

DH-IPC-HFW5442T-ASE-NI

4MP WDR 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 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.

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

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, 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.

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-HFW5442T-ASE-NI

Technical Specification

Streaming Capability

Resolution

Frame Rate

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 f	2.0 m (6.56 ft)			
DONDistance	Lens	Detect	Observe	Recognize	Identify	
DORI 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°–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						
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)				

3 Streams

(352 × 288/352 × 240)

2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 ×

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

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

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

720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/CIF

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

Pro Al Series | DH-IPC-HFW5442T-ASE-NI

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	<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	N/A			
Construction				
Casing	Metal			
Dimensions	244.1 mm × 79.0 mm × 75.9 mm (9.61" × 3.11" × 2.99")			
Net Weight	0.805 Kg (1.77 lb)			
Gross Weight	1.16 Kg (2.56 lb)			

Accessories

Optional:

PFA130-E

Junction box





PFA152-E

Pole Mount

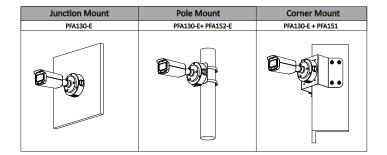


PFA151

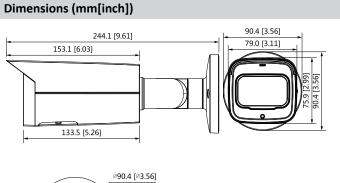
Corner Mount

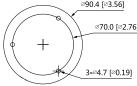


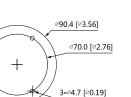
LR1002 ePoE Over Coax Converter

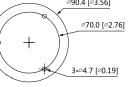


Ordering Information					
Туре	Part Number	Description			
4MP camera	DH-IPC- HFW5442TP- ASE-NI	4MP WDR Bullet Al Network Camera, WDR, PAL			
	DH-IPC- HFW5442TN- ASE-NI	4MP WDR Bullet Al Network Camera, WDR, NTSC			
	IPC-HFW5442TP- ASE-NI	4MP WDR Bullet Al Network Camera, WDR, PAL			
	IPC-HFW5442TN- ASE-NI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











 \mathbb{O} 2019 Dahua . All rights reserved. Design and specifications are subject to change without notice. Pictures in the document are for reference only, and the actual product shall prevail. Rev 001.001