DH-IPC-HDW2230T-AS-S2

2MP Lite IR Fixed-focal Eyeball Network Camera



- 2MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2MP (1920 × 1080)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, DWDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire.
- Abnormality detection: Motion detection, privacy masking, audio abnormity, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Max. 256 G micro SD card; 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.

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.

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 cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising 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 ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Max. Resolution	1920 (H) × 1080 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 Lux@F1.6 (Color, 30 IRE) 0.0005 Lux@F1.6 (B/W, 30 IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.43 ft) (IR)
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
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	2.8 mm: F1.6 3.6 mm: F1.6
Field of View	2.8 mm: Horizontal: 107°; Vertical: 56°; Diagonal: 127° 3.6 mm: Horizontal: 88°; Vertical: 44°; Diagonal: 105°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 0.7 m (2.30 ft) 3.6 mm: 1.3 m (4.27 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	43.9 m (144.03 ft)	17.5 m (57.41 ft)	8.8 m (28.87 ft)	4.4 m (14.44 ft)
	3.6 mm	58.9 m (193.24 ft)	23.6 m (77.43 ft)	11.8 m (38.71 ft)	5.9 m (19.36 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: 1920 × 1080@1–25/30 fps Sub stream: 704 × 576@1–25 fps 704 × 480@1–30 fps *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	2 streams
Resolution	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	DWDR
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° (Support 90°/270° with 1080p resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G.726; PCM

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 abnormality; voltage detection; security exception

Network

Network Port	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
Network 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; Boujour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone
User/Host	20 (Total bandwidth: 48 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Client	IOS; Android

Certification

Certifications	CE-LVD: EN 62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B

Power

Power Supply	12 V DC/PoE (802.3af)
Power Consumption	Basic: 1.8 W (12 V DC); 2.6 W (PoE) Max. (ICR + H.265 + max. resolution + main stream + IR intensity + DWDR + IVS): 5.5 W (12 V DC); 6.4 W (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)
Protection	IP67

Structure

Casing	Inner core: Metal Cover: Plastic
Product Dimensions	100.9 mm × Φ109.9 mm (3.97" × Φ4.33")
Net Weight	0.39 kg (0.86 lb)
Gross Weight	0.56 kg (1.23 lb)

Ordering Information

Type	Model	Description
2MP Camera	DH-IPC-HDW2230T-AS-S2	2MP Lite IR Fixed-focal Eyeball Network Camera
Accessories (optional)	PFA13G	Junction Box
	PFB205W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFM321D	12V DC 1A Power Adapter
	PFM900-E	Integrated Mount Tester

Accessories

Optional:



PFA13G
Junction Box

PFB205W
Wall Mount Bracket



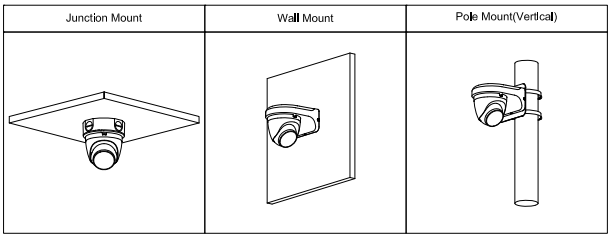
PFA152-E
Pole Mount Bracket



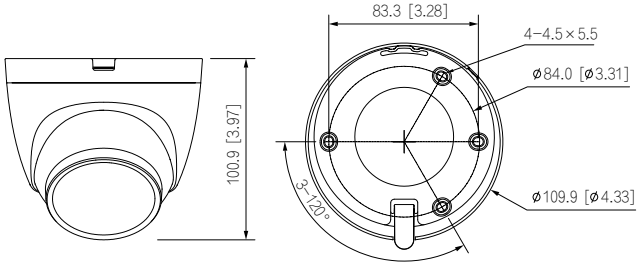
PFM321D
12V DC 1A Power Adapter



PFM900-E
Integrated Mount Tester



Dimensions (mm[inch])



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