Dahua TECHNOLOGY

DH-IPC-HDW2531EM-AS-S2

5MP Lite IR Fixed-focal Eyeball Network Camera

- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944) @20 fps, and supports 2688 ×1520 (2688 × 1520) @25/30 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
- Rotation mode, WDR, 3D DNR, 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 disconnected, IP conflict, illegal access, voltage detection
- Supports max. 256 GB Micro SD card, built-in MIC
- 12V DC/PoE power supply
- IP67 protection

| 5Mp | Smart Codec | WDR | Starlight | IVS | IP67 |

Series Overview

With upgraded H.265 encoding technology, Dahua Lite series camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better colorful image in the environment of low illumination. It supports SD card storage, waterproof function, dust-proof function, complying to the standards of IP67.

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.

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.

ONVIF

Technical Specification

Camera

Image Sensor	1/2.7" 5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
S/N Ratio	0.008 Lux @ F1.6
Min. Illumination	> 56 dB
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm 3.6 mm
Max. Aperture	F1.6 F1.6
Field of View	2.8 mm: Horizontal 103° × Vertical 71° × Diagonal 132° 3.6 mm: Horizontal 84° × Vertical 58° × Diagonal 110°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.6 m (3.61 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	56 m (183.73 ft)	22.4 m (73.49 ft)	11.2 m (36.75 ft)	5.6 m (18.37 ft)
	3.6 mm	80 m (262.47 ft)	32.0 m (104.99 ft)	16.0 m (52.49 ft)	8.0 m (26.25 ft)

Smart event

General IVS Analytics	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: 2592 × 1944 (1 fps–20 fps) 2688 × 1520 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps) 704 × 480 (1 fps–30 fps)
Stream Capability	2 streams

Resolution	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 DNR
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 2592 × 1944 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Audio Compression	G.711A; G.711Mu; G.726; AAC

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

Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
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; Bonjour
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec
User/Host	20
Storage	Dahua Cloud; 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

Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 7.2W

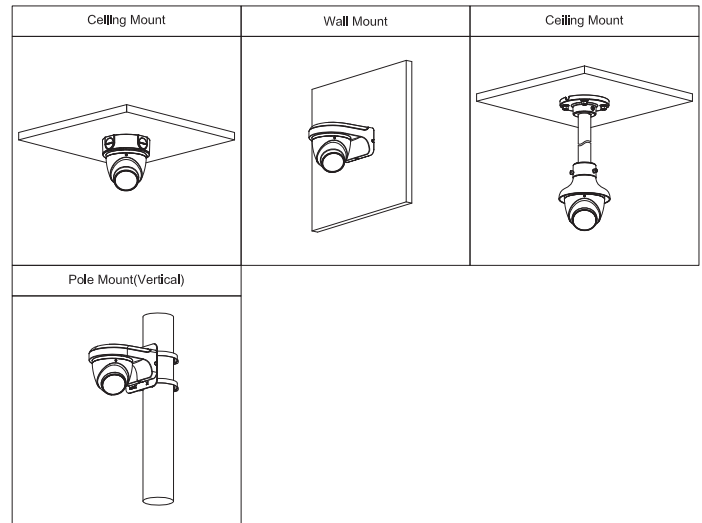## Environment

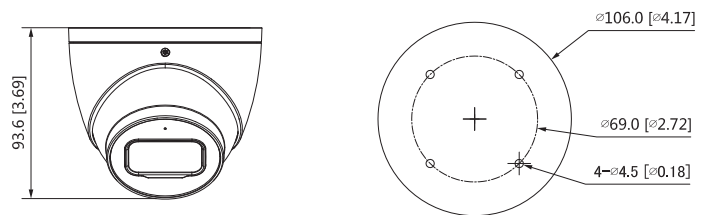|	
Operating Conditions	−40°C to +60°C (−40°F to +140°F)/less than ≤95%
Storage Temperature	−40°C to +60°C (−40°F to +140°F)
Protection Grade	IP67

Structure

Casing	Metal
Dimensions	93.6 mm × Φ106 mm (3.7" × Φ4.2")
Net Weight	530 g (1.1 lb)
Gross Weight	800 g (1.7 lb)

PFA106 Mount Adapter
PFB220C Cell Mount
PFM321D DC12V1A Power Adapter
LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender
PFM900-E Integrated Mount Tester
PFM114 TLC SD Card

Ceiling Mount   Wall Mount   Ceiling Mount   Pole Mount(Vertical)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-IPC-HDW2531EM-AS-S2	5MP Lite IR Fixed-focal Eyeball Network Camera, PAL
Accessories (optional)	PFA130-E	Junction Box
	PFB204W	Wall Mount
	PFA152-E	Pole Mount
	PFA106	Mount Adapter
	PFB220C	Cell Mount
	PFM321D	DC12V1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Dimensions (mm[inch])

93.6 [3.69]

∅106.0 [∅4.17]
∅69.0 [∅2.72]
4−∅4.5 [∅0.18]

Accessories

Optional:

PFA130-E Junction Box
PFB204W Wall Mount
PFA152-E Pole Mount

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