

DH-IPC-HDBW5241E-ZE

2MP IR Vari-focal Vandal-proof Dome WizMind Network Camera



Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS,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

Driven by deep learning algorithms, Dahua WizMind S Series network camera offers a variety of intelligent functions that greatly improve the accuracy of audio and video analysis. It supports video metadata, smart sound detection, face detection, perimeter protection, people counting and more. The camera also adopts advanced image processing AI-Powered Image technology and has the Deeplight night vision effect. The camera is dustproof, waterproof and vandal-proof, and is certified as IP67 and IK10 (the type of protection varies depending on the model).

Functions

AI-Powered Image

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

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.

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.

Smart Sound Detection

With deep learning algorithms, Dahua Smart Sound Detection technology can detect and identify the sound of screams, glass breaking, and more.

- * The parameters and datasheets below can only be applied to 5241-Z-S3 series.
- 2-MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2MP (1920×1080) @25/30 fps.
- Built-in IR LED, and the max. illumination distance is 40 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.
- With deep learning algorithm, it supports: video metadata, smart sound detection, IVS, face detection, smart object detection, and people counting, etc.
- Alarm: 2 in, 1 out; audio: 1 in, 1 out; supports max. 512 GB Micro SD card, built-in MIC.
- 24V AC/12 VDC/PoE power supply; ePoE.
- IP67 and IK10 protection.
- SMD 3.0.



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 reports to meet your requirements.

Video Metadata

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

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 work normally 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	l Specificatio	on						Tripwire people counting, generating and exporting
Camera							People Counting	report (day/week/month/year); people counting in area and queue management; generating and exporting
Image Sensor		1/2.8" CMOS						report (day/week/month); 4 rules can be set for tripwire people counting in area and queue management.
Max. Resolution		1920 (H) × 1080 (V)					Heat Map	Yes
ROM		4 GB						Motor vehicle, non-motor vehicle, face, human body detection; track; snapshot; snapshot optimization; optimal face snapshot upload.
RAM		1 GB						
Scanning System		Progressive					Video Metadata	Motor vehicle attributes: vehicle type, vehicle color, vehicle logo and other attributes : seatbelt, smoking, calling. Non-motor vehicle attributes: type, color, number of people, top type and color, hat. Human body attributes: gender, top/bottom type and color, bag, hat and umbrella. Face attributes: gender, age, expressions, glasses, face mask and beard.
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100,000 s						
Min. Illumination		0.0007 lux@F1.5 (Color, 30 IRE) 0.0004 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)						
S/N Ratio	S/N Ratio							Work together with Smart NVR to perform refine
Illumination Distance		40 m (131.23 ft) (IR)					Smart Search	intelligent search, event extraction and merging to event videos
Illuminator On/Off Control		Auto; Zoomprio; Manual					Smart Sound Detection	Yes
Illuminator I	Illuminator Number						Video	
Angle Adjustment		Pan: 0°–355° Tilt: 0°–65° Rotation: 0°–355°					Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
Lens							Smart Codec	Smart H.265+; Smart H.264+
Lens Type		Motorized vari-focal					AI Coding	AI H.265; AI H.264
Lens Mount		ф14					Video Frame Rate	Main stream: 1080p@(1–25/30 fps) Sub stream: D1@(1–25/30 fps) Third stream: 1080p@(1–25/30 fps) Fourth stream: 720p@(1–25/30 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.
Focal Length Max. Aperture		2.7 mm-13.5 mm F1.5						
Field of Viev	Field of View		V: 56°–17°; D:	131°–35°			Stream Capability	4 streams
Iris Control Close Focus Distance		Auto 0.8 m (2.62 ft)					Resolution	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 ×720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
	Lens	Detect	Observe	Recognize	Identify		Bit Rate Control	CBR/VBR
DORI Distance	W	44.1 m (144.69 ft)	17.7 m (58.07 ft)	8.8 m (28.27 ft)	4.4 m (14.44 ft)		Video Bit Rate	Н.264: 32 kbps–12032 kbps; Н.265: 12 kbps–7424 kbps
	Т	144.8 m (475.07 ft)	57.9 m (189.96 ft)	29.0 m (95.14 ft)	14.5 m (47.57 ft)		Day/Night	Auto(ICR)/Color/B/W
Intelligen	ce						BLC	Yes
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					HLC	Yes
							WDR	120 dB
Smart Object Detection		Smart abandoned object; smart missing object					Scene Self-adaptation (SSA)	Yes
SMD 3.0		Less false alarm, longer detection distance					White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
AI SSA		Yes					Gain Control	Auto
Face Detection		Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes and 8 expressions; face snapshot set as face,					Noise Reduction	3D NR
							Motion Detection	OFF/ON (4 areas, rectangular)
		one-inch photo or custom; snapshot strategies (real-time snapshot, quality priority and optimization snapshot);					Region of Interest (RoI)	Yes (4 areas)
		face angle filter; optimization time setting.					Image Stabilization	Electronic Image Stabilization (EIS)
							Defea	

Defog Yes



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Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower)			
Mirror	Yes			
Privacy Masking	8 areas			
Audio				
Built-in MIC	Yes			
Audio Compression	G.711a; G.711Mu; PCM; 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; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; external alarm; face detection; video metadata; SMD; people counting in area; stay detection; people counting; people number error detection; queue people number alarm; queue time alarm; security exception; defocus detection			
Network				
Network Port	RJ-45 (10/100 Enhancement Base-T)			
SDK and API	Yes			
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; P2P			
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI			
User/Host	20 (Total bandwidth: 80 M)			
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS			
Browser	IE: IE 9 and later Chrome: Chrome 102 and later Firefox:Firefox 88 and later			
Management Software	SmartPSS Lite; DSS; DMSS			
Mobile Client	iOS; Android			
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification			
Certification				
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B; UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14			
Port				
Audio Input	1 channel (RCA port)			
Audio Output	1 channel (RCA port)			
Alarm Input	2 channels in: wet contact, 5mA 3V–5V DC			
Alarm Output	1 channel out: wet contact, 300mA 12V DC			
Power				
Power Supply	12 VDC/24 VAC/PoE (802.3af)/ePoE			
Power Consumption	Basic: 3 W (12 VDC); 3.5 W (24 VAC); 4.6 W (PoE) Max. (H.265+ WDR+ Intelligence on+IR on): 9.2 W (12 VDC); 10.8 W (24 VAC); 11.5 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)					
Storage Humidity	10%–95% (RH), non-condensing					
Protection	IP67; IK10					
Structure						
Casing Material	Metal					
Product Dimensions	Φ159.1 mm × 118.1 mm (6.26" × Φ4.65")					
Net Weight	0.91 kg (2.01 lb)					
Gross Weight	1.22 kg (2.69 lb)					

Ordering Information						
Туре	Model	Description				
2MP	DH-IPC-HDBW5241E-ZE	2MP IR Vari-focal Vandal-proof Dome WizMind Network Camera				
Camera	IPC-HDBW5241E-ZE	2MP IR Vari-focal Vandal-proof Dome WizMind Network Camera				
	PFB211W	Wall Mount Bracket				
	PFA138	Junction Box				
	PFB5201C	In-ceiling Mount Bracket				
	PFB300C	Ceiling Mount Bracket				
Accessories (Optional)	PFA156	Pole Mount Bracket				
	PFA101	Mount Adapter				
	PFM321D	12 VDC 1 A Power Adapter				
	PFM900-E	Integrated Mount Tester				
	TF-P100	MicroSD Memory Card				

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Accessories

Optional:



PFB211W Wall Mount Bracket



PFB300C Ceiling Mount Bracket

PFM321D

12 VDC 1 A Power

Adapter





PFM900-E

Mount Adapter



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TF-P100

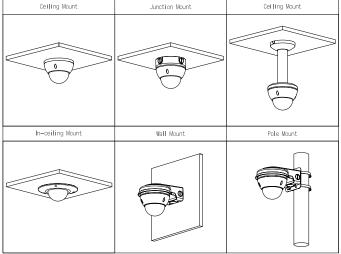
PFB5201C

In-ceiling Mount Bracket

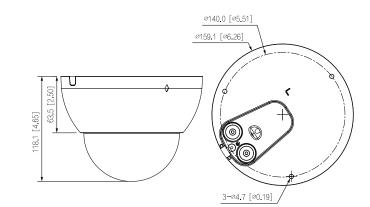
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PFA101

MicroSD Integrated Memory Card Mount Tester



Dimensions (mm[inch])



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