

DH-IPC-HFW5442T-S 4MP WDR IR Bullet 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. Active Deterrence and Full Color camera are also in this series. Meanwhile, the series features starlight and smart IR technology. This series fully protected from dust and water, certified to IP67 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 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.

- · 1/1.8" 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 (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)
- · Max. IR LEDs Length 50 m
- · Micro SD memory, IP67



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.

Protection(IP67, 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), the camera is the choice for installation in even the most unforgiving environments.





Pro Al Series | DH-IPC-HFW5442T-S

Technical Specification

Camera						
Image Sensor		1/1.8" 4Megapixel progressive scan CMOS				
Effective Pixels		2688 (H) × 1520 (V)				
RAM/ROM		512 MB/128 MB				
Scanning System	Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3 s-1/100000 s				
Minimum Illumination		0.001 Lux@F1.6				
IR Distance		Distance up to 50 m (164 ft)				
IR On/Off Control		Auto/Manual				
IR LEDs		4				
Lens						
Lens Type		Fixed				
Mount Type		Board-in				
Focal Length		2.8 mm, 3.6 mm, 6.0 mm				
Max. Aperture		F1.6				
Angle of View		H: 113°, V: 60°/H: 89°, V: 48°/H: 56°, V: 31°				
Optical Zoom		N/A				
Aperture Type		Fixed				
Close Focus Distance		1.3 m (4.27 ft)/1.9 m (6.23 ft)/3.8 m (12.47 ft)				
	Lens	Detect	Observe	Recognize	Identify	
DONDistance	2.8mm	58m(190ft)	23m(75ft)	12m(39ft)	6m(20ft)	
DORI Distance	3.6mm	72m(236ft)	29m(95ft)	14m(46ft)	7m(23ft)	
	6mm	113m(371ft)	45m(148ft)	23m(75ft)	11m(36ft)	
Pan/Tilt/Rotation						
Pan/Tilt/Rotation Range		Pan: 0°–360°; Tilt: 0°–90°; Rotation: 0°–360°				
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						
		Motion detection, Video tampering , Scene				

Event Trigger	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	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: 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	Auto (ICR)/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)
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 (10/100 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

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Interface

Ordering Information

interface				
Video Interface	N/A			
Audio Interface	N/A			
RS485	N/A			
Alarm	N/A			
Electrical				
Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)			
Power Consumption	<8.4W			
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	N/A			
Construction				
Casing	Metal			
Dimensions	244.1 mm × 79.0 mm × 75.9 mm (9.61" × 3.11" × 2.99")			
Net Weight	0.815 kg (1.80 lb)			
Gross Weight	1.08 kg (2.38 lb)			

Accessories

Optional:



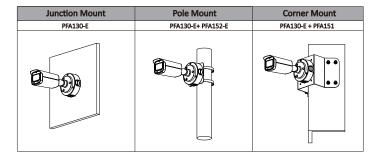




PFA130-E Junction box

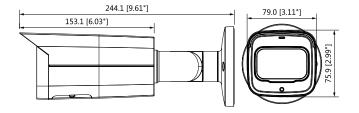
PFA152-E Pole Mount

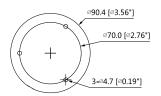
PFA151 Corner Mount



Dimensions (mm[inch])

Туре Part Number Description 4MP WDR IR Bullet AI Network Camera, DH-IPC-HFW5442TP-S WDR, PAL DH-IPC-4MP WDR IR Bullet AI Network Camera, HFW5442TN-S WDR, NTSC 4MP camera 4MP WDR IR Bullet AI Network Camera, IPC-HFW5442TP-S WDR, PAL 4MP WDR IR Bullet AI Network Camera, IPC-HFW5442TN-S WDR, NTSC PFA130-E Junction box Accessories PFA152-E Pole Mount (optional) PFA151 Corner Mount









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