive scan CMOS			
Effective Pixels		2592(H) x 1944(V)			
RAM/ROM		512MB/128MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s			
Minimum Illumination		0.0048Lux/F1.6 (Color,1/3s,30IRE) 0.043Lux/F1.6 (Color,1/30s,30IRE) 0Lux/F1.6(IR on)			
IR Distance		Distance up to 40m (131ft)			
IR On/Off Control		Auto/ Manual			
IR LEDs		1			
Lens					
Lens Type		Fixed			
Mount Type		Board-in			
Focal Length		2.8mm,3.6mm,6.0mm			
Max. Aperture		F1.6			
Angle of View		H: 102°, V:71°/H: 84°, V:58°/H: 51°, V:37°			
Optical Zoom		N/A			
Aperture Type		Fixed			
Close Focus Distance		0.9m(2.95ft)/1.6m(5.25ft)/3.1m(10.17ft)			
	Lens	Detect	Observe	Recognize	Identify
DODIDI	2.8mm	56m(184ft)	22m(72ft)	11m(36ft)	6m(20ft)
DORI Distance	3.6mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)
	6.0mm	120m(394ft)	48m(157ft)	24m(79ft)	12m(39ft)
Pan/Tilt/Rotat					
Pan/Tilt/Rotation Range		Pan:0°~355°; Tilt:0°~75°; Rotation:0°~355°			
Artificial Intelligence					

Perimeter Protection	Tripwire, Intrusion(Human & Vehicle classification)
People Counting	Line crossing people counting, Region people counting,Loitering filter
General Intelligence	
Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access,Storage anomaly
General Intelligence	Object Abandoned/Missing
Video	
Compression	H.265+/H.265/H.264+/H.264/H.264B/H.264H/ MJPEG(sub stream)
Streaming Capability	3 Streams
Resolution	2592×1944/2688×1520/2304×1296/1080P(1920×1080)/1.3M(1280×960)/720P(1280×7 20)/D1(704×576/704×480)/VGA(640×480)/ CIF(352×288/352×240)

	Main Stream: 2592×1944(1~20fps)		
Frame Rate	Sub Stream: D1(1~20/30fps)		
	Third Stream: 1080P(1~13fps)		
Bit Rate Control	CBR/VBR		
Bit Rate	H.264: 32~ 8192Kbps H.265: 19~ 8192Kbps		
Day/Night	Auto(ICR) / Color / B/W		
BLC Mode	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		
Defog	Support		
Digital Zoom	N/A		
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(Profile S/Profile G), CGI,Milstone,Genetec,P2P		
Streaming Method	Unicast / Multicast		
Max. User Access	20 Users		
Edge Storage	NAS FTP Mirco SD card 256GB		
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		

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Interface

Ordering Information

Video Interface	N/A	
Audio Interface	N/A	
RS485	N/A	
Alarm	N/A	
Electrical		
Power Supply	DC12V(±30%), PoE(802.3af)(Class 0)	
Power Consumption	DC12V:2W 4.7W(IR on) PoE:2.6W 5.2W(IR on)	
Environmental		
Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / 10%RH~95% RH	
Strorage Conditions	+5° C $^{\rm \sim}$ +40° C (+41° F $^{\rm \sim}$ +104° F) (daily temperature difference within 15° C/59° F) / 10%RH~95% RH	
Ingress Protection	IP67	
Vandal Resistance	IK10	
Construction		
Casing	Metal	
Dimensions	Φ122mm×88.9mm (4.80"×3.50")	
Net Weight	0.43Kg (0.95lb)	
Gross Weight	0.59Kg (1.30lb)	

Accessories

Optional:



PFB200C Junction box Inceiling Mount





Junction box



Wall Mount

PFA152-E Pole Mount

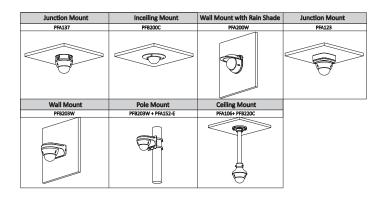


Mount Adapter

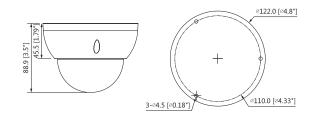
PFA200W

Rain Shade

PFB220C Ceiling Mount



Dimensions (mm/inch)



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TECHNOLOGY

Part Number Description Туре DH-IPC-5MP WDR IR Bullet AI Network Camera, HDBW5541RP-S WDR,PAL DH-IPC-5MP WDR IR Bullet AI Network Camera, HDBW5541RN-S WDR,NTSC 5MP camera IPC-5MP WDR IR Bullet AI Network Camera, HDBW5541RP-S WDR,PAL IPC-5MP WDR IR Bullet AI Network Camera, HDBW5541RN-S 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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