DH-IPC-HFW2831T-AS-S2

8MP Lite IR Fixed-focal Bullet Network Camera

· 8MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
· Outputs max. 8MP (3840 × 2160) @15 fps, and supports 2688×1520 (2688 × 1520) @25/30 fps
· Support Triple Stream
· H.265 codec, high compression rate, ultra-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 NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
· Intelligent detection: Intrusion, tripwire
· Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, local alarm, voltage detection,audio detection
· Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 GB Micro SD card
· 12V DC/POE power support supply
· IP67 protection, IK10 protection (optional)

Series Overview

With upgraded H.265 encoding technology, Dahua Lite series network camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better color image in the condition of low illumination. It supports SD card storage, dust-proof function, waterproof function and vandal-proof function, complying to the standards of IP67 and IK10 (Supported by some select models).

Functions

Smart H.265+ & Smart 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.

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.

Starlight

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

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

Cyber Security

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

Protection (IP67, IK10, 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.
IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).
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	1/2.7" 8Megapixel progressive CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	128 MB
RAM	256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.009 Lux@F2.0
S/N Ratio	> 56 dB
Illumination Distance	80 m (262.5 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	3.6 mm 6 mm
Max. Aperture	3.6 mm: F2.0 6 mm: F2.0
Field of View	3.6 mm: Horizontal 87° × Vertical 47° × Diagonal 104° 6 mm: Horizontal 54° × Vertical 31° × Diagonal 61°
Iris Type	Fixed
Close Focus Distance	3.6 mm: 1.9 m (6.2 ft) 6 mm: 3.7 m (12.1 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	3.6 mm	106.7 m (350.1 ft)	42.7 m (140.1 ft)	21.3 m (69.9 ft)	10.7 m (35.1 ft)
	6 mm	160 m (524.9 ft)	64.0 m (210.0 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)

Smart Event

IVS	Tripwire; intrusion

Video

Video Compression	H.265; H.264; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: 3840 × 2160 (1 fps–15 fps) 2688 × 1520 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps); 704 × 480 (1 fps–30 fps) Third stream: CIF@1fps
Stream Capability	3 streams
Resolution	3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048); 3072 ×1728 (3072 × 1728); 2592 × 1944 (2592 × 1944); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 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–8192 kbps H.265: 12 kbps–8192 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 NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 3840 × 2160 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

Audio

Audio Compression	G.711a; G.711Mu; G.726

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; security exception; local alarm

Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
User/Host	20
Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS; DSS; DMSS

Mobile Phone	IOS; Android

Certification

Certifications	CE-LVD: EN62368-1 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

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC

Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 8.4W

Environment

Operating Conditions	–40°C to +60°C (–40°F to +140°F)/less than ≤ 95% RH
Storage Temperature	–40°C to +60°C (–40°F to +140°F)
Protection	IP67; IK10(optional)

Structure

Casing	Metal
Dimensions	244.1 mm × Φ90.4 mm (9.61" × Φ3.26")
Net Weight	0.88 kg (1.9 lb)
Gross Weight	1.15 kg (2.5 lb)

Ordering Information

Type	Part Number	Description
8MP Camera	DH-IPC-HFW2831TP-AS-S2	8MP Lite IR Fixed-focal Bullet Nework Camera, PAL
	DH-IPC-HFW2831TN-AS-S2	8MP Lite IR Fixed-focal Bullet Nework Camera, NTSC
Accessories (optional)	PFA130-E	Junction Box
	PFA152-E	Pole Mount
	PFM321D	12V DC 1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD card

Accessories

Optional:

PFA130-E
Junction Box

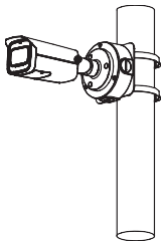
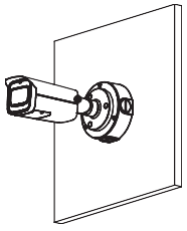
PFA152-E
Pole Mount

PFM321D
12V DC 1A Power Adapter

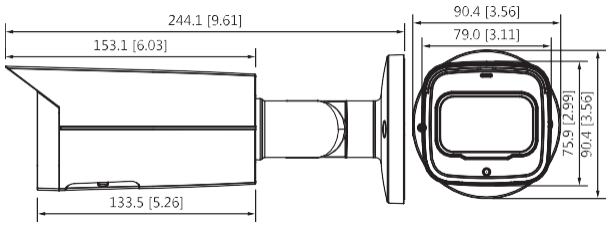
LR1002-1ET/1EC
Single-port Long Reach Ethernet over Coax Extender

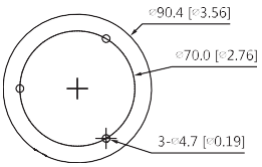
PFM900-E
Integrated Mount Tester

PFM114
TLC SD Card

Pole Mount	Junction Mount
PFA130-E+PFA152-E	PFA130-E
	

Dimensions (mm[inch])





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