



DH-IPC-HDBW5241E-Z5E

2MP 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.

- 2-MP 1/2.8" CMOS image sensor, low luminance, and high definition
- Outputs max. 2 MP (1920 × 1080)@30 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
- 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 ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

People Counting Susses management and recording periodic part of counting periodic	Technical Specification								Tripwire people counting and people counting in area, generating and exporting report (day/month/year);
Max	Camera							People Counting	queue management, generating and exporting report (day/month); 4 rules can be set for tripwire, people
AND MEAN SOUTH AND MEAN STATE AND ME	Image Sensor		1/2.8" CMOS						
Saming System	Max. Resolution		1920 (H) × 1080 (V)					Smart Search intelligent search, event extraction and merging to ev	
Samining System Progressive Electronic Shutter Speed Abin/Manual (VA = 1/100,000) c OLOGO Expedit 3, (SW, 30) BES OLOGO Expedi	ROM		128 MB					Video	
	RAM		512 MB					Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported
Bectronic Shutter Speed AutoManual X13 + 21/100,000 s	Scanning System		Progressive					Smart Codec	,
Min. Illumination 0.0005 LayBF13 ((blv.) dilbF) 5/N Ratio > 56 8 Video Frame Rate	Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s						, and the second
Illumination Distance 100 m (328.06 ft) [R]	Min. Illumination		0.0002 lux@F1.3 (B/W, 30 IRE)					Al county	Main stream: 1920 × 1080@(1 fps-25/30 fps) Sub stream: D1@(1 fps-25/30 fps)
	S/N Ratio		>56 dB					Video Frame Rate	*The values above are the max. frame rates of each
Bluminator Number 3 R LED 200 200 2100 1300 1300 1200 1200 220 1200 220 2	Illumination [Illumination Distance		100 m (328.08 ft) (IR)					stream; for multiple streams, the values will be subjected to the total encoding capacity.
Pan/Tit/Rotation Range	Illuminator On/Off Control		Auto					Stream Capability	3 streams
Lens Video Bit Rate Control CBRYVER Lens Type Motorized vari-focal Day/Night Acto (IcR)/Color/8/W Lens Mount Module BLC Ves BLC Ves Max. Aperture F1.3 (Constant) HCZ vertice: 191-57 Diagrantis 381-107 Vertice: 191-57 Diagrantis 381-117 Iris Control Auto Close Focus Distance 0.3-2 m (0.98 ft-6.56 ft) Survey Recognize Identify DORI DIStance Vertice: 191-57 Diagrantis 381-117 DORI DISTANCE Vertice: 191-58 (85.96 ft) Survey Recognize Identify DORI DISTANCE Vertice: 191-59 (85.96 ft) Region of Interest (Rol) Ves (4 areas) T 427.6 m (171.9 ft) (85.96 ft) (140.09 ft) Region of Interest (Rol) Ves (4 areas) Smart Event IVS Abandoned object, missing object Heat Map Ves Face detection, poole gathering, and parking detection support the classification and accurate detection of pooling apport in classification and accurate detection opports and parking detection poole gathering, and parking detection pooling face proposition (right) and parking detection on the photos, snapphot optimization; optimal face snapphot upload, face enhancement, face exposure, face activities extraction including 6 attributes (gender, age, glasses, expressions, mask, and beard) and 8 expressions (agnety, add, diaguated, screed, suprised, calm, happy, confused); face snapphot typload, face enhancement, face exposure, face activities extraction including 6 attributes (gender, age, glasses, expressions, mask, and beard) and 8 expressions (agnety, add, diaguated, screed, suprised, calm, happy, confused); face snapphot typload, face enhancement, face exposure, face activities extraction including 6 attributes (gender, age, glasses, expressions, mask, and beard) and 8 expressions (agnety, add, diaguated, screed, suprised, calm, happy, confused); face snapphot set as face or on eninh photos, snapphot	Illuminator Number							Resolution	× 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF
Lens Type Motorlued vari-focal Day/Night Auto (ICR)/Color/8/W Lens Mount Module BLC Yes Max. Aperture F1.3 (Constant) HLC Yes Max. Aperture F1.3 (Constant) Horizontal: 33"-10" Wertical: 19"-5" Diagonal: 38"-11" Iris Control Auto Close Focus Distance 0.3-2 m (0.98 ft-6.56 ft) DORI Distance W (131.0 m (22.9 ft) (171.9 lt) (85.9 ft) (42.98 ft) T (427.6 m (171.0 m) (280.5 lt)) (120.99 ft) (280.5 lt) (140.09 ft) T (420.289 ft) (661.02 ft) (280.5 lt) (140.09 ft) Iris Control Auto; manual Motion Detection OFF/ON (4 areas; rectangular) To detect Observe Recognize Identify Motion Detection OFF/ON (4 areas; rectangular) T (427.6 m (171.0 m) (280.5 lt)) (140.09 ft) T (420.289 ft) (661.02 ft) (280.5 lt) (140.09 ft) Image Stabilization Electronic image Stabilization (EIS) Smart Event Smart Illumination Yes Professional, intelligent Intrusion, tripwire, fast moving (the three functions of vehicle and furman); bolieving detection, people gathering, and parking detection of vehicle and furman); bolieving detection, popular gathering, and parking detection popular gathering, and parking detection of vehicle and furman); bolieving detection, popular gathering, and parking detection of vehicle and furman); bolieving detection, popular gathering, and parking detection, popular gathering, and parking detection of vehicle and furman); bolieving detection (stance exposure, face arthrolise strationis inclining 6 attributes (gender, age, glasses, expressions, mask, and beard) and general detection of vehicle and furman); bolieving detection of vehicle and furma	Pan/Tilt/Rotation Range							Bit Rate Control	CBR/VBR
Lens Mount Module Focal Length 7 mm-35 mm HLC Yes Max. Aperture F1.3 (Constant) Hris Control Auto Close Focus Distance Defect T 427.5 m 171.0 tl, 129.1 tl, 129.5 tl, 120.0 st, 119. tl, 120.0 st, 12	Lens							Video Bit Rate	The state of the s
Focal Length 7 mm-35 mm HLC Yes Max. Aperture F1.3 (Constant) Field of View Horizontal: 33*-10* Vertical: 39*-5* Diagonal: 38*-11* Scene Self-adaptation (SSA) Iris Control Auto Close Focus Distance 0.3-2 m (0.98 R-6.56 ft) DORI Distance Lens Detect Observe Recognize Identify (42.98 ft) (17.91 ft) (85.96 ft) (42.98 ft) (71.91 ft) (85.96 ft) (42.98 ft) (71.91 ft) (85.96 ft) (140.09 ft) (51.02 ft) (140.09 ft) (51.02 ft) (280.51 ft) (140.09 ft) (140.09 ft) (50.02 ft) (140.09 ft) (50.02 ft) (140.09 ft) (1	Lens Type		Motorized vari-focal					Day/Night	Auto (ICR)/Color/B/W
Max. Aperture F1.3 (Constant) Field of View	Lens Mount		Module					BLC	Yes
Field of View	Focal Length		7 mm-35 mm					HLC	Yes
Field of View Vertical: 19"-5" Diagonal: 38"-11" Iris Control Auto Close Focus Distance 0.3-2 m (0.98 ft-6.56 ft) DORI Lens Detect Distance Vertical: 131.0 m Distance Vertical: 29.79 ft) Distance Vertical: 29.79 ft) Distance T 427.6 m (1402.89 ft) Cis61.02 ft) Vertical: 280.51 ft) Smart Event IVS Abandoned object; missing object Heat Map Ves Professional, intelligent IVS (Perimeter Protection) SMD 3.0 Less false alarm, longer detection distance Face detection; track; snapshot optimization; opimiral face snapshot upload; face enhancement; face exposure; face attributes extraction including G 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 photou, snapshot strategies (real-time snapshot.) White Balance Auto; natural; street lamp; outdoor; manual; regional custom Motion Detection OFF/ON (4 areas, rectangular) Region of Interest (RoI) Ves (4 areas) Image Stabilization Electronic Image Stabilization (EIS) Smart Illumination Ves Defog Yes Image Rotation 0'90',180',270' Mirror Yes Privacy Masking 8 areas Audio Alarm Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access, motion detection, organia detection, extend allaget; tolering odetection; proping abandoned object; missing object; tolering odetection; seene changing; audio detection; extend allagry, seene changing; audio detection; extend allagry, seene changing; audio dete	Max. Aperture		F1.3 (Constant)					WDR	120 dB
Professional, intelligent	Field of View		Vertical: 19°–5°					·	
Close Focus Distance 0.3–2 m (0.98 ft-6.56 ft)	Iris Control		o .					White Balance	
Lens Detect Observe Recognize Identify DORI Distance W 131.0 m	Close Focus Distance		0.3–2 m (0.98 ft–6.56 ft)					Gain Control	Auto; manual
DORI Distance W		Lens	Detect	Observe	Recognize	Identify		Noise Reduction	3D NR
Distance Ves	DORI				_			Motion Detection	OFF/ON (4 areas, rectangular)
Smart Event IVS Abandoned object; missing object Heat Map Yes Professional, intelligent IVS (Perimeter Protection) IVS (Perimeter Protection) Smart illumination Professional, intelligent Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection 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, one-inch photo;		W					Region of Interest (RoI)	Yes (4 areas)	
IVS Abandoned object; missing object Heat Map Yes Image Rotation O*/90*/180*/270* Mirror Yes Professional, intelligent 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; track; 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, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; s		Т						Image Stabilization	Electronic Image Stabilization (EIS)
Heat Map Yes Image Rotation O°/90°/180°/270° Mirror Yes Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection SMD 3.0 Less false alarm, longer detection distance Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes (gender, age, glasses, expressions, angry, sad, disgusted, scared, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, strategies (real-	Smart Event							Smart Illumination	Yes
Professional, intelligent 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; 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-th-fire snapshot, snapshot strategies (real-th-fire sn	IVS		Abandoned object; missing object					Defog	Yes
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; 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, well-ten) and support the classification and accurate detection support the classification and accurate detection and accu	Heat Map		Yes					Image Rotation	0°/90°/180°/270°
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; 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, surprised, calm, happy, confused); face snapshot strategies (real-time snapshot, surprised, calm, photo; snapshot strategies (real-time snapshot, snapshot strategies (real-time snapshot, snapshot strategies (real-time snapshot, snapshot snapshot, snapshot strategies (real-time snapshot, snapsh	Profession	nal, intellige	ent					Mirror	Yes
Face Detection Face Detection Face Detection Face detection; track; snapshot strategies (real-time snapshot, snapshot strategies (real-time snapshot, snapshot strategies (real-time snapshot, sn								Privacy Masking	8 areas
Face detection; track; 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 strategies (real-time snapshot, surprised, calm, plate); snapshot strategies (real-time snapshot, surprised, calm, plate); snapshot strategies (real-time snapshot, s	IVS (Perimeter Protection)		of vehicle and human); loitering detection, people					Audio	
Face Detection Face Detection	SMD 3.0		Less false alarm, longer detection distance					Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723
filter; optimization time setting security exception	Face Detection		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						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; audio detection; external alarm; SMD; people counting in area; stay detection; people counting;

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 log IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trust execution; trusted upgrade			
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTN 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; Milestor			
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 (802.3af); ePoE			
Power Consumption	Basic: 4.9 W (12 VDC); 5.1 W (24 VAC); 5.2 W (PoE) Max. (max. stream + intelligence + IR on + focus): 10.5 (12 VDC); 13.5 W (24 VAC); 13 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					
2MP Camera	DH-IPC-HDBW5241EP-Z5E	2MP IR Vari-focal Dome WizMind Network Camera, PAL					
ZIMP Camera	DH-IPC-HDBW5241EN-Z5E	2MP IR Vari-focal Dome WizMind Network Camera, NTSC					
	PFA138	Junction Box Bracket					
	PFB211W	Wall Mount Bracket					
	PFB300C	Ceiling Mount Bracket					
	PFA152-E	Pole Mount Bracket					
Accessories (Optional)	PFB201C	In-ceiling Mount Bracket					
(Ортіонаі)	PFA101	Mount Adapter					
	PFM321D	12 VDC 1A Power Adapter					
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender					
	PFM900-E	Integrated Mount Tester					

Accessories

Optional:



PFA138 Junction Box Bracket



PFB211W Wall Mount Bracket



PFB300C Ceiling Mount Bracket



PFA152-E Pole Mount Bracket



PFB201C In-ceiling Mount Bracket



PFA101 Mount Adapter



PFM321D 12 VDC 1A Power Adapter

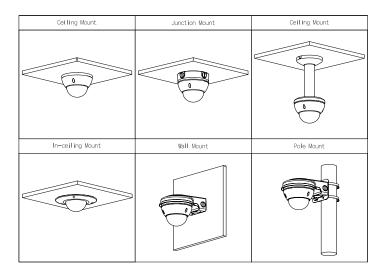


LR1002-1ET/1EC Single-port Long Reach Ethernet Over Coax Extender



PFM900-E Integrated Mount Tester





Dimensions (mm[inch])

