DH-IPC-HFW4439M-AS-PV-B-PRO

4MP WizColor Fixed-focal Bullet 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.

System Overview

Powered by its advanced deep learning algorithms, Dahua WizMind 4 Series cameras are ahead of their time advancing functions such as perimeter protection and smart motion detection. With its Starlight sensors and large aperture lenses, cameras in this series deliver excellent image quality even in environments with low illuminance. This series is IP67-rated and IK10-rated (depending on the model) giving you the confidence and precision you are looking for in a camera.

Functions

WizColor Technology

Dahua WizColor Technology seamlessly combines with the powerful AI-ISP, large pixel size sensor and large aperture in cameras. This unique integration enables cameras to effortlessly capture high-quality images with vibrant colors during nighttime scenarios, ensuring fine details are preserved and minimizing motion blur. Unlike traditional self-illuminating cameras, Dahua WizColor Technology maximizes the utilization of weak light sources, such as moonlight and city lights reflected in the sky, delivering captivating full-color images of the entire scene. It also ensures that monitoring distances are not compromised at night due to limited illumination ranges, facilitating full-color image capture even over long distances.

Xinghan Large-Scale AI Models-Vision

Xinghan Large-Scale AI Models-Vision seamlessly expands the storage and operational capacity of algorithmic models through the powerful integration of edge AI model algorithms and NPU computing power. Engineered with a lightweight transformer architecture and enhanced by model distillation and quantization techniques, it optimizes the computing power consumption of ViT operators. This enables the system to collaborate on multiple tasks simultaneously through joint inference between small and large models optimized for edge devices.

- 4-MP 1/1.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max 4 MP (2688 × 1520)@20 fps and supports 4 MP (2560 × 1440)@25/30 fps.
- Built-in warm light, the max warm light distance is 30 m.
- ROI, AI H.264/H.265 (Super AI Coding), flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; max 512 GB Micro SD card; built-in Mic and speaker; two-way talk.
- 2 VDC/PoE power supply.
- IP67 protection.
- SMD 3.0.



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.

Siren and Light Active Deterrence

Dahua siren and light active deterrence network camera supports the light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing.

Super AI Coding

With advanced AI object detection and scene recognition technology, Super AI Coding integrates ROI, BAE, and ABR to achieve higher encoding efficiency than H.265 and H.264 while effectively reducing storage and transmission costs without compromising video quality.

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 work normally after soaking in 1 m deep water for 30 minutes.

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
Max. Resolution	2688 (H) × 1520 (V)
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.0001 lux@F1.0 (Color, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 20 m (65.62 ft) (Warm light);Up to 30 m (98.43 ft) (Warm light)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	4 (Warm light)

Lens

Lens Type	Fixed-focal
Lens Mount	M16
Focal Length	2.8 mm;3.6 mm
Max. Aperture	F1.0
Field of View	H: 112°; V: 50°; D: 134°;H: 94; V: 50°; D: 113°
Iris Control	Fixed
Close Focus Distance	3.0 m (9.84 ft);2.0 m (6.56 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	57.9 m (189.96 ft)	23.2 m (76.12 ft)	11.6 m (38.06 ft)	5.8 m (19.03 ft)
	3.6 mm	70.3 m (230.64 ft)	28.1 m (92.19 ft)	14.1 m (46.26 ft)	7.0 m (22.97 ft)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/ project design tool.				

Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
SMD	SMD 3.0

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
AI Coding	AI H.265; AI H.264 (Super AI Coding) *Includes smart codec technology, Smart H.265+ and Smart H.264+
Video Frame Rate	Main stream: 2688 × 1520@(1–20/30 fps)/2560 × 1440 (1–30 fps) Sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps) Third stream: 352 × 288@1 fps/352 × 240@1 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.
Streaming Capability	3 streams
Resolution	4M (2688 × 1520/2560 × 1440); 3M (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	VBR; CBR
Video Bit Rate	H.264: 24 kbps–4096 kbps H.265: 9 kbps–4096 kbps
Day/Night	Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
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)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (supports 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas
LDC	Yes

Audio

Built-in MIC	Yes, built-in Mic
Built-in Speaker	Yes, built-in speaker
Audio Compression	G.711a; G.711Mu; PCM; G.726

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; external alarm; SMD; security exception

Network

Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; NFS; P2P; Auto Registration
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI
User/Host	6 (Total bandwidth: 36 M)
Storage	FTP; SFTP; Micro SD card (supports max 512 GB)
Browser	IE: IE 11 and later Chrome: Chrome 102 and later Firefox: Firefox 88 and later

Management Software	SmartPSS Lite; DSS; DMSS; DoLynk Care
Mobile Client	Android;iOS
Security	Session security;Digest; WSSE; Account lockout; Trusted execution; Generation and importing of X.509 certification; 802.1x; Security logs; Security warning; IP/MAC filtering; HTTPS; Trusted upgrade; syslog; AES 256; SSL/TLS1.2; Trusted boot

PTZ Dome

Light Warning	Warm light warning Flash/Solid on duration: 5 s–30 s Flash frequency: high, medium, low
Sound Warning	Offers 3 sound alarms and supports importing custom sound alarms. Sound: 0–100. Play times can be set from 1 to 10.

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: supports wet contact connection (max load 5 mA 3–5 VDC); supports dry contact connection
Alarm Output	1 channel out: wet contact, max load 300 mA 12 VDC

Power

Power Supply	12 VDC (±30%); PoE (802.3af)
Dual Power Backup	When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.
Power Consumption	Basic: 1.9 W (12 VDC); 3.7 W (PoE) Max (Intelligence on + WDR + illuminator intensity): 6.7 W (12 VDC); 11.5 W (PoE)

Environment

Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	≤95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.

Structure

Casing Material	Front casing: Metal Back casing: Plastic
Product Dimensions	183.8 mm × 92.2 mm × 94.1 mm (7.24" × 3.63" × 3.71") (L × W × H)
Net Weight	680 g (1.5 lb)
Gross Weight	930 g (2.05 lb)

Ordering Information

Type	Model	Description
IP CAMERA	DH-IPC-HFW4439M-AS-PV-B-PRO	4MP WizColor Fixed-focal Bullet WizMind Network Camera
Accessories	PFB120WS	Wall Mount Bracket
	DH-PFA2600X	Universal Joint
	DH-PFB110W	Ceiling Mount Bracket
	DH-PFA2590	Pole Mount Bracket
	DH-PFB121W	Wall Mount Bracket
	DH-PFA121	Water-proof Junction Box
	DH-PFA156	Pole Mount Bracket
	G3416GW	G3/4" Water Joint
	DH-PFM325D-1215EN	DC12V 1.5A Power Adapter
	DH-PFM320-020EN	DC12V 2A Power Adapter
	DH-PFM320D-EN	DC12V 2A Power Adapter
	PFM900-E	Integrated Mount Tester
	DHI-TF-P100/512GB	MicroSD Card

Accessories

Included:



PFB120WS
Wall Mount Bracket

Optional:



DH-PFA2600X
Universal Joint



DH-PFB110W
Ceiling Mount Bracket



DH-PFA2590
Pole Mount Bracket



DH-PFB121W
Wall Mount Bracket



DH-PFA121
Water-proof Junction Box



DH-PFA156
Pole Mount Bracket

Optional:



G3416GW
G3/4" Water Joint



DH-PFM325D-1215EN
DC12V 1.5A Power Adapter



DH-PFM320-020EN
DC12V 2A Power Adapter



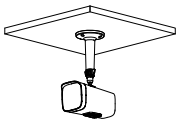
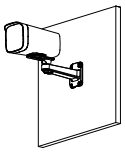
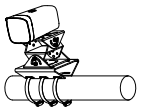
DH-PFM320D-EN
DC12V 2A Power Adapter

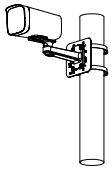


PFM900-E
Integrated Mount Tester

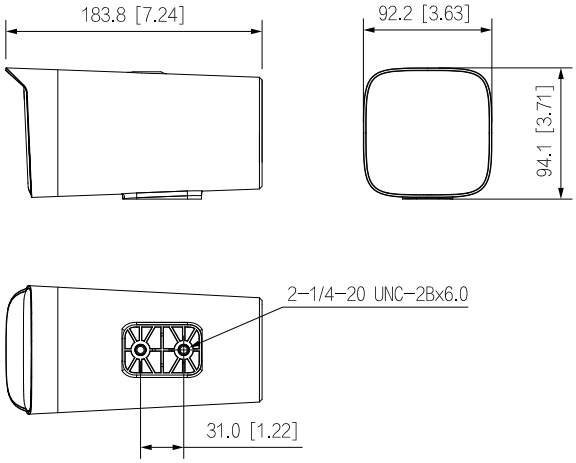


DHI-TF-P100/512GB
MicroSD Card

Ceiling Mount	Wall Mount	Pole Mount (Horizontel)
		

Pole Mount(Vertical)


Dimensions (mm[inch])



Rev 002.000 © 2026 Dahua. All rights reserved. Design and specifications are subject to change without notice.
The images, specifications and information mentioned in the document are only for reference, and might differ from the actual product.