

DH-IPC-HFW7442H-ZFR

4MP AI IR Bullet Network Camera



System Overview

With advanced deep learning algorithm, Dahua Ultra AI series network camera supports various intelligent functions and satisfies the requirements in different scenes. The camera can accurately detect person, vehicle, and non-motor vehicle, face, and liveness. This series camera has ultra starlight night version effect, and works with ultra-low stream. It supports dust-proof function, waterproof function and vandal-proof function, complying to the standards of IP67 and IK10.

Functions

People Counting

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs yearly/monthly/weekly/daily reports to meet your requirements.

Video Metadata

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

Smart Codec

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

ePoE

Dahua ePoE technology provides 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.

Face Recognition

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database to recognize the person identity.

- 4MP, 1/1.8" CMOS image sensor, low illuminance, high image definition
- Max outputs 4MP (2688×1520) @50 fps/60 fps
- H.264&H.265 coding, high compression ration · Wide dynamic, day/night, 3D noise reduction, AWB, HLC, BLC
- ROI, SVC, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- With deep learning algorithm, it supports people counting, face recognition, perimeter protection etc
- 24V AC/PoE/12V DC power support
- Five streams for three-channel HD video
- IP67, IK10 protection grade



Starlight



People Counting



Face Recognition



Video Metadata



Privacy Protection

Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

Privacy Protection

Dahua Privacy Protection technology can mask the detected face and human body to protect the privacy of some special targets.

Technical Specification						
Camera						
Image Sensor		1/1.8” 4Megapixel progressive CMOS				
Effective Pixels		2688 (H) × 1520 (V)				
ROM		16 GB				
RAM		2 GB				
Scanning System		Progressive				
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100000 s				
Min. Illumination		0.001 Lux@F1.2				
IR Distance		Distance up to 60m (196.85 ft)				
IR On/Off Control		Auto/Manual				
IR LEDs Number		4 (IR LEDs)				
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°				
Lens						
Lens Type		Motorized vari-focal				
Mount Type		Module interface				
Focal Length		2.7–12 mm				
Max. Aperture		F1.2				
Field of View		Horizontal: 114°(W)–47°(T) Vertical: 59°(W)–27°(T) Diagonal: 141° (W–55°(T)				
Iris Type		Auto aperture				
Close Focus Distance		W: 1 m (3.28ft) T: 2.5 m (8.20ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	W	60.1 m (187.19 ft)	24 m (78.74 ft)	12 m (39.37 ft)	6 m (19.69 ft)	
	T	128.6 m (421.92 ft)	51.4 m (168.64 ft)	25.7 m (84.32 ft)	12.8 m (41.99 ft)	
Smart event						
General IVS Analytics		Abandoned object, moving object				
Professional, intelligent						
Perimeter Protection		Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human); parking detection, loitering detection, and people gathering.				
Face Recognition		Face recognition, track, priority, snapshot, face enhancement, face exposure, face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, sadness, disgust, fear, surprise, calm, happiness and confusion), mask, beard Face matting setting: face, single inch photo Two snapshot strategies: priority snapshot, recognition Face angle filter Priority time setting Management of 5 group face libraries Single person register and person register in batch Face recognition and similarity setting Max supports face contrast in face library with 200,000 faces				
Video Metadata		Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.				
People Counting		People counting (count the entry number, exit number and pass number), display and output daily/monthly/annual statistics, No. in area				
Intelligent Search		Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.				
Video						
Video Compression		H.265, H.264, H.264H, H.264B, MJPEG				
Smart Codec		Yes				
Video Frame Rate		Main Stream: 2688 × 1520 (1–50/60 fps) sub stream 1: 704 × 576 (1–25/30 fps) sub stream 2: 1920 × 1080 (1–25/30 fps) sub stream 3: 1920 × 1080 (1–25/30 fps) sub stream 4: 704 × 576 (1–25/30 fps)				
Stream Capability		5 streams				
Resolution		4M (2688 × 1520), 3M (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)				
Bit Rate Control		CBR/VBR				
Video Bit Rate		H.264: 32–10240 kbps H.265: 12–10240 kbps				
Day/Night		ICR switch				
BLC		Yes				
WDR		140 dB				
White Balance		Auto/aatural/street lamp/outdoor/manual/regional custom				
Gain Control		Auto/Manual				
Noise Reduction		3D DNR				
Motion Detection		OFF/ON (4 areas, rectangular)				
Region of Interest(Rol)		Yes (4 areas)				
Electronic Image Stabilization(EIS)		Yes				
Smart IR		Yes				
Defog		Yes				
Image Rotation		0°/90°/180°/270° (Supports 90°/270° with 1080p resolution or below.)				
Mirror		Yes				
Privacy Masking		4 areas				
Audio						
Audio Compression		G.711a; G.711Mu; G726; AAC; G.723				
Network						
Network		RJ-45 (10/100/1000 Base-T)				
Protocol		HTTP; Htpps; 8021.x; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; SFTP; RTMP; Genetec;Bonjour				

Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P
Scene self-adaptation	Yes
User/Host	20
Edge Storage	FTP; Micro SD card (256 G); NAS; SFTP
Browser	IE: Versions later than IE9 Google: Versions later than Chrome 42 Firefox: Versions later than Firefox 48.0.2
Management Software	Smart PSS, DSS PRO, NVR, IVSS, DMSS
Mobile Phone	IOS, Android

Certification

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
----------------	--

Port

RS-485	1 (Bit rate: 1200 bps–115200 bps)
Audio Input	Audio Interface: 1/1 channel In/Out
Audio Output	
Alarm Input	3 channel In: 5mA 5V DC
Alarm Output	2 channel Out: 1000mA 30V DC/500mA 50V AC

Power

Power Supply	12V DC/24V AC/POE
Power Consumption	<17.3W

Environment

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Operating Humidity	≤95%
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Ingress Protection	IP67, IK10

Structure

Casing	Metal + Plastic
Dimensions	340.1 mm × 108.5 mm × 92.9 mm (13.39" × 4.27" × 3.66") (L × W × H)
Net Weight	1600g (3.53 lb)
Gross Weight	2400g (5.29 lb)

Ordering Information

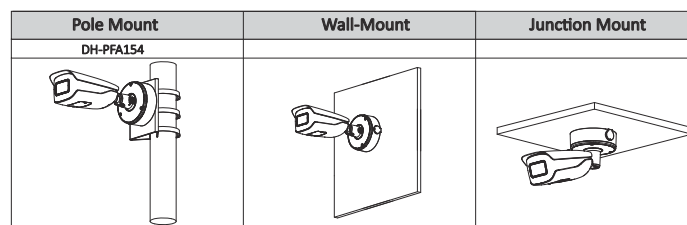
Type	Part Number	Description
4MP Camera	DH-IPC-HFW7442HP-ZFR	4MP AI IR Bullet Network Camera
	IPC-HFW7442HP-ZFR	4MP AI IR Bullet Network Camera
	DH-IPC-HFW7442HN-ZFR	4MP AI IR Bullet Network Camera
	IPC-HFW7442HN-ZFR	4MP AI IR Bullet Network Camera
Accessories (optional)	PFA154	Pole Mount

Accessories

Optional:



PFA154



Dimensions (mm/inch)

