DH-IPC-HFW5241E-SE

2MP IR Fixed-focal Bullet WizMind Network Camera

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

Series Overview

With starlight solution and deep learning algorithm, Dahua WizMind 5 Series network camera has various intelligent functions, including face capture, perimeter protection and people counting, which greatly improve the accuracy of video analysis.

Functions

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.

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.

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 yearly/monthly/daily reports to meet your requirements.

- 2-MP 1/2.8" 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 50 m.
- ROI, SVC, SMART H.264 +/H.265+, AI 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 monitoring: Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); abandoned object, missing object, loitering detection, people gathering, parking detection, heat map and face detection.
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Supports max. 256 G Micro SD card.
- 12 VDC/PoE power supply, easy for installation.
- ePoE; IP67 protection.
- SMD 3.0

ePoE

Dahua's innovative ePoE technology offers a new solution to transmit power and data over long distances between cameras and network switch, allowing more flexible design of surveillance system, improving reliability, reducing installation time and saving money. ePoE technology encompasses pure network systems where a single CAT6 cable can carry signals up to 300 m (984 ft) at 100 Mbps, 800 m (2625 ft) at 10 Mbps.

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	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.002 lux@F1.6 (Color, 30 IRE) 0.0002 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	50 m (164.04 ft) (IR)
Illuminator On/Off Control	Auto; manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		2.8 mm; 3.6 mm; 6 mm			
Max. Aperture		F1.6			
Field of View		2.8 mm: Horizontal: 106°; Vertical: 57°; Diagonal: 126° 3.6 mm: Horizontal: 87°; Vertical: 46°; Diagonal: 104° 6 mm: Horizontal: 53°; Vertical: 30°; Diagonal: 60°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 0.6 m (1.97 ft) 3.6 mm: 1.2 m (3.94 ft) 6 mm: 2.5 m (8.20 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	38.6 m (126.64 ft)	15.4 m (50.52 ft)	7.7 m (25.26 ft)	3.9 m (12.80 ft)
	3.6 mm	55.2 m (181.10 ft)	22.1 m (72.51 ft)	11.0 m (36.09 ft)	5.5 m (18.04 ft)
	6 mm	82.8 m (271.65 ft)	33.1 m (108.60 ft)	16.6 m (54.46 ft)	8.3 m (27.23 ft)

Smart Event

IVS	Abandoned object; missing object
Heat Map	Yes

Professional, intelligent

IVS (Perimeter Protection)	Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection
SMD 3.0	Less false alarm, longer detection distance
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face snapshot set as face, one-inch photo or custom; 3 snapshot strategies (real-time snapshot, optimization snapshot and quality first); face angle filter; optimization time setting
People Counting	Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/monthly/daily reports. Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm. Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm.
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 the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 1080p@(1–25/30 fps) Sub stream: D1@(1–25/30 fps) Third stream: 1080p@(1–25/30 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	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	CBR/VBR
Video Bit Rate	H.264: 3 kbps–20480 kbps H.265: 3 kbps–20480 kbps
Day/Night	Auto (ICR)/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°
Mirror	Yes
Privacy Masking	8 areas

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; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; SMD; people counting in area; stay detection; people counting; security exception

Network

Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	NA
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; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; P2P
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE 8 and later Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN60950-1; 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	12 VDC/PoE (802.3af)/ePoE
Power Consumption	Basic: 2.4 W (12 VDC); 3 W (PoE) Max. (H.265 + three streams + intelligence on + IR on): 5.7 W (12 VDC); 6.8 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	Metal + plastic
Product Dimensions	179.9 mm × 70 mm × 70 mm (7.08" × 2.76" × 2.76") (L × W × H)
Net Weight	470 g (1.04 lb)
Gross Weight	590 g (1.30 lb)

Ordering Information

Type	Model	Description
2MP Camera	DH-IPC-HFW5241EP-SE	2MP IR Fixed-focal Bullet WizMind Network Camera, PAL
	DH-IPC-HFW5241EN-SE	2MP IR Fixed-focal Bullet WizMind Network Camera, NTSC
Accessories (Optional)	PFA152-E	Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFA121	Junction box
	PFM321D	12 VDC 1A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:

PFA152-E
Pole Mount
Bracket

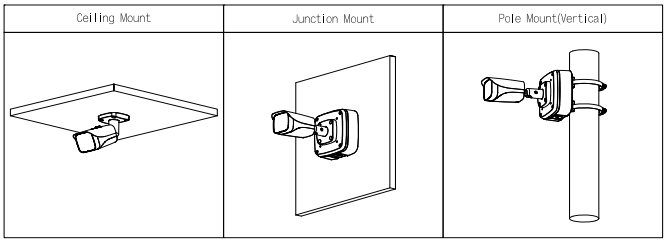
PFA151
Corner Mount
Bracket

PFA121
Junction
box

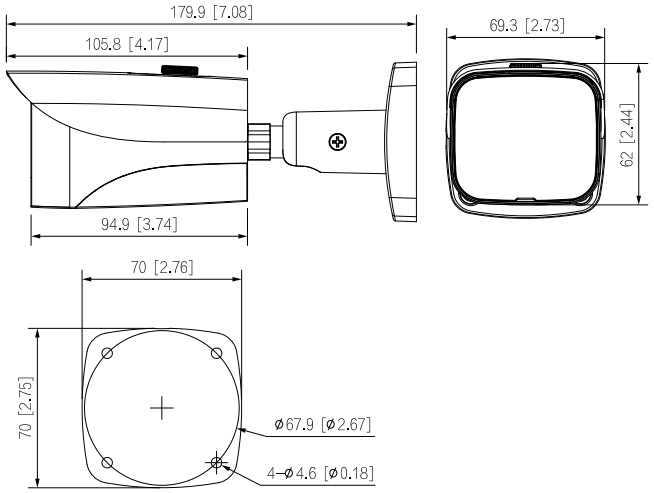
PFM321D
12 VDC 1A Power
Adapter

PFM900-E
Integrated
Mount Tester

TF-P100
MicroSD
Memory Card



Dimensions (mm[inch])



Rev 002.000 © 2022 Dahua. All rights reserved. Design and specifications are subject to change without notice.
The images, specifications and information mentioned in the document are only for reference, and might differ from the actual product.