

DH-IPC-HFW7442KP-Z-0832-SAPS

4MP AI IR Bullet Network Camera



- 4MP, 1/1.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 4MP (2688 × 1520)@30 fps
- H.264&H.265 codec, high compression rate, low bit rate
- Built-in IR LED, max. IR distance: 80 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- With deep learning algorithm, it supports ANPR
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Alarm: 3 in, 2 out; Audio: In, out; supports max. 256 G Micro SD card
- 12V DC/PoE power support, 12V power output, max. current 165mA
- IP67 protection



System Overview

With advanced deep learning algorithm, Dahua Ultra AI series network camera supports some intelligent functions, such as perimeter protection and smart motion detection and ANPR function. It adopts starlight solution, which makes a better image effect in low illuminance.

Functions

Smart (H.265+ & H.264+)

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart encoding technology realizes the higher efficiency than (H.265 & H.264), providing high-quality video, and reducing the cost of storage and transmission.

Wide dynamic range (WDR)

Dahua adopts advanced Wide Dynamic Range (WDR) technology. You can get clear details in the environment of strong brightness contrast. In high brightness and back-light environment, bright region and dark region with strong light source, you can also get clear images.

Starlight

Dahua Starlight technology mainly applies to the environment of low illumination, and it can provide clear colorful video. Even in the environment of min. illumination, the technology can guarantee the good image effect.

ANPR

With deep learning algorithm, it supports ANPR function, which can detect and capture vehicles and identify license plate information.

Intelligent Video Analysis (IVS)

With advanced video algorithm, Dahua camera supports intelligent detection, such as tripwire and intrusion and so on.

Protection (IP67, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera	
Image Sensor	1/1.8" 4Megapixel progressive CMOS
Effective Pixels	2688 (H) x1520 (V)
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s~1/100000 s
Min. Illumination	0.001 Lux@F1.6
IR Distance	Distance up to 80 m (262.5 ft)
IR On/Off Control	Auto/Manual
IR LEDs Number	4 (IR LEDs)

Lens	
Lens Type	Motorized vari-focal
Mount Type	Module interface
Focal Length	8 mm~32 mm
Max. Aperture	F1.6
Field of View	Horizontal: 40° (W)~15° (T) Vertical: 23° (W)~9° (T) Diagonal: 46° (W)~18° (T)
Iris Type	Auto aperture
Close Focus Distance	W: 2.5 m (8.20 ft) T: 6 m (19.69 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	151 m (495.4 ft)	60.7 m (199.15 ft)	30.3 m (99.41 ft)	15.1 m (49.54 ft)
	T	400 m (1312.34 ft)	160 m (524.93 ft)	80 m (262.47 ft)	40 m (131.23 ft)

Professional, Intelligent

Perimeter Protection	Tripwire; intrusion (Recognition of human and vehicle)
ANPR	ANPR, track, priority, snapshot Vehicle attributes: license plate, vehicle type, vehicle color, vehicle brand

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG
Smart Codec	Yes
Video Frame Rate	Main Stream: 2688 x 1520 (1~25 fps) sub stream 1: 704 x 576 (1~25 fps) sub stream 2: 1920 x 1080 (1~25 fps) sub stream 3: 1920 x 1080 (1~25 fps) sub stream 4: 704 x 576 (1~25 fps)
Stream Capability	5 streams
Resolution	4M (2688 x 1520); 3M (2304 x 1296); 1080p (1920 x 1080); 1.3M (1280 x 960); 720p (1280 x 720); D1 (704 x 576/704 x 480); VGA (640 x 480); CIF (352 x 288/352 x 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps~10240 kbps H.265: 12 kbps~10240 kbps
Day/Night	Auto(ICR)/Color/B/W

BLC	Yes
HLC	Yes
WDR	120 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Roi)	Yes (4 areas)
Electronic Image Stabilization(EIS)	Yes
Smart IR	Yes
Deforg	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920 x 1080 resolution.)
Mirror	Yes
Privacy Masking	4 areas

Audio

Audio Compression	G.711a; G.711Mu; G726; AAC; MPEG2-Layer2; G.722.1; G729
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Network

Network	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);CGI;P2P;Milestone;Genetec
Scene Self-adaptation	Yes
User/Host	20
Edge Storage	FTP; SFTP; Micro SD Card (support max. 256 G); NAS
Browser	IE: Versions later than IE9 Chrome: Versions later than Chrome 42 Firefox: Versions later than Firefox 48.0.2
Management Software	Smart PSS, DSS, 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
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Port

RS-485	1 (Bit rate: 1200 bps~115200 bps)
Audio Input	1-channel (RCA port)
Audio Output	1-channel (RCA port)
Alarm Input	3 channels in: 5mA 3V~5V DC
Alarm Output	2 channels out: 1000mA 30V DC/500mA 50V AC

Power

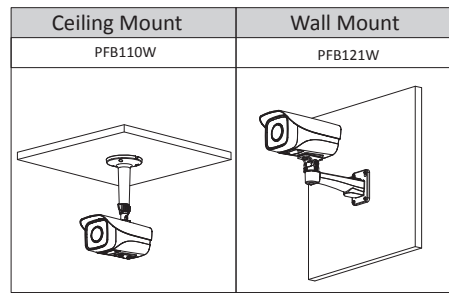
Power Supply	12V DC/PoE (802.3af)
Power Consumption	<21W

Environment

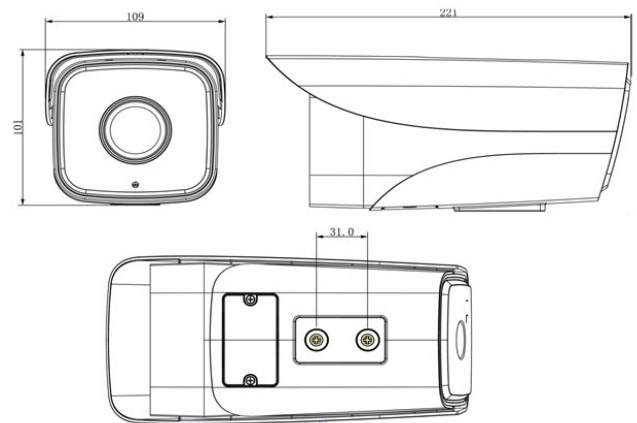
Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than≤95%
Storage Conditions	-40°C to +60°C (-40°F to +140°F)
Ingress Protection	IP67

Structure

Casing	Metal + Plastic
Dimensions	221 mm × 109 mm × 101 mm (L × W × H)
Net Weight	1080g
Gross Weight	1280g



Dimensions (mm[inch])



Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HFW3441MP-AS-I2	4MP AI IR Bullet Network Camera
Accessories (optional)	PFB110W	Ceiling Mount
	PFB121W	Wall Mount
	PFM321D	DC12V1A Power adapter
	LR1002-1ET/1EC	Single-port long reach ethernet over coax extender
	PFM907	Integrated mount tester
	PFM114	TLC SD card

Accessories

Optional:



PFB110W Ceiling Mount



PFB121W Wall Mount



PFM321D DC12V1A Power Adapter



LR1002-1ET/1EC Single-port long reach ethernet over coax extender



PFM907 Integrated Mount tester



PFM114 TLC SD card