

# DH-IPC-HDW5442TM-AS-LED

4MP WDR Eyeball 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 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.

#### **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.

- · 1/1.8" 4Megapixel progressive scan STARVIS™ CMOS
- · H.265&H.264 triple-stream encoding
- · 25/30fps@4Mp(2688×1520)
- · WDR(120dB), Day/Night(Electronic), 3DNR, AWB, AGC, BLC
- $\cdot$  Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2.8mm fixed lens (3.6mm, 6mm optional)
- $\cdot$  Max. LEDs Length 17m
- · Micro SD memory, IP67



#### Metadata

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

#### 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**

#### Comoro

General Intelligence

Streaming Capability

Video Compression

Camera						
Image Sensor		1/1.8" 4Megapixel progressive scan CMOS				
Effective Pixels		2688(H) x 1520(V)				
RAM/ROM		512MB/128MB				
Scanning System		Progressive				
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s				
Minimum Illumination		0.001653Lux/F1.6 ( Color,1/3s,30IRE) 0.01482Lux/F1.6 ( Color,1/30s,30IRE)				
LED Distance		2.8mm:Distance up to 8m (26ft) 3.6mm:Distance up to 11m (36ft) 6mm:Distance up to 17m (56ft)				
LED On/Off Control		Auto/ Manual				
LEDs		2				
Lens						
Lens Type		Fixed				
Mount Type		Board-in				
Focal Length		2.8mm,3.6mm,6.0mm				
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		1.3m(4.27ft)/1.9m(6.23ft)/3.8m(12.47ft)				
	Lens	Detect	Observe	Recognize	Identify	
DORI Distance	2.8mm	58m(192ft)	23m(75ft)	12m(39ft)	6m(20ft)	
DONIDIStance	3.6mm	72m(236ft)	29m(95ft)	14m(46ft)	7m(23ft)	
	6.0mm	113m(371ft)	45m(148ft)	23m(75ft)	11m(36ft)	
Pan/Tilt/Rota	tion					
Pan/Tilt/Rotation Range		Pan:0°~360°; Tilt:0°~78°; Rotation:0°~360°				
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				

Object Abandoned/Missing

3 Streams

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

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	G.711a/G.711Mu/G.726/AAC/G.723		
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		

4M(2688×1520)/3M(2304×1296)/1080P(192 0×1080)/1.3M(1280×960)/720P(1280×720)/

D1(704×576/704×480)/VGA(640×480)/ CIF(352×288/352×240)

Main Stream: 4M(1~25/30ps)

Sub Stream: D1(1~25/30fps) Third Stream: 1080P(1~11fps)

H.264: 32~ 8192Kbps

H.265: 19~ 8192bps Day/Night: Electronic

Auto/ Color / B/W

Auto/Manual

BLC / HLC / WDR(120dB)

Auto/Natural/Street Lamp/Outdoor/Manual

CBR/VBR

Resolution

Frame Rate

Bit Rate

Day/Night

BLC Mode

White Balance

Gain Control

Bit Rate Control

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

#### Interface

internate					
Video Interface	N/A				
Audio Interface	N/A				
RS485	N/A				
Alarm	N/A				
Electrical					
Power Supply	DC12V, PoE(802.3af)(Class 0)				
Power Consumption	DC12V:2.1W 6.2W(LED on) PoE:2.6W 7.2W(LED on)				
Environmental					
Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / 10%RH~95% RH				
Strorage Conditions	+5° C $^{\sim}$ +40° C (+41° F $^{\sim}$ +104° F) (daily temperature difference within 15° C/59° F ) / 10%RH~95% RH				
Ingress Protection	IP67				
Construction					
Casing	Metal, plastic				
Dimensions	Ф106mm×99.2mm (4.17"×3.91")				
Net Weight	0.55Kg (1.21lb)				
Gross Weight	0.71Kg (1.57lb)				

Gross Weight		0.71Kg (1.57lb)				
Ordering Information						
Туре	Part Number		Description			
4MP camera	DH-IPC- HDW5442TMP- AS-LED		4MP WDR Eyeball Al Network Camera,WDR,PAL			
	DH-IPC- HDW5442TMN- AS-LED		4MP WDR Eyeball AI Network Camera,WDR,NTSC			
	IPC- HDW5442TMP- AS-LED		4MP WDR Eyeball Al Network Camera,WDR,PAL			
	IPC- HDW5442TMN- AS-LED		4MP WDR Eyeball AI Network Camera,WDR,NTSC			
Accessories (optional)	PFA130-E		Junction box			
	PFA151		Corner Mount			
	PFB203W		Wall Mount			
	PFA106		Mount Adapter			
	PFB220C		Ceiling Mount			

## Accessories

PFA130-E

Junction box

PFB220C

## **Optional:**





Wall Mount



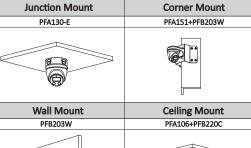
PFA106 Mount Adapter

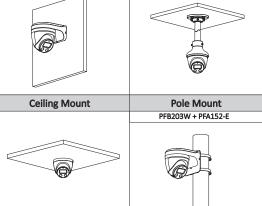




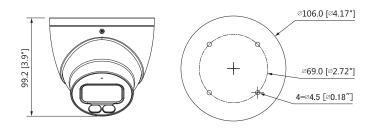
PFA151

Corner Mount





## Dimensions (mm/inch)





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PFA152-E Pole Mount