DH-IPC-T1E20

2MP ECO IR Fixed-focal Eyeball Network Camera



- 2-MP 1/3.2" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2 MP (1920 × 1080)@30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 30 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.
- 12 VDC 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.

Smart Illumination

Dahua Smart Illumination technology can display image in the environment of low illuminance or completely dark environment. According to the distance of the targets, the camera adjusts Illuminations intensity automatically to display the details of the moving target.

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	1/3.2" CMOS
Max. Resolution	1920 (H) × 1080 (V)
ROM	16 MB
RAM	64 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.01 lux@F2.2 (Color, 30 IRE) 0.005 lux@F2.2 (B/W,30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 30 m (98.43 ft) (IR LED)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	2 (IR LED)
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	F2.2
Field of View	2.8 mm: H: 99°; V: 55°; D: 117° 3.6 mm: H: 79°; V: 43°; D: 94°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 0.5 m (1.64 ft) 3.6 mm: 0.8 m (2.62 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	44.7 m (146.65 ft)	17.9 m (58.73 ft)	8.9 m (29.20 ft)	4.5 m (14.76 ft)
	3.6mm	55.0 m (180.45 ft)	22.0 m (72.18 ft)	11.0 m (36.09 ft)	5.5 m (18.04 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: 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); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
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
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

Alarm Event	Network disconnection; IP conflict; illegal access; motion detection; video tampering; 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
Mobile Client	iOS;Android
Cyber Security	Configuration encryption;Trusted execution;Digest;Security logs;HTTPS;Trusted upgrade;WSSE;Trusted boot;Account lockout;Generation and importing of X.509 certification;Video encryption

Power

Power Supply	12 VDC/PoE
Power Consumption	Basic: 1.2 W (12 VDC); 2.1 W (PoE) Max. (ICR switch+illuminator intensity): 2.8 W (12 VDC); 4 W (PoE)

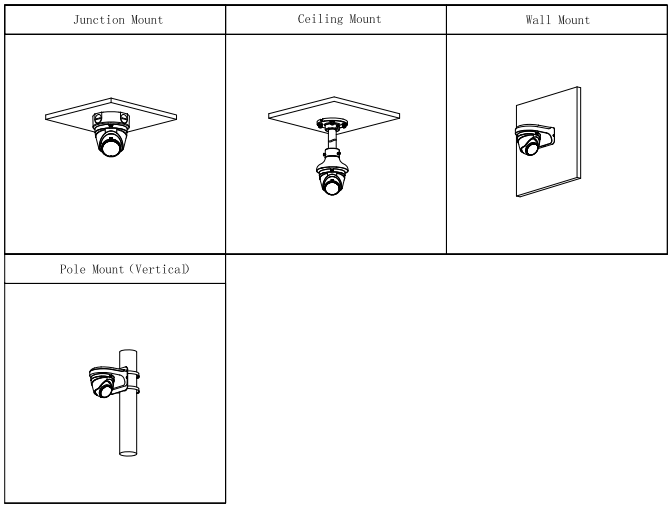
Environment

Operating Temperature	–40 °C to +50 °C (–40 °F to +122 °F)
Operating Humidity	≤95%
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)

Storage Humidity	≤95%
Protection	IP67

Structure

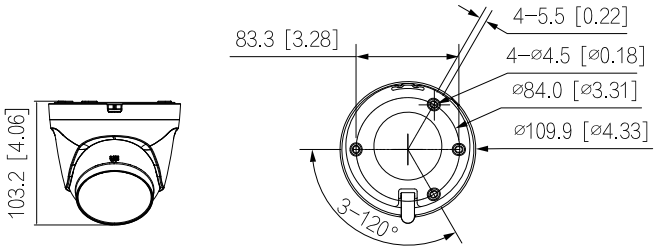
Casing Material	Plastic
Product Dimensions	103.2 mm × Φ109.9 mm (4.06" × Φ4.33")
Net Weight	0.24 kg (0.53 lb)
Gross Weight	0.38 kg (0.84 lb)



Ordering Information

Type	Model	Description
2MP Camera	DH-IPC-T1E20	2MP ECO IR Fixed-focal Eyeball Network Camera
Accessories (Optional)	PFM321D	12 VDC 1 A Power Adapter
	PFM900-E	Integrated Mount Tester
	PFB205W-E	Wall Mount Bracket
	PFA13G	Junction Box
	PFA109	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	PFA152-E	Pole Mount Bracket

Dimensions (mm[inch])



Accessories

Optional:



PFM321D
12 VDC 1 A Power Adapter



PFM900-E
Integrated Mount Tester



PFB205W-E
Wall Mount Bracket



PFA13G
Junction Box



PFA109
Mount Adapter



PFB220C
Ceiling Mount Bracket



PFA152-E
Pole Mount Bracket

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