DH-IPC-T1E49-A-IL

4MP ECO Dual Light Fixed-focal Eyeball Network Camera



- 4-MP 1/3" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2560 × 1440)@30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in multi-core light, the max. IR distance is 30 m and the max. warm light distance is 15 m.
- DWDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Built in Mic.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.



Series Overview

The Dahua ECO Series camera is designed with simplicity for practicality. Plug and play, it immediately outputs images when connected to the Dahua NVR. It supports remote monitoring through the Dahua mobile app, and triggers alarms for motion detection, video tampering, and security exception, providing you with a convenient and secure IP service.

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.

Dual Light

Dahua Dual Light Technology has flexible illumination modes. The warm light in the camera can be used to output full-color videos 24/7, and the IR light can be accessed for general monitoring. The lights can also be manually selected to suit the scene, making the technology suitable for use in residential areas, retail stores, roads and many other locations.

Motion Detection

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

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 work normally 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	1/3" CMOS
Max. Resolution	2560 (H) × 1440 (V)
ROM	16 MB
RAM	64 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.008 lux@F1.6 (Color, 30 IRE); 0.0008 lux@F1.6 (B/W, 30 IRE); 0 lux (Illuminator on)
S/N Ratio	＞56 dB
Illumination Distance	Up to 30 m (98.43 ft) (IR); Up to 15 m (49.21 ft) (Warm light)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	2 (Multi-core (IR + warm) light)
Angle Adjustment	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	F1.6
Field of View	2.8 mm: H: 94°; V: 52°; D: 111° 3.6 mm: H: 78°; V: 41°; D: 94°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.1 m (3.61 ft) 3.6 mm: 1.7 m (5.58 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	64.0 m (209.97 ft)	25.6 m (83.99 ft)	12.8 m (41.99 ft)	6.4 m (21.00 ft)
	3.6 mm	85.4 m (280.18 ft)	34.2 m (112.20 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.				

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: 2560 × 1440@(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	4M (2560 × 1440); 3M (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	VBR;CBR
Video Bit Rate	H.264: 32 kbps–4096 kbps; H.265: 12 kbps–4096 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°/180°
Mirror	Yes
Privacy Masking	4 areas

Audio

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

Alarm

Alarm Event	Network disconnection; IP conflict; illegal access; motion detection; video tampering; audio detection; security exception

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; NTP; Multicast; P2P
Interoperability	ONVIF (Profile S & Profile T); CGI
User/Host	6 (Total bandwidth: 24 M)
Storage	FTP
Browser	IE; Chrome; Firefox
Management Software	Smart PSS Lite; DSS; DMSS; DoLynk Care
Mobile Client	iOS;Android
Cyber Security	Video encryption;Configuration encryption;Digest;WSSE;Account lockout;Security logs;Generation and importing of X.509 certification;HTTPS;Trusted boot;Trusted execution;Trusted upgrade

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU

Power

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 1.4 W (12 VDC), 2.1 W (PoE); Max.: 3.3 W (12 VDC); 4.5 W (PoE) (ICR switch + illuminator intensity)

Environment

Operating Temperature	–40 °C to +50 °C (–40 °F to +122 °F)
Operating Humidity	≤95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	≤95% (RH), non-condensing
Protection	IP67

Structure

Casing Material	Plastic
Product Dimensions	103.2 mm × Φ109.9 mm (4.06" × Φ4.33")
Net Weight	0.24 kg (0.53 lb)
Gross Weight	0.38 kg (0.84 lb)

Ordering Information

Type	Model	Description
IP CAMERA	DH-IPC-T1E49-A-IL	4MP ECO Dual Light Fixed-focal Eyeball Network Camera
Accessories (Optional)	DH-PFA109	Mount adapter
	DH-PFB220C	Ceiling Mount Bracket
	DH-PFB305W	Wall mount bracket
	DH-PFA151	Corner mount bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFA152-E	Pole Mount Bracket
	DH-PFB205W-E	Wall Mount Bracket
	DH-PFA13G	Junction box
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM321D-EN	DC12V 1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester

Accessories

Optional:



DH-PFA109
Mount adapter



DH-PFB220C
Ceiling Mount Bracket



DH-PFB305W
Wall mount bracket



DH-PFA151
Corner mount bracket



DH-PFA150
Pole Mount Bracket



DH-PFA152-E
Pole Mount Bracket



DH-PFB205W-E
Wall Mount Bracket



DH-PFA13G
Junction box



DH-PFM321-EN
DC12V1A power adapter



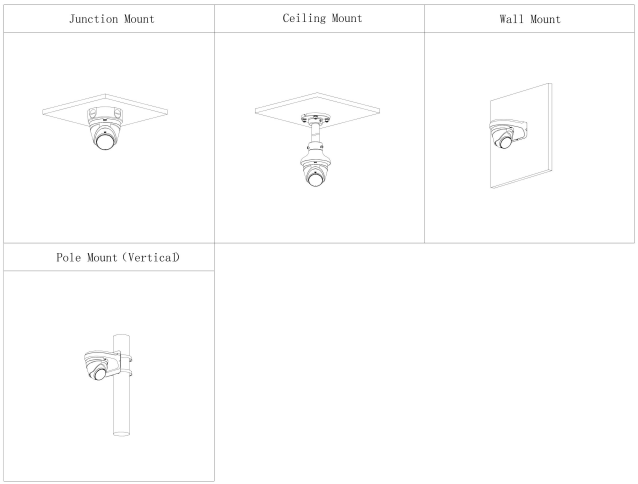
DH-PFM321D-EN
DC12V 1A power adapter



DH-PFM320D-EN
DC12V2A power adapter

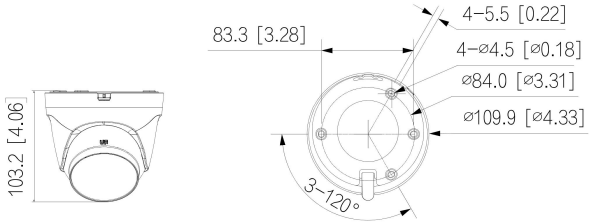


PFM900-E
Integrated Mount Tester



Dimensions (mm[inch])

mm [inch]



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