

DH-IPC-HDBW5541E-Z5E

5MP IR Vari-focal Dome 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.

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.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2592 × 1944)@20 fps.
- Built-in IR LED, and the max. illumination distance is 100 m.
- ROI, SVC, SMART H.264+/H.265+, AI H.264/H.265, encoding after filter, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Three switchable intelligent resources: IVS, face detection, and people counting.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card.
- 24 VAC/12 VDC/PoE power supply, easy for installation.
- ePoE; IP67 and IK10 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, 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 $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

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Technical Specification

Camera						
Image Sensor		1/2.7" CMOS				
Max. Resolution		2592 (H) × 1944 (V)				
ROM		128 MB				
RAM		1 GB				
Scanning System		Progressive				
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s				
Min. Illumination		0.003 lux@F1.3 (Color, 30 IRE) 0.0003 lux@F1.3 (B/W, 30 IRE) 0 lux (Illuminator on)				
S/N Ratio		>56 dB				
Illumination Distance		45 m (147.64 ft) (IR)				
Illuminator On/Off Control		Auto				
Illuminator Number		3 (IR LED)				
Pan/Tilt/Rotation Range		Pan: 0°–355° Tilt: 0°–65° Rotation: 0°–355°				
Lens						
Lens Type		Motorized vari-focal				
Lens Mount		Module				
Focal Length		7 mm-35 mm				
Max. Aperture		F1.3				
Field of View		Horizontal: 31°–9° Vertical: 23°–7° Diagonal: 39°–11°				
Iris Control		Auto				
Close Focus Distance		W-T: 0.4 m-2 m (1.31 ft-6.56 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	W	190 m (623.36 ft)	76 m (249.34 ft)	38 m (124.67 ft)	19 m (62.34 ft)	
	т	620 m (2034.12 ft)	248 m (813.65 ft)	124 m (406.82 ft)	62 m (203.41 ft)	
Smart Event						

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 attributes extraction including 6 attributes (gender, age, glasses, expressions, mask, and beard) and 8 expressions (angry, sad, disgusted, scared, surprised, calm, happy, confused); 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, generating and exporting report (day/month); 4 rules can be set for tripwire, people counting in area and queue management
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: 2688 × 1520@(1 fps-25/30 fps) Sub stream: D1@(1 fps-50/60 fps) Third stream: 1080p@(1 fps-50/60 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	2688 × 1520; 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)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps-8192 kbps H.265: 32 kbps-8192 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	140 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)
Image Stabilization	Electronic Image Stabilization (EIS)
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270°
Mirror	Yes
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; tripwire; intrusion; abandoned object; missing object; fast moving; parking detection; loitering detection; people gathering; input error; intensity change; people counting, face detection; voltage detection; people counting in area; stay detection; people number error detection; queue management

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Network Network Port

Network					
Network Port	RJ-45 (10/100 Enhancement 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				
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; Bonjour				
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone				
User/Host	20 (Total bandwidth: 88 M)				
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS				
Browser	IE: IE8 and later Chrome Firefox				
Management Software	Smart PSS, DSS, DMSS				
Mobile Client	iOS; Android				
Certification					
Certifications	CE-LVD: EN 62368-1 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				
Port					
Audio Input	1 channel (RCA port)				
Audio Output	1 channel (RCA port)				
Alarm Input	1 channels in: 5 mA 3 V–5 VDC				
Alarm Output	1 channel out: 300 mA 12 VDC				
Power					
Power Supply	12 VDC (±30%)&24 VAC (±30%); PoE+ (802.3at); ePoE				
Power Consumption	Basic: 4.6 W (12 VDC); 4.9 W (24 VAC); 4.9 W (PoE) Max. (max. stream + intelligence + IR on + focus +heater): 18 W (12 VDC); 16.9 W (24 VAC); 16.2 W (PoE)				
Environment					
Operating Temperature	-30 °C to +60 °C (-22 °F to +140 °F)				
Operating Humidity	≤ 95%				
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)				
Protection	IP67; IK10				
Structure					
Casing	Metal + plastic				
Product Dimensions	Φ159 mm × 117.9 mm (6.26" × 4.64")				
Net Weight	950 g (2.09 lb)				
Gross Weight	1200 g (2.65 lb)				

Ordering Information Туре Model Description 5MP IR Vari-focal Dome WizMind DH-IPC-HDBW5541EP-Z5E Network Camera, PAL 5MP Camera 5MP IR Vari-focal Dome WizMind DH-IPC-HDBW5541EN-Z5E Network Camera, NTSC PFA138 Junction Box Bracket PFB211W Wall Mount Bracket PFB300C Ceiling Mount Bracket PFA152-E Pole Mount Bracket Accessories PFB201C In-ceiling Mount Bracket (Optional) PFA101 Mount Adapter 12 VDC 1A Power Adapter PFM321D Single-port Long Reach Ethernet LR1002-1ET/1EC over Coax Extender

Accessories

PFM900-E

Optional:





PFB211W

Wall Mount

Bracket

PFB300C Ceiling Mount Bracket

510.

Integrated Mount Tester



PFM321D 12 VDC 1A Power Adapter



PFA152-E Pole Mount Bracket



LR1002-1ET/1EC Single-port Long Reach Ethernet Over Coax Extender



PFM900-E Integrated Mount Tester

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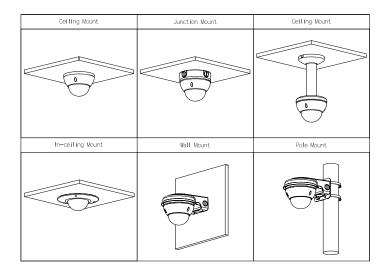
PFB201C In-ceiling Mount

Bracket

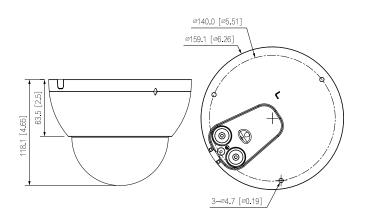




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Dimensions (mm[inch])



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