

DH-IPC-HDW5442TM-AS-LED

4MP WDR Eyeball 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 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.

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.

- · 1/1.8" 4Megapixel progressive scan CMOS
- · H.265 & H.264 triple-stream encoding
- · 25/30 fps@2688 × 1520, 50/60 fps@1080P (1920 × 1080)
- · WDR (140 dB), Day/Night (Electronic), 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 Built-in MIC
- \cdot Max. LEDs Length 20 m
- · Micro SD memory, IP67



Full-color Starlight

The camera adopts F1.6 large aperture lens and 1/2.8" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera presents an impressive lowlight performance with an exceptional balance between noise reduction and the blur of moving object.

Warm Supplemental lights

With two warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total darkness. It also provides visible By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposureing of the objects in the image center. Also, the sensitivity and intensity of the LED lights can be remotely controlled by OSD menu.

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-HDW5442TM-AS-LED

Technical Specification

Smart Codec

Streaming Capability

<table-container>In lage Sensor in the series in the series</table-container>	Camera						
RAM/ROMSign Register in the second of the second o	Image Sensor		1/1.8" 4Megapixel progressive scan CMOS				
ProgressiveScanning SystemProgressiveElectronic Shutter SpeedAtto/Manual.1/3 s=1/100000000000000000000000000000000000	Effective Pixels		2688 (H) × 1520 (V)				
Electronic Shutter SpeedAuto/Manual-J s = J J U S = J	RAM/ROM		512 MB/128	MB			
Minimun III withowO.002 Lux@FIJEUISLED DistanceDistance up 2 0 m (66 FI)LED On/Off CottoAuto/ManueLEDS2LEDS2International State of Colspan="2">International State of Colspan="2"<	Scanning System		Progressive				
Bistance up to 10 G60 FU U U U G66 FULED Dn/Off ControlAuto/ManualLEDs2LEDs2LensFixed-focalLens TypeFixed-focalMount TypeBaard-inFocal LengthBaard-inKax ApertureF1.6Angle of ViewF1.6Angle of ViewF1.6Aperture TypeIs an (A.27 King Soft, V.4 King Soft,	Electronic Shutter Speed		Auto/Manua	l, 1/3 s—1/100	000 s		
Auto/Manu=LED On/Off Co+TrolAuto/Manu=LEDs2Lens TypeFixed-focalMount TypeBoard-inMount TypeBoard-inFocal LengthC.8 mm, 3.6 U = U = U = U = U = U = U = U = U = U	Minimum Illum	ination	0.002 Lux@F	0.002 Lux@F1.6			
Intermediate Item Problem Pro	LED Distance		Distance up 1	to 20 m (66 ft)			
Intrastantial Interpretation of the series of the ser	LED On/Off Cor	itrol	Auto/Manua	I			
Fixed-focalHourd TypeFixed-focalMount TypeRoard-inFocal Length2.8 mm, 3.6 U mmMax. ApertureF1.6Angle of ViewH: 113°, V: 60 V mmAperture TypeFixedClose Focus Distore1.3 m (4.27 U m (6.23 Km (3.24 mm))Aperture TypeS8m (1924)QammaS8m (1924)2.8 mmS8m (1924)2.8 mmS8m (1924)3.6 mmClose Focus Distore3.6 mmClose Focus Distore4.0 mmClose Focus Distore4.0 mmClose Focus Distore5.0 mmClose Focus Distore9.0 mmClose Focus Di	LEDs		2				
Mount TypeBoard-inHount TypeEard-inFocal Length2.8 mm, 3.6 \cup m. (-0 mm)Max. ApertureF1.6Angle of ViewH: 113°, V: 60°/H: 89°, V: 48°/H: 56°, V: 31°Angle of ViewFixedAperture TypeFixedClose Focus Distance1.3 m (4.27 \cup m (6.23 \cup m. (2.3.8 m(12.47 \cup m. (2.3.9 m(12.	Lens						
r.Proceed Length2.8 mm, 3.6 mm, 6.0 mmFocal LengthE1.6Max. ApertureF1.6Angle of ViewH: 113", V: 60"/H: 89", V: 48"/H: 56", V: 31"Aperture TypeFixedClose Focus Distance1.3 m (4.27 tr)/1.9 m (6.23 tr)/3.8 m(12.47 tr)Close Focus DistanceDetectObserveRecognizeAgenture TypeS8m(192ft)23m(75ft)12m(39ft)6m(20ft)Agenture TypeS8m(192ft)23m(75ft)12m(39ft)6m(20ft)Agenture TypeS8m(192ft)29m(95ft)14m(46ft)7m(23ft)Boolen Tilt/RotationRangePar: 0'-360", Tilt: 0'-78", return: 0'-35", return: 0	Lens Type		Fixed-focal				
Max. ApertureF1.6Angle of ViewH: 113°, V: 60/H: 89°, V: 48°/H: 56°, V: 31Aperture TypeFixedClose Focus Ditter1.3 m (4.27 H: 50°, V: 38 m(12.47 H)Close Focus Ditter1.3 m (4.27 H)Appentine Type2.8 mmS8m(192ft)2.8 mm58m(192ft)23m(75ft)12m(39ft)3.6 mm72m(236ft)29m(95ft)14m(46ft)3.6 mm72m(236ft)29m(95ft)14m(46ft)3.6 mm113m(371ft)45m(148ft)23m(75ft)Pan/Tilt/RotattorPan: 0'-360'Tilt: 0'-78'; Futation: 0'-36'Tilt: 0'-78'; Futation: 0'-78'; Fut	Mount Type		Board-in				
Angle of ViewH: 113", V: 60"/H: 89", V: 43"/H: 56", V: 31"Aperture TypeFixedClose Focus Distance1.3 m (4.27 H) 1.9 m (6.23 H)/3.8 m(12.47 H)DoRa DistanceDetectObserveRecognizeIdentify2.8mmS8m(192ft)23m(75ft)12m(39ft)6m(20ft)3.6mm72m(236ft)29m(95ft)14m(46ft)7m(23ft)6.0mm113m(371ft)45m(148ft)23m(75ft)11m(36ft)Pan/Tilt/Rotation RangePan: 0"-360"; Filt: 0"-78"; Rutation: 0"-78"; R	Focal Length		2.8 mm, 3.6	mm, 6.0 mm			
Aperture TypeFixedClose Focus Distance1.3 m (4.27 H) (5.23 H) (3.28 m) (3.27 H)1.3 m (4.27 H) (3.8 m) (3.27 H)PORI DistanceLensDetectObserveRecognizeIdentify2.8mm58m (192ft)23m (75ft)12m (39ft)6m (20ft)3.6mm72m (236ft)29m (95ft)14m (46ft)7m (23ft)6.0mm113m (371ft)45m (148ft)23m (75ft)11m (36ft)Pan/Tilt/Rotation RangePan: 0°-360°; Tilt: 0°-78°; Retation: 0°-3Partfificial IntelligenceFace DetectionSupport facture rotage capture visual detection: 0° detection: 0° detection of vehicle and people), fast moving, loitering detector. vising detection: 0° detection are capture visual detection are capture visual detection are capture visual detection are capture visual detection. Video tampering visual detection are capture visual detection. Video tampering visual detection. Pipel detection (19 a) detection. Pipel detection (19 a) detection. Pipel detection (19 a) detection. Pipel detection. Video tampering. Support 4 accesses independent detection.Perimeter TriggerColspan="4">Motion detection, Video tampering. Super 4 accesses independent detection. Pipel	Max. Aperture		F1.6				
Close Focus Distance1.3 m (4.27 Fl)1.9 m (6.23 Fl)3.8 m(12/F fl)Close Focus Distance1.3 m (4.27 Fl)1.9 m (6.23 Fl)3.8 m(12/F fl)Amount Part Part Part Part Part Part Part Par	Angle of View		H: 113°, V: 60)°/H: 89°, V: 48	3°/H: 56°, V: 3	l°	
Image: constraint of the second se	Aperture Type		Fixed				
DORI Distance2.8mm58m(192ft)23m(75ft)12m(39ft)6m(20ft)3.6mm72m(236ft)29m(95ft)14m(46ft)7m(23ft)6.0mm113m(371ft)45m(148ft)23m(75ft)11m(36ft)Pan/Tilt/RotationPan/Tilt/RotationPan: 0°-360'; Tilt: 0°-78'; Rotation: 0°-360'Pan: 0°-360'; Tilt: 0°-78'; Rotation: 0°-360'Pan/Tilt/RotationPan: 0°-360'; Tilt: 0°-78'; Rotation: 0°-360'Partificial InteligenceFace DetectionSupport face capturePerimeter ProtectionSupport face captureSupport face capturePeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection, IP address conflict, Illega Access, Storage anomalyGeneral InteligenceMotion detection, Video tampering, Scenee changing, Network disconnection, IP address conflict, Illega Access, Storage anomalyGeneral InteligenceObject Abanter/MissingGeneral InteligenceMotion detection, Video tampering, SceneeGeneral InteligenceObject Abanter/MissingGeneral InteligenceObject Abanter/MissingSupport Line construction, IP address conflict, Illega Access, Storage anomaly	Close Focus Dis	tance	1.3 m (4.27 f	t)/1.9 m (6.23	ft)/3.8 m(12.4	17 ft)	
DORI Distance3.6mm72m(236ft)29m(95ft)14m(46ft)7m(23ft)3.6mm113m(371ft)45m(148ft)23m(75ft)11m(36ft)Pan/Tilt/RotationPan/Tilt/RotationPan: 0°-360°; Tilt: 0°-78°; Rotation: 0°-360°Artificial IntelligenceFace DetectionSupport face image capturePerimeter ProtectionSupport face image capturePeople CountingSupport face image captureSupport face consing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection, IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceBobject Abanced/MissingColspan="4">Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection, IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abance/MissingSuper Line consting / Super time store in the s		Lens	Detect	Observe	Recognize	Identify	
3.6mm72m(236ft)29m(95ft)14m(46ft)7m(23ft)6.0mm113m(371ft)45m(148ft)23m(75ft)11m(36ft)Pan/Tilt/Rotat:Pan/Tilt/Rotat:Pan: 0°-360 : TI: 0°-78'; TU: 0'-78'; TU:		2.8mm	58m(192ft)	23m(75ft)	12m(39ft)	6m(20ft)	
Pan/Tilt/RotationPan/Tilt/Rotation RangePan: 0°-360°; Tilt: 0°-78°; Rotation: 0°-360°Artificial IntelligenceSupport face image captureFace DetectionSupport face image capturePerimeter ProtectionTripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gatheringPeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detectionEvent TriggerMotion detection, Video tampering, Scene changing, Network disconnection, .IP address conflict, Illegal Access, Storage anomalyHeat MapYes	DONIDIStance	3.6mm	72m(236ft)	29m(95ft)	14m(46ft)	7m(23ft)	
Pan/Tilt/Rotation RangePan: 0°-360°; Tilt: 0°-78°; Rotation: 0°-360°Artificial IntelligenceFace DetectionSupport face image capturePerimeter ProtectionTripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gatheringPeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detectionGeneral IntelligenceMotion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomalyHeat MapYes		6.0mm	113m(371ft)	45m(148ft)	23m(75ft)	11m(36ft)	
Artificial IntelligenceFace DetectionSupport face image capturePerimeter ProtectionTripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gatheringPeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detectionGeneral IntelligenceMotion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abandoned/Missing	Pan/Tilt/Rota	ation					
Face DetectionSupport face image capturePerimeter ProtectionTripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gatheringPeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detectionGeneral IntelligenceMotion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abandoned/Missing	Pan/Tilt/Rotation Range		Pan: 0°–360°; Tilt: 0°–78°; Rotation: 0°–360°				
Perimeter ProtectionTripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gatheringPeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detectionGeneral IntelligenceMotion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abandoned/MissingHeat MapYes	Artificial Inte	lligence					
Perimeter Protectionpeople), fast moving, loitering detection, parking detection and people gatheringPeople CountingSupport Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detectionGeneral IntelligenceMotion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abandoned/MissingHeat MapYes	Face Detection		Support face image capture				
People Counting counting; Support 4 accesses independent detection, 4 areas independent detection General Intelligence Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly General Intelligence Object Abandoned/Missing Heat Map Yes	Perimeter Protection		people), fast moving, loitering detection, parking				
Event TriggerMotion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abandoned/MissingHeat MapYes	People Counting		counting; Support 4 accesses independent				
Event Triggerchanging, Network disconnection , IP address conflict, Illegal Access, Storage anomalyGeneral IntelligenceObject Abandoned/MissingHeat MapYes	General Intel	ligence					
Heat Map Yes	Event Trigger		changing, Network disconnection , IP address				
	General Intelligence		Object Aban	doned/Missin	g		
Video	Heat Map		Yes				
Compression H.265,H.264,H.264B,H.264H, MJPEG (sub stream)	Video						

Yes

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	Day/Night: Electronic Auto/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 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;RTCF ;RTMP;SMTP;FTP;SFTP;DHCP;DNS;DDNS;QoS;UPnP ;NTP;Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;SNMF				
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					

Pro Al Series | DH-IPC-HDW5442TM-AS-LED

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				
Audio Interface	Built-in MIC			
RS485	N/A			
Alarm	N/A			
Electrical				
Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)			
Power Consumption	<7.2W			
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			
Construction				
Casing	Metal			
Dimensions	Φ106 mm × 99.2 mm (4.17" × 3.91")			
Net Weight	0.55 kg (1.21 lb)			
Gross Weight	0.71 kg (1.57 lb)			

Ordering Information Туре Part Number Description DH-IPC-4MP WDR Eyeball AI Network Camera, WDR, HDW5442TMP-PAL AS-LED DH-IPC-4MP WDR Eyeball AI Network Camera, WDR, HDW5442TMN-NTSC AS-LED 4MP camera IPC-4MP WDR Eyeball AI Network Camera, WDR, HDW5442TMP-PAL AS-LED IPC-4MP WDR Eyeball AI Network Camera, WDR, HDW5442TMN-NTSC AS-LED PFA130-E Junction box PFA151 Corner Mount PFB204W Wall Mount Accessories (optional) PFA106 Mount Adapter PFB220C Ceiling Mount PFA152-E Pole Mount

Accessories

PFA130-E

Junction box

Optional:





Wall Mount



PFA106 Mount Adapter

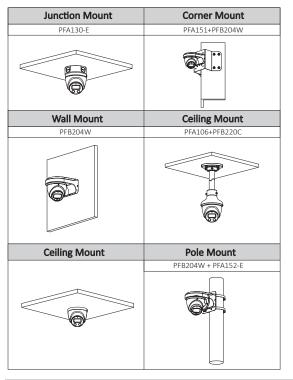


PFA151

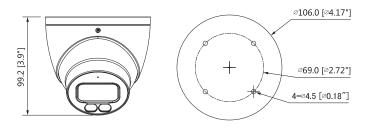
Corner Mount

PFB220C F Ceiling Mount Po

PFA152-E Pole Mount



Dimensions (mm[inch])





Rev 001.001 © 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.