DH-IPC-HF5242E-E-MF

2MP Box WizMind Network Camera

· 1/1.8" 2Megapixel progressive scan CMOS

· ROI, SMART H.264 +/H.265+,AI H.264/H.265, flexible coding, appli
cable to various bandwidth and storage environments

· 50/60 fps@1080 (1920 × 1080)

· WDR (140 dB), Day/Night (ICR), 3D NR, AWB, AGC, BLC

· Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS

· 2/1 Alarm in/out, 1/1 audio in/out (Built-in MIC)

· Auto back focus(ABF)

· Micro SD memory

· SMD3.0

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. The series camera supports dustproof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

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.

Face Attributes

With deep learning algorithm, the network camera can recognize face attributes, such as gender, age, expression, glasses, mouth mask, and beard.

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.

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 camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Max. Resolution	1920 (H) × 1080 (V)
RAM	1 GB
ROM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/ 100,000 s
S/N Ratio	> 56 dB
Minimum Illumination	0.002 Lux@F1.5 (Color, 30IRE) 0.0002 Lux@F1.5 (B/W, 30IRE) 0 Lux (Illuminator on)

Lens

Mount Type	C/CS

Artificial Intelligence

Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attribute extraction including 6 attributes (gender, age, glasses, expressions, mask and beard) and 8 expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear); mask; beard; face snapshot set as face or one-inch photo; 3 snapshot strategies (real-time snapshot, optimization snapshot and quality priority); face angle filter;optimization time setting
Perimeter Protection	Tripwire; intrusion; fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection; people gathering; parking detection
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

General Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly
General Intelligence	Abandoned object; missing object
Heat Map	Yes

Video

Compression	H.265,H.264,H.264B,H.264H, MJPEG (only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
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)

Frame Rate	Main Stream:1920 × 1080 (1 fps–50/60 fps) Sub Stream: D1 (1 fps–25/30 fps) D1 (1 fps–50/60 fps) Third Stream: 1080P (1 fps–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.
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC/HLC/WDR (140 dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D NR
Motion Detection	Off/On (4 areas, rectangular)
Region of Interest	Off/On (4 areas)
Electronic Image Stabilization (EIS)	Yes
Defog	Yes
Flip	0°/90°/180°/270°
Mirror	Off/On
Privacy Masking	8 areas

Audio

Audio Compression	PCM, G.711a, G.711Mu, 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;Defocus Detection;scene changing;intrusion;tripwire;abandoned object;missing object;fast moving;parking detection;loitering detection;people gathering;audio detection;people counting;face detection;People counting in area;Stay alarm;People No. exception detection;Queue Management

Network

Network	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
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; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T), CGI, Milestone, Genetec, P2P
User/Host	20 Users
Storage	NAS; FTP; SFTP Micro SD card (support max. 256 G)

Browser	IE: IE8 and later Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	iOS; Android

Certifications

Certifications	CE-LVD: EN62368-1 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

Interface

Audio Interface	1/1 channel In/Out, Built-in MIC
RS485	1 port
Alarm	2 channel In: 5mA 5V DC 1 channel Out: 1A 30VDC/0.5A 50V AC
Power Out	165mA 12V DC

Electrical

Power Supply	DC 12V (±25%)/AC 24V (±25%)/PoE (802.3af)/ePoE
Power Consumption	Basic power consumption: 4.1W (12V DC); 4.3W (24V AC); 4.4W (PoE) Max. power consumption (max. stream + intelligent function + focus): 9.2W (12V DC); 8.7W (24V AC); 9.2 (PoE)

Environmental

Operating Conditions	−30° C to +60° C (−22° F to +140° F)/Less than 95% RH
Storage Conditions	−40° C to +60° C (−40° F to +140° F)

Construction

Casing	Metal
Dimensions	135.4 mm × 74.4 mm × 65.5 mm (5.33" × 2.93" × 2.58")
Net Weight	0.53 kg (1.17 lb)
Gross Weight	0.62 kg (1.37 lb)

Ordering Information

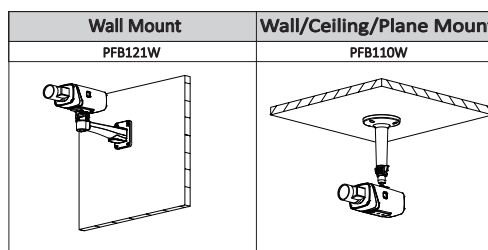| Type	Part Number	Description
2MP camera	DH-IPC-HF5242EP-E-MF	2MP Box WizMind Network Camera, PAL
	DH-IPC-HF5242EN-E-MF	2MP Box WizMind Network Camera, NTSC
	IPC-HF5242EP-E-MF	2MP Box WizMind Network Camera, PAL
	IPC-HF5242EN-E-MF	2MP Box WizMind Network Camera, NTSC
Accessories (optional)	PFB110W	Ceiling Mount
	PFB121W	Wall Mount
	TF-P100	MicroSD Memory Card

Accessories

Optional:

PFB110W
Wall Mount

PFB121W
Wall Mount

TF-P100
MicroSD
Memory Card

Wall Mount	Wall/Ceiling/Plane Mount
PFB121W	PFB110W

Dimensions (mm[inch])

135.4 [5.33"]
125 [4.92"]
74.4 [2.93"]
65.5 [2.58"]