

# DH-IPC-HFW5241T-AS-LED

2MP WDR Bullet AI Network Camera



- 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265 & H.264 triple-stream encoding
- 25/30 fps@1080P (1920 × 1080)
- WDR (120 dB), Day/Night (Electronic), 3D DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- 2.8 mm fixed lens (3.6 mm, 6.0 mm, 8.0 mm optional)
- 1/1 Alarm in/out, 1/1 audio in/out
- Max. LEDs Length 25 m
- Micro SD memory, IP67



## 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.

### 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 overexposing 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.

Technical Specification						
<b>Camera</b>						
Image Sensor	1/2.8" 2Megapixel progressive scan STARVIS™ CMOS					
Effective Pixels	1920 (H) × 1080 (V)					
RAM/ROM	512 MB/128 MB					
Scanning System	Progressive					
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s					
Minimum Illumination	0.002 Lux@F1.6					
LED Distance	Distance up to 25 m (82 ft)					
LED On/Off Control	Auto/Manual					
LEDs	2					
<b>Lens</b>						
Lens Type	Fixed-focal					
Mount Type	Board-in					
Focal Length	2.8 mm, 3.6 mm, 6.0 mm, 8.0 mm					
Max. Aperture	F1.6					
Angle of View	H: 106°, V: 57°/H: 87°, V: 46°/H: 53°, V: 30°/H: 41°, V: 23°					
Aperture Type	Fixed					
Close Focus Distance	0.6 m (1.97 ft)/1.2 m(3.94 ft)/2.5 m (8.20 ft)/4 m (13.12 ft)					
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	2.8mm	39m(128ft)	15m(49ft)	8m(26ft)	4m(13ft)	
	3.6mm	55m(180ft)	22m(72ft)	11m(36ft)	6m(20ft)	
	6mm	83m(272ft)	33m(108ft)	17m(56ft)	8m(26ft)	
	8mm	110m(361ft)	44m(144ft)	22m(72ft)	11m(36ft)	
<b>Pan/Tilt/Rotation</b>						
Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–90°; Rotation: 0°–360°					
<b>Artificial Intelligence</b>						
Face Detection	Support face image capture					
Perimeter Protection	Tripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gathering					
People Counting	Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection					
<b>General Intelligence</b>						
Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly					
General Intelligence	Object Abandoned/Missing					
Heat Map	Yes					
<b>Video</b>						
Compression	H.265,H.264,H.264B,H.264H, MJPEG (sub stream)					
Smart Codec	Yes					
Streaming Capability	3 Streams					
Resolution	1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/CIF (352 × 288/352 × 240)					
Frame Rate	Main Stream: 1080P (1 fps–25/30 fps)					
	Sub Stream: D1 (1 fps–25/30 fps)					
	Third Stream: 1080P (1 fps–6 fps)					
Bit Rate Control	CBR/VBR					
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–7424 Kbps					
Day/Night	Day/Night: Electronic Auto/Color/B/W					
BLC Mode	BLC/HLC/WDR (120 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)					
<b>Audio</b>						
Compression	G.711a, G.711Mu, G.726, AAC, G.723					
<b>Network</b>						
Ethernet	RJ-45 (10/100 Base-T)					
Protocol	IPv4;IPv6;HTTP;HTTPS;TCP;UDP;ARP;RTP;RTSP;RTCP;RTMP;SMTP;FTP;SFTP;DHCP;DNS;DDNS;QoS;UPnP;NTP;Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;SNMP					
Interoperability	ONVIF (Profile S/Profile G/Profile T), CGI, Milestone, 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					
<b>Certifications</b>						
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	1/1 channel In/Out
RS485	N/A
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	<7W

**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
Vandal Resistance	N/A

**Construction**

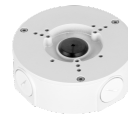
Casing	Metal
Dimensions	244.1 mm × 79.0 mm × 75.9 mm (9.61" × 3.11" × 2.99")
Net Weight	0.815 kg (1.80 lb)
Gross Weight	1.08 kg (2.38 lb)

**Ordering Information**

Type	Part Number	Description
2MP camera	DH-IPC-HFW5241TP-AS-LED	2MP WDR Bullet AI Network Camera, WDR, PAL
	DH-IPC-HFW5241TN-AS-LED	2MP WDR Bullet AI Network Camera, WDR, NTSC
	IPC-HFW5241TP-AS-LED	2MP WDR Bullet AI Network Camera, WDR, PAL
	IPC-HFW5241TN-AS-LED	2MP WDR Bullet AI Network Camera, WDR, NTSC
Accessories (optional)	PFA130-E	Junction box
	PFA152-E	Pole Mount
	PFA151	Corner Mount

**Accessories**

**Optional:**



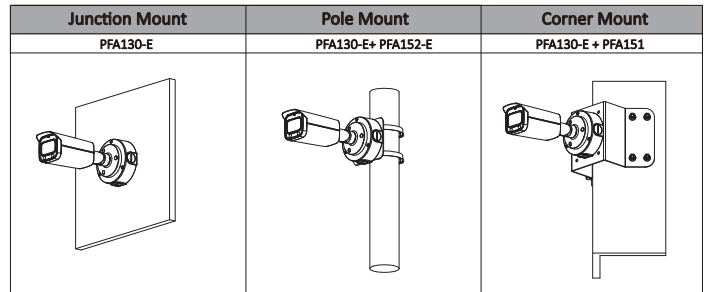
PFA130-E  
Junction box



PFA152-E  
Pole Mount



PFA151  
Corner Mount



**Dimensions (mm[inch])**

