

DH-IPC-HUM8241E-E1-L1

2MP Covert Pinhole WizMind Network Camera-KIT-L1



Series Overview

Dahua Pinhole series network camera includes one-in-all camera and separated camera. Separated camera can work with different lens to meet the requirements in different installation scenes. Pinhole Series camera is widely applied in hidden or small scenes such as banks and advertising screen.

Functions

AI Coding

Through Dahua AI Coding technology, the camera adopts advanced scene adaptive bit rate control algorithms to improve the efficiency of coding using H.265 and H.264 codecs. It offers the basic bit rate control technologies of constant bitrate (CBR) and variable bitrate (VBR), along with the new average bitrate (ABR). ABR allocates bit rate in each period more reasonably under expected storage conditions, and combines the advantages of CBR's maintenance of bit rate stability over the long term and VBR's prioritization of image quality over the short term.

Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

Face Detection

Dahua Face Detection technology can detect the face in the image. With deep learning algorithm, the technology supports detecting, tracking, capturing and selecting the best face image, and then outputs face snapshot.

- 2-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2 MP (1920 × 1080) @50/60 fps.
- ROI, AI H.264 /H.265, flexible coding, applicable to various bandwidth and storage environments.
- LDC, rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- With deep learning algorithm, it supports: Face detection, IVS, Smart object detection, People counting, Acupick, etc.
- Privacy Protection: Mosaics can be automatically placed over the face or body of a person to protect their privacy.
- Alarm: 2 in, 2 out; audio: 1 in, 1 out; max. 512 G Micro SD card.
- 12 VDC/PoE power supply, easy for installation.
- The Network Camera Main Box connects to the lens through the included 8 m coaxial cable.
- Supports dual power backup.



People Counting

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs reports to meet your requirements.

Technical Specification

Camera	
Image Sensor	1/2.7" CMOS
Max. Resolution	1920 (H) × 1080 (V)
ROM	256 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F2.0 (Color, 30 IRE) 0.0005 lux@F2.0 (B/W, 30 IRE)
S/N Ratio	>56 dB

Lens											
Lens Type	Fixed-focal										
Lens Mount	M12										
Focal Length	2.8 mm										
Max. Aperture	F2.0										
Field of View	H: 104°; V: 59°; D: 118°										
Iris Control	Fixed										
Close Focus Distance	0.5 m (1.64 ft)										
DORI Distance	<table border="1"> <thead> <tr> <th>Lens</th> <th>Detect</th> <th>Observe</th> <th>Recognize</th> <th>Identify</th> </tr> </thead> <tbody> <tr> <td>2.8 mm</td> <td>42.1 m (138.12 ft)</td> <td>16.8 m (55.12 ft)</td> <td>8.4 m (27.56 ft)</td> <td>4.2 m (13.78 ft)</td> </tr> </tbody> </table>	Lens	Detect	Observe	Recognize	Identify	2.8 mm	42.1 m (138.12 ft)	16.8 m (55.12 ft)	8.4 m (27.56 ft)	4.2 m (13.78 ft)
	Lens	Detect	Observe	Recognize	Identify						
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<p>*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.</p>											

Intelligence	
IVS (Perimeter Protection)	Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection.
Smart Object Detection	Smart abandoned object; smart missing object
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people, animal and motor vehicles, and search through live and recorded videos to quickly locate targets.
Face Detection	Face detection; snapshot; snapshot optimization; optimal face snapshot upload; face exposure; face attributes extraction including 6 attributes and 8 expressions; face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting.
People Counting	Tripwire people counting and people counting in area; generating and exporting report (day/month/year);

	queue management; 4 rules can be set for tripwire, people counting in area and queue management.
Privacy Protection	Mosaics can be automatically placed over the face or body of a person to protect their privacy
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos

Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by sub stream)
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 1920 × 1080@(1–50/60 fps) sub stream: 1920 × 1080@(1–25/30 fps) third stream: 1920 × 1080@(1–25/30 fps) *High frame rate of main stream is supported under monitoring mode only Note: AI/WDR cannot be enabled at the same time as high frame rate.
Streaming Capability	3 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	VBR;CBR;ABR
Video Bit Rate	H.264: 3 kbps–8192 kbps; H.265: 3 kbps–8192 kbps
Day/Night	Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
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)
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower)
Mirror	Yes
Privacy Masking	4 areas
LDC	Yes

Audio	
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723

Alarm	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; missing object; abandoned object; parking detection; loitering detection; people gathering; scene changing; audio detection; voltage detection; external alarm; face detection; people counting; people number error detection; security exception
Network	
Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
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; SAMBA; PPPoE; SNMP; P2P; Bonjour; Auto Registration
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI; P2P; Milestone; Genetec
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (Support max. 512 G); NAS
Browser	IE: IE8, IE9, and IE11; Chrome; Firefox
Management Software	Smart PSS; DSS; DMSS; DoLynk Care
Mobile Client	iOS; Android
Security	Digest; WSE; Account lockout; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HTTPS; 802.1x; Trusted boot; Trusted execution; Trusted upgrade; Session security; Security warning
Certification	
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU;
Port	
Audio Input	1 channel (3.5mm JACK port)
Audio Output	1 channel (3.5mm JACK port)
Alarm Input	2 channels in: wet contact, 5 mA 3–5 VDC
Alarm Output	2 channels out: dry contact, 1,000 mA 30 VDC/500 mA 50 VAC
Power	
Power Supply	12 VDC; PoE (802.3af)
Dual Power Backup	When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.
Power Consumption	Basic: 4 W (12 VDC); 5.6 W (PoE); Max.: 5.7 W (12 VDC); 6.7 W (PoE) (High frame rate + Intelligence on + WDR)
Environment	
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °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
Structure	
Casing Material	Metal
Product Dimensions	E1: 110 mm × 83 mm × 24 mm (4.33" × 3.27" × 0.94") L1: Φ30.5 mm × 45.8 mm (Φ1.20" × 1.80")
Net Weight	511 g (1.13 lb)
Gross Weight	646 g (1.42 lb)

Ordering Information		
Type	Model	Description
IP CAMERA	DH-IPC-HUM8241E-E1-L1	2MP Covert Pinhole WizMind Network Camera-KIT-L1
Accessories (Optional)	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester
	DHI-TF-P100/512GB	MicroSD Card

Accessories

Optional:



DH-PFM320D-EN
DC12V2A power adapter



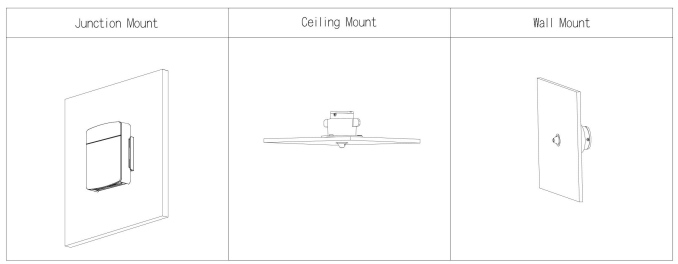
DH-PFM321-EN
DC12V1A power adapter



DHI-TF-P100/512GB
MicroSD Card



PFM900-E
Integrated Mount Tester



Dimensions (mm[inch])

