

DH-IPC-HFW5842DK1-Z-5G

Dahua 8MP 5G Vari-focal Bullet WizMind Network Camera



Wiz Mind

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

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.

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 • 8-MP 1/1.8" CMOS image sensor, low luminance, and high definition image.

- Outputs max. 8 MP (3840 × 2160)@30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light/IR LED, and the max. illumination of IR distance is 60 m.
- ROI, SMART H.264+/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485, BNC, supports max. 512 G Micro SD card; built-in dual MICS and speaker, support two-way talk.
- 12 VDC power supply.
- 12 VDC power output, and max. current 165 mA, easy for installation.
- Supports multiple frequency bands for 5G that make it convenient to install and connect to the network.
- IP67 Protection.
- SMD 4.0.



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 yearly/monthly/daily reports to meet your requirements

5G

Equipped with built-in high-performance 5G mobile communication module, the network camera supports 5G network connection and two networking methods: Non-Standalone (NSA) and Standalone (SA). It is backward compatible with 4G connection (The module is different for band compatibility). It can be registered on the platform through wireless connection, and can transmit videos, pictures, intelligent feature information, and alarm events. Through the client, you can remotely monitor and operate in real time.

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, 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.

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.

Technical Specification

Camera

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Image Sensor		1/1.8" CMOS			
Max. Resolution		3840 (H) × 2160 (V)			
ROM		4 GB			
RAM		1 GB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s			
Min. Illumination		0.005 lux@F1.8 (Color, 30 IRE) 0.0005 lux@F1.8 (B/W, 30 IRE) 0 lux (Illuminator on)			
S/N Ratio		>56 dB			
Illumination Distance		60 m (196.85 ft) (IR LED)			
Illuminator On/Off Control		Auto; Zoomprio; Manual			
Illuminator Number		4 (IR LED); 4 (Warm light)			
Lens					
Lens Type		Motorized vari-focal			
Lens Mount		ф14			
Focal Length		2.7 mm–12 mm			
Max. Aperture		F1.8			
Field of View		H: 113°-47° V: 60°-26° D: 133°-53°			
Iris Control		Auto			
Close Focus Distance		1.2 m (3.94 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	82.4 m (273.62 ft)	33.4 m (109.58 ft)	16.7 m (54.79 ft)	8.3 m (27.23 ft)
	т	189.6 m (622.05 ft)	75.8 m (248.69 ft)	37.9 m (124.34 ft)	19.0 m (62.34 ft)

Intelligence

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	
Heat Map	Yes	
Smart Object Detection	Smart abandoned object; smart missing object	
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, queue management; 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 (Compression rate≥25%) AI H.264 (Compression rate≥25%)		
Video Frame Rate	Main stream: 3840 × 2160@(1–25/30 fps) sub stream: D1@(1–25/30 fps) third stream: 1080p@(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.		
Stream Capability	3 streams		
Resolution	3840 × 2160; 3072 × 2048; 3072 ×1728; 2592 × 1944; 2688 × 1520; 2560 × 1440; 2048 × 1536; 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: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps		
Day/Night	Auto(ICR)/Color/B/W		
BLC	Yes		
HLC	Yes		
WDR	120 dB		
Scene Self-adaptation (SSA)	Yes		
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom		
Gain Control	Auto		
Noise Reduction	3D NR		
Motion Detection	OFF/ON (4 areas, rectangular)		
Region of Interest (Rol)	Yes (4 areas)		
Image Stabilization	Electronic Image Stabilization (EIS)		
Smart Illumination	Yes		
Defog	Yes		
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 4M resolution and lower)		
Mirror	Yes		
Privacy Masking	4 areas		
Audio			
Built-in MIC	Yes		
Built-in Speaker	Yes		
Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723		

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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; scene changing; audio detection; voltage detection; external alarm; face detection; security exception			
Network				
Network Port	RJ-45 (10/100 Base-T)			
Frequency	5G SA:N1/N3/N7/N8/N20/N28/N38/N40/N41/N75/N76/ N77/N78 NSA:N1/N3/N7/N8/N20/N28/N38/N40/N41/N77/N78 4G FDD-LTE: B1/B3 /B7 /B20 TDD-LTE: B41 3G WCDMA:B1 /B8			
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; PPPoE; SNMP			
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; P2P			
User/Host	20 (Total bandwidth: 80 M)			
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS			
Browser	IE: IE9 and later Chrome Firefox Safari: Safari 12 and later			
Management Software	Smart PSS; DSS; DMSS			
Mobile Client	iOS; Android			
Certification	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 CE RED			
Port				
RS-485	1 (baud rate range:1200 bps-115200 bps)			
Audio Input	1 channel (RCA port)			
Audio Output	1 channel (RCA port)			
Alarm Input	3 channels in: 5mA 3V–5V DC			
Alarm Output	2 channels out: 300mA 12V DC			
Power				
Power Supply	12 VDC (±30%)			
Power Consumption	Basic: 6.6 W (12 VDC) Max. (H.265 + WDR + max. stream + intelligence on+ illuminator on + active deterrence + vari-focal + power output): 20 W (12 VDC)			
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		
Structure			
Casing Material	Metal + plastic		
Product Dimensions	281.3 mm × 171.8 mm × 191.7 mm (11.07" × 6.76" × 7.55") (L × W × H)		
Net Weight	2074 g (4.57 lb)		
Gross Weight	2290 g (5.05 lb)		

Ordering Information				
Туре	Model	Description		
8MP Camera	DH-IPC-HFW5842DK1P-Z-5G- FM16-2712	Dahua 8MP 5G Vari-focal Bullet WizMind Network Camera		
	IPC-HFW5842DK1P-Z-5G- FM16-2712	8MP 5G Vari-focal Bullet WizMind Network Camera		
Accessories	PFB605W	Wall Mount Bracket		
	PFB603C	Ceiling Mount Bracket		
	PFA150	Pole Mount Bracket (Horizontal)		
	PFM320D	12 VDC 2 A Power Adapter		
	PFM900-E	Integrated Mount Tester		
	TF-P100	MicroSD Memory Card		
	PFA162	Housing Bracket		

Accessories

Included:



PFB605W Wall Mount Bracket

Optional:



PFB603C

Ceiling Mount

Bracket

PFM900-E

Integrated

Mount Tester



PFA150 Pole Mount Bracket (Horizontal)



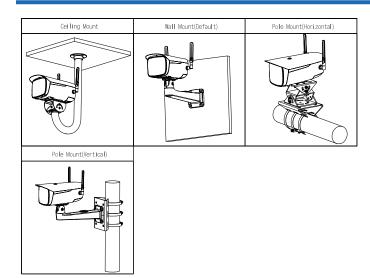
TF-P100 MicroSD Memory Card



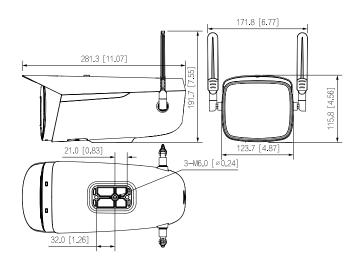
PFM320D 12 VDC 2 A Power Adapter

PFA162 Housing Bracket

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Dimensions (mm[inch])



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