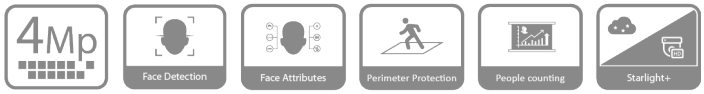
DH-IPC-HDBW5442E-ZE

4MP IR Vari-focal Dome WizMind Network Camera

· 1/1.8" 4Megapixel progressive scan CMOS
· ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
· 25/30 fps@2688 × 1520, 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
· 2.7 mm–12.0 mm motorized lens
· 1/1 Alarm in/out, 1/1 audio in/out
· Max. IR LEDs Length 40 m
· Micro SD memory, IP67, IK10
· SMD Plus



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 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, 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.

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 outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Effective Pixels	2688 (H) × 1520 (V)
RAM/ROM	1 GB/128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
S/N Ratio	> 56 dB
Minimum Illumination	0.003 lux@F1.8 (Color, 30 IRE) 0.0003 lux@F1.8 (B/W, 30 IRE) 0 lux (Illuminator on)
Illumination Distance	Distance up to 40 m (131 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)

Lens

Lens Type	Motorized vari-focal
Mount Type	Board-in
Focal Length	2.7 mm–12.0 mm
Max. Aperture	F1.8
Angle of View	H: 114°–47°, V: 62°–26°
Aperture Type	Auto
Close Focus Distance	1.2 m (3.94 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	58 m (190 ft)	23 m (75 ft)	12 m (39 ft)	6 m (20 ft)
	T	131 m (430 ft)	52 m (171 ft)	26 m (85 ft)	13 m (43 ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–355°; Tilt: 0°–65°; Rotation: 0°–355°

Professional, intelligent

Face Detection	Face detection; track; optimization; snapshot; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear), mask, beard; face matting setting: face, single inch photo;three snapshot methods: real-time snapshot, optimization snapshot, 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

Smart Event

IVS	Object Abandoned/Missing
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	2688 × 1520/2560 × 1440/2304 × 1296/1080P (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: 2688 × 1520 (1 fps–25/30 fps) 2560 × 1440 (1 fps–25/30 fps) 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–16 fps)
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)
Scene Self-adaptation (SSA)	Yes
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	Yes (4 areas)
Electronic Image Stabilization (EIS)	Yes
Smart Illumination	Yes
Defog	Yes
Flip	0°/90°/180°/270°
Mirror	Yes
Privacy Masking	8 areas

Audio

Audio Compression	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; SAMBA; PPPoE; SNMP; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T), CGI, Milstone, Genetec, P2P
User/Host	20 Users
Storage	NAS; FTP; SFTP; Micro SD card 256 GB
Browser	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)
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%)/AC 24V (±30%)/PoE (802.3af)/ePoE
Power Consumption	Basic power consumption: 4.9W (12V DC); 5.1W (24V AC); 5.2W (PoE) Max. power consumption (max. stream + intelligent function + IR LED + focus): 12.4W (12V DC); 11.9W (24V AC); 11.6W (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)
Protection Grade	IP67,IK10

Construction

Casing	Metal
Dimensions	Φ159.0 mm × 117.9 mm (6.26" × 4.64")
Net Weight	0.95 kg (2.09 lb)
Gross Weight	1.20 kg (2.65 lb)

Ordering Information

Type	Part Number	Description
4MP camera	DH-IPC-HDBW5442EP-ZE	4MP IR Vari-focal Dome WizMind Network Camera, PAL
	DH-IPC-HDBW5442EN-ZE	4MP IR Vari-focal Dome WizMind Network Camera, NTSC
	IPC-HDBW5442EP-ZE	4MP IR Vari-focal Dome WizMind Network Camera, PAL
	IPC-HDBW5442EN-ZE	4MP IR Vari-focal Dome WizMind Network Camera, NTSC
Accessories (optional)	PFA138	Junction Box
	PFB211W	Wall mount
	PFB300C	Ceiling mount
	PFA152-E	Pole mount
	PFA101	Mount adapter
	PFB201C	In-ceiling mount

Accessories

Optional:

PFB211W
Wall mount

PFA138
Juntion Box

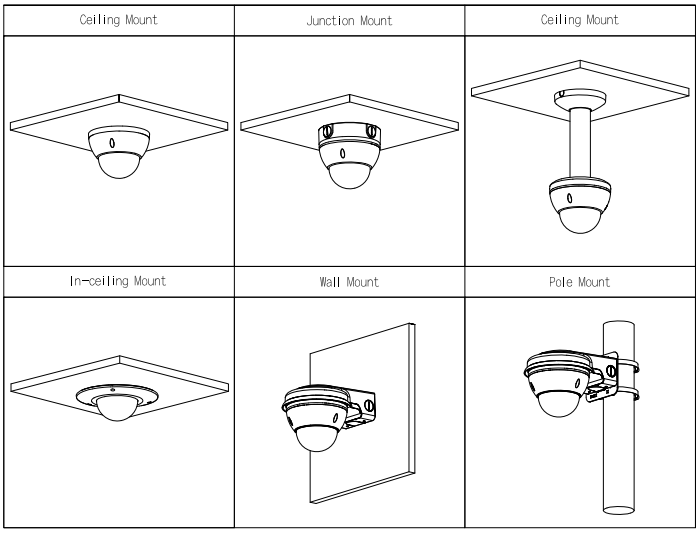
PFB201C
In-ceiling mount

LR1002
ePoE Over Coax Converter

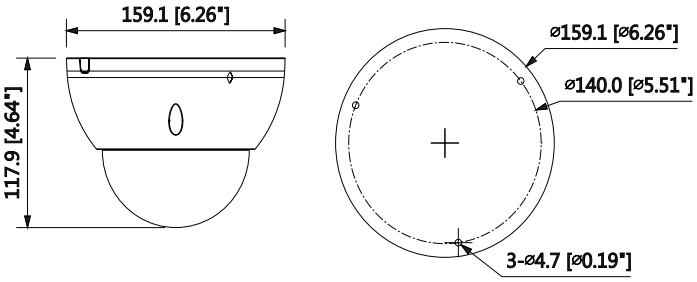
PFB300C
Ceiling mount

PFA152-E
Pole mount

PFA101
Mount adapter



Dimensions (mm[inch])



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