

# DH-IPC-HDW2431T-AS-S2

## 4MP Lite IR Fixed-focal Eyeball Network Camera



- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440)@25/30 fps, Max. supports 4MP (2688 × 1520) @ 20 fps
- H.265 coding, high compression ration, 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 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 disconnected, IP conflict, illegal access, voltage detection
- Max. 256 GB SD card and built-in Mic
- 12V DC/POE power supply
- IP67 protection



### 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 with the standards of IP67 (Supported by some select models).

### Functions

#### Smart H.265+ & Smart 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.

#### 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

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

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

**Technical Specification**

**Camera**

Image Sensor	1/3" 4Megapixel progressive CMOS
Max. Resolution	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	0.008 Lux @ F1.6
S/N Ratio	>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 102.0° × Vertical 55.0° × Diagonal 121.0° 3.6 mm : Horizontal 84.0° × Vertical 45.0° × Diagonal 100.0°				
Iris Type	Fixed				
Close Focus Distance	2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.6 m (3.61 ft)				
DOR/ 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**

IVS	Tripwire; intrusion
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**Video**

Video Compression	H.265; H.264; H.264B; MJPEG(only supported by sub stream)
Smart Codec	Smart H.265+ / Smart H.264+
Video Frame Rate	Main stream: 2688 × 1520 (1 fps-20 fps) 2660 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)
Stream Capability	2 streams

Resolution	2688 × 1520 (2688 × 1520); 2660 × 1440 (2660 × 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	Auto/Manual
Noise Reduction	3D NR
Motion Detection	Disable/Enable (4 areas, rectangle)
Region of Interest(ROI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution.)
Mirror	Yes
Privacy Masking	4 areas

**Audio**

Built-in MIC	Yes
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; voltage detection; security exception
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**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
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Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; IGMP; IGMP; NFS; PPPoE; Bonjour
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Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
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User/Host	20
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Storage	FTP; Micro SD card (support max. 256 G); NAS; SFTP
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Browser	IE Google Firefox
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Management Software	Smart PSS; DSS; DMSS
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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
Power Consumption	Basic power consumption: 2.1W (12V DC); 2.5W (POE) Max power consumption (H.265, Max resolution, Max stream, WDR, IR full intensity, IVS): 5.7W (12V DC); 6.5W (POE)
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)
Storage Humidity	≤95%
Protection	IP67
Structure	
Casing	Metal + Plastic
Dimensions	100.9 mm × Φ109.9 mm (3.97" × Φ4.33")
Net Weight	0.39 kg (0.86 lb)
Gross Weight	0.52 kg (1.15 lb)

Ordering Information		
Type	Part Number	Description
4MP Camera	DH-IPC-HDW2431TP-AS-S2	4MP Lite IR Fixed-focal Eyeball Network Camera, PAL
	DH-IPC-HDW2431TN-AS-S2	4MP Lite IR Fixed-focal Eyeball Network Camera, NTSC
Accessories	PFA130-E	Junction Box
	PFB203W	Well Mount
	PFA152-E	Pole Mount
	PFM321D	DC12V1A Power Adapter
	LR1002-1ET/1EO	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Accessories

Optional:



PFA130-E Junction Box



PFB203W Well Mount



PFA152-E Pole Mount



PFM321D DC12V1A Power Adapter



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



PFM900-E Integrated Mount Tester



PFM114 TLC SD card

Junction Mount	Wall Mount	Pole Mount
PFA130-E	PFB203W	PFA152-E+PFB203W

Dimensions (mm[inch])

