DH-IPC-HFW1431S1-S4

4MP Entry IR Fixed-focal Eyeball Netwok Camera

- 4MP, 1/3” CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440) @25/30 fps, and supports max. 4MP (2688 × 1520) @20 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max. IR distance: 30 m
- ROI, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Image flip, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Abnormality detection: Motion detection, video tampering, network disconnection, IP conflict, illegal access, voltage detection
- 12V DC/PoE power support
- IP67, protection

System Overview

With features of simple installation, easy operation, and high performance-cost ratio, Dahua Entry Series camera is applicable to small and medium-sized scenes, such as homes/residences, small-sized retail stores, and other small and medium-sized enterprises.

Functions

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

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.

Motion Detection

When moving objects appear in the monitoring image, Dahua Motion Detection (General) technology triggers alarm or records.

Wide Dynamic Range (WDR)

With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

Smart IR

Dahua Smart IR technology can display image in the environment of low illuminance or completely dark environment. According to the distance of the targets, the camera adjusts IR LEDs intensity automatically to display the details of the moving target.

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 works normal after soaking in 1 m deep water for 30 minutes.

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

Technical Specification

Camera

Image Sensor	1/3"4Megapixel progressive CMOS
Effective Pixels	2688 (H) ×1520 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.03 Lux @ F2.0
IR Distance	30 m (98.4 ft)
IR On/Off Control	Auto/Manual
IR LEDs Number	1
Pan/Tilt/Rotation Range	Horizontal: 0°–360° Vertical: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed
Mount Type	M12
Focal Length	2.8 mm 3.6 mm
Max. Aperture	F2.0
Field of View	2.8 mm: Horizontal: 93° Vertical: 53° Diagonal: 111° 3.6 mm: Horizontal: 81° Vertical: 44° Diagonal: 95°
Iris Type	Fixed aperture
Close Focus Distance	2.8 mm: 0.8 m (2.6 ft) 3.6 mm: 1.4 m (4.6 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8mm	50.0 m (183.7 ft)	22.4 m (73.5 ft)	11.2 m (36.7 ft)	15.1 m (18.4 ft)
	3.6mm	80.0 m (262.5 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)	8.0 m (26.2 ft)

Video

Video Compression	H.265; H.264; H.264B; MJPEG
Smart Codec	Yes
Video Frame Rate	Main Stream: 2688 × 1520 (1 fps–20 fps) 2560 × 1440 (1 fps–25/30 fps) Sub Stream: 704 × 576 (1 fps–20/25 fps) 704 × 480 (1 fps–20/30 fps)
Stream Capability	2 streams
Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (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 Kbps–6144 Kbps H.265: 12 Kbps–6144 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	Manual/Auto
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(RoI)	Yes (4 areas)
Smart IR	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution.)
Mirror	Yes
Privacy Masking	4 areas

Network

Network	RJ-45 (10/100 Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; HTTPS; SFTP; 802.1x; ICMP; IGMP
Interoperability	ONVIF (Profile S/Profile G); CGI; Milestone; Genetec; P2P
User/Host	20
Edge Storage	Dahua Cloud; FTP; NAS
Browser	IE Chrome Firefox
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

Power

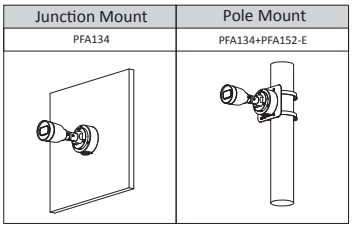
Power Supply	12V DC/POE (802.3af)
Power Consumption	< 5.0W

Environment

Operating Conditions	-40°C to +55°C (-40°F to +131°F) /less than≤95%
Strorage Conditions	-40°C to +60°C (-40°F to +140°F)
Ingress Protection	IP67

Structure

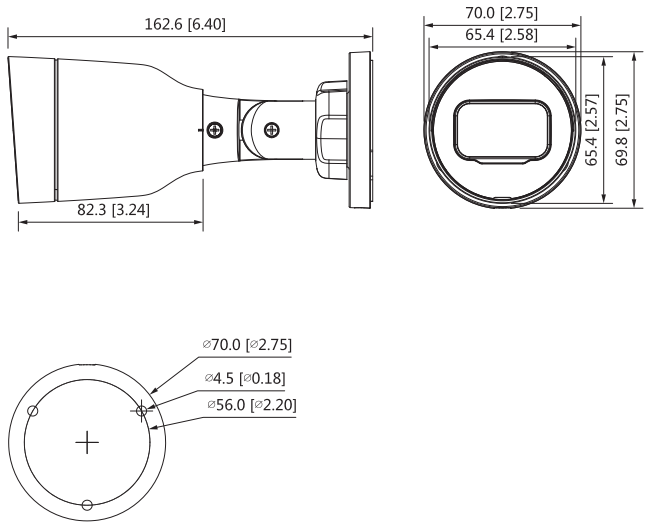
Casing	Metal +Plastic
Dimensions	162.6 mm × Φ70 mm (6.4" × Φ2.8")
Net Weight	0.22 kg (0.5 lb)
Gross Weight	0.35 kg (0.8 lb)



Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HFW1431S1P-S4	4MP Entry IR Fixed-focal Bullet Netwok Camera,PAL
	DH-IPC-HFW1431S1N-S4	4MP Entry IR Fixed-focal Bullet Netwok Camera,NTSC
Accessories (optional)	PFA134	Junction Box
	PFA152-E	Pole Mount
	PFM321D	DC12V1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester

Dimensions (mm[inch])



Accessories

Optional:

PFA134
Junction Box

PFA152-E
Pole Mount

PFM321D
DC12V1A Power Adapter

LR1002-1ET/1EC
Single-port Long Reach Ethernet over Coax Extender

PFM900-E
Integrated Mount Tester

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