DH-IPC-HFW5242T-ASE-MF

2MP IR Fixed-focal Bullet 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@1080P (1920 × 1080)

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

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

· 2.8 mm fixed lens (3.6 mm, 6.0 mm optional)

· 1/1 Alarm in/out, 1/1 audio in/out

· Max. IR LEDs Length 50 m

· Micro SD memory, IP67,IK10

· SMD3.0

Launched by Dahua Technology, Dahua WizMind is a full portfolio of so-
lutions 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
dust-proof 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, track-
ing, 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.

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.

Protection (IP67, IK10, 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.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg
hammer falling from a height of 40 cm (Impact energy is 20J).

Wide voltage: The camera allows ±30% (for some power supplies) input
voltage tolerance (wide voltage range), and it is widely applied to out-
door environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Max. Resolution	1920 (H) × 1080 (V)
RAM	1GB
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@F1.6 (Color, 30IRE) 0.0002 Lux@F1.6 (B/W, 30IRE) 0 Lux (Illuminator on)
Illumination Distance	50 m (164 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR LED)

Lens

Lens Type	Fixed-focal
Mount Type	Board-in
Focal Length	2.8 mm, 3.6 mm, 6.0 mm
Max. Aperture	F1.6
Angle of View	2.8 mm: Horizontal 113° × Vertical 60° 3.6 mm: Horizontal 89° × Vertical 48° 6.0 mm: Horizontal 56° × Vertical 31°
Aperture Type	Fixed
Close Focus Distance	1.3 m (4.27 ft)/1.9 m (6.23 ft)/3.8 m (12.47 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8mm	41.4m (135.8ft)	16.6m (54.5ft)	8.3m (27.2ft)	4.1m (13.5ft)
	3.6mm	51.2m (168.0ft)	20.5m (67.3ft)	10.2m (33.5ft)	5.1m (16.7ft)
	6mm	80.8m (265.1ft)	O:32.3m (106.0ft)	16.2m (53.1ft)	8.1m (26.6ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0˚–360˚; Tilt: 0˚–90˚; Rotation: 0˚–360˚

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
IVS	Abandoned object; missing object
Heat Map	Yes

Video

Compression	H.265,H.264,H.264B,H.264H, MJPEG (only supported by the 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)
Smart Illumination	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
Alarm	1 channel In: 5mA 5V DC 1 channel Out: 300mA 12V DC

Electrical

Power Supply	DC 12V (±30%)/PoE (802.3af)/ePoE
Power Consumption	Basic power consumption: 1.7W (12V DC); 2.2W (PoE) Max. power consumption (max. stream + intelligent function + IR LED): 8.7W (12V DC); 9.3W (PoE)

Environmental

Operating Conditions	−40° C to +60° C (−40° F to +140° F)/Less than 95% RH
Storage conditions	−40° C to +60° C (−40° F to +140° F)
Protection Grade	IP67,IK10

Construction

Casing	Metal
Dimensions	244.1 mm × 79.0 mm × 75.9 mm (9.61" × 3.11" × 2.99")
Net Weight	0.815 kg (1.80 lb)
Gross Weight	1.08 kg (2.38 lb)

Ordering Information

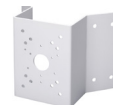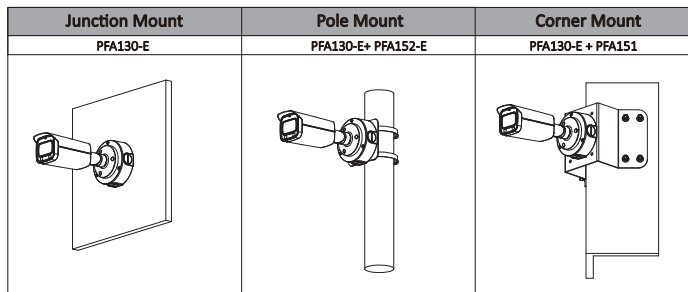| Type	Part Number	Description
2MP camera	DH-IPC-HFW5242TP-ASE-MF	2MP IR Fixed-focal Bullet WizMind Network Camera,WDR, PAL
	DH-IPC-HFW5242TN-ASE-MF	2MP IR Fixed-focal Bullet WizMind Network Camera,WDR, NTSC
	IPC-HFW5242TP-ASE-MF	2MP IR Fixed-focal Bullet WizMind Network Camera,WDR, PAL
	IPC-HFW5242TN-ASE-MF	2MP IR Fixed-focal Bullet WizMind Network Camera,WDR, NTSC
Accessories (optional)	PFA130-E	Junction box
	PFA152-E	Pole Mount
	PFA151	Corner Mount
	TF-P100	MicroSD Memory Card

Accessories

Optional:

PFA130-E Junction box

PFA152-E Pole Mount

PFA151 Corner Mount

TF-P100 MicroSD Memory Card

Junction Mount	Pole Mount	Corner Mount
PFA130-E	PFA130-E+ PFA152-E	PFA130-E + PFA151

Dimensions (mm[inch])

244.1 [9.61"]

153.1 [6.03"]

79.0 [3.11"]

75.9 [2.99"]

∅90.4 [∅3.56"]

∅70.0 [∅2.76"]

3-∅4.7 [∅0.19"]