

DH-IPC-HDW5559TM-ASE-IL

5MP Smart Dual Light Fixed-focal Eyeball 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

With its deep learning algorithms, the WizMind 5 Series camera offers advanced analytical capabilities for both audio and video. It integrates intelligent features such as video metadata, AcuPick, face detection, perimeter protection, and people counting. Powered by the Xinghan Large-Scale AI Models-Vision, the camera excels in object detection, recognition, and scene adaptation. Equipped with AI-ISP imaging technology, it offers enhanced night vision performance. The series is designed for durability, being dust-proof, waterproof, and vandal-proof, in compliance with IP67 and IK10 standards, though support for these certifications may vary across models.

Functions

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.

Self-Learning

Empowered by deep learning technology, the device recognizes different types of targets and their statuses through learning and analyzing target features to detect targets and filter out false alarms.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- · Outputs max. 5 MP (2960 × 1668) @25/30 fps.
- Built-in multi-core light, the max. IR distance is 50 m and the max. warm light distance is 50 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.
- Powered by the Xinghan Large-Scale AI Models-Vision, the camera outstandingly delivers on its object detection, recognition, and scene adaptation functions.
- With deep learning algorithm, it supports: AcuPick, video metadata,
 IVS, face detection, and people counting, etc.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 1 TB Micro SD card; built-in Mic
- · 12 VDC/PoE power supply; ePoE
- · IP67 protection.













Smart Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

AcuPick

This industry-leading search technology effectively utilizes both frontend and back-end intelligence to help with searching through massive video data to quickly and conveniently locate targets with greater precision.

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 $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Camera					
Image Sensor		1/2.7" CMOS			
Max. Resolution		2960 (H) × 1668 (V)			
ROM		4 GB			
RAM		2 GB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100,000 s			
Min. Illumination		0.0009 lux@F1.6 (Color, 30 IRE) 0.0005 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)			
S/N Ratio		>56 dB			
Illumination Distance		Up to 50 m (164.04 ft) (IR) Up to 50 m (164.04 ft) (Warm light)			
Illuminator On/Off Control		Auto;Manual			
Illuminator Number		2 (Multi-core (IR + warm) light)			
Angle Adjustment		Pan: 0°-360° Tilt: 0°-80° Rotation: 0°-360°			
Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		2.8 mm; 3.6 mm; 6 mm			
Max. Aperture	2	F1.6			
Field of View		2.8 mm: H: 108.4°; V: 60°; D: 127.1° 3.6 mm: H: 90.3°; V: 47.8°; D: 108.6° 6 mm: H: 56°; V: 30.3°; D: 65.4°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 1 m (3.28 ft) 3.6 mm: 1.5 m (4.92 ft) 6 mm: 3.2 m (10.50 ft)			
	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	61.6 m (202.10 ft)	24.6 m (80.71 ft)	12.3 m (40.35 ft)	6.2 m (20.34 ft)
	3.6 mm	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)
DORI Distance	6 mm	124.0 m (406.82 ft)	49.6 m (162.73 ft)	24.8 m (81.36 ft)	12.4 m (40.68 ft)
	(EN-62676-4) video to distin The numbers distances. For	(Detect, Observe, Recognize, Identify) is a standard system (676-4) for defining the ability of a person viewing the codistinguish persons or objects within a covered area. Imbers in this table do not reflect intelligent function ces. For intelligent function distances, refer to installation mmissioning manual/project design tool.			
Intelligenc	e				
Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle, animal and human); loitering detection, peopl gathering parking detection, stay detection. Offers			ection of ction, people		

gathering, parking detection, stay detection. Offers Perimeter Protection Large-Scale AI Models to extend

IVS (Perimeter Protection)	the target detection range and reduce the rate of false alarm. Supports self-learning, it filters out false alarms.		
SMD	SMD 4.0		
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people, animal and motor vehicles, and search through live and recorded videos to quickly locate targets.		
Face Detection	Face detection; 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, one-inch photo or custom; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting.		
People Counting	Tripwire people counting, generating and exporting report (day/week/month/year); people counting in area and queue management, generating and exporting report (day/week/month); 4 rules can be set for tripwire, people counting in area and queue management.		
Heat Map	Yes		
Video Metadata	Motor vehicle, non-motor vehicle, face, and human body detection; snapshot; snapshot optimization; optimal face snapshot upload. Extraction of motor vehicle and non-motor vehicle attributes: extracts 6 attributes for motor vehicle and 6 attributes for non-motor vehicle. Extraction of face and human body attributes: extracts 6 attributes for face and 8 attributes for human body.		
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)		
Al Coding	AI H.265; AI H.264 *Includes smart codec technology, Smart H.265+ and Smart H.264+.		
Video Frame Rate	Main stream: 2960×1668@(1 fps-25/30 fps) Sub stream: 704 × 576@(1 fps-25 fps)/704 × 480@(1 fps-30 fps) Third stream: 1920 × 1080@(1 fps-25/30 fps) Fourth stream: 1280 × 720@(1 fps-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.		
Streaming Capability	4 streams		
Resolution	5M (2960 × 1668/2880 × 1620); 4M (2688 × 1520/2560 × 1440); 3M (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	VBR;CBR		
Video Bit Rate	H.264: 3 kbps–16384 kbps H.265: 3 kbps–16384 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/Manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Smart Dual Light	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 4M (2688 \times 1520) resolution and lower)
Mirror	Yes
Privacy Masking	4 mosaics or 8 color blocks
LDC	Yes
Audio	
Built-in MIC	Yes, built-in Mic
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; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage 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
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; Auto Registration
Interoperability	ONVIF (Profile S & Profile G & Profile T & Profile M); CGI
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 1 TB); NAS
Browser	IE: IE 11 and later Chrome: Chrome 102 and later Firefox: Firefox 88 and later
Management Software	DSS; DMSS; DoLynk Care
Mobile Client	iOS;Android
Security	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;Session security;Security warning

Function		
Sound Warning	Offers 11 sound alarms and supports importing 10 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: wet contact, 5 mA 3–5 VDC	
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC	
Power		
Power Supply	12 VDC (±30%); PoE+ (802.3at); ePoE	
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: 4.2 W (12 VDC); 6.3 W (PoE) Max. (H.265 + WDR+ warm light + intelligence on): 13.3 W (12 VDC); 15.6 W (PoE)	
еРоЕ	Yes	
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	
Structure		
Casing Material	Metal	
Product Dimensions	105.5 mm × Φ122.0 mm (4.15" × Φ4.80")	
Net Weight	530 g (1.17 lb)	
Gross Weight	710 g (1.57 lb)	

Ordering Information				
Туре	Model	Description		
IP CAMERA	DH-IPC-HDW5559TM-ASE-IL	5MP Smart Dual Light Fixed-focal Eyeball WizMind Network Camera		

Туре	Model	Description
Accessories (Optional)	DH-PFB220C	Ceiling Mount Bracket
	DH-PFA109	Mount Adapter
	DH-PFB305W	Wall Mount Bracket
	DH-PFA151	Corner Mount Bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFA156	Pole Mount Bracket
	DH-PFB2203W	Wall Mount Bracket
	G3416GW	G3/4" Water Joint
	DH-PFA130-E	Water-proof Junction Box
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester

Junction Mount Ceiling Mount Wall Mount Pole Mount(Vertical)

Dimensions (mm[inch])

Accessories

Optional:



DH-PFA109 Mount Adapter



DHI-TF-P100/1TB

DH-PFA130-E Water-proof Junction Box



MicroSD Card

DH-PFA150 Pole Mount Bracket



DH-PFA151 Corner Mount Bracket



DH-PFA156 Pole Mount Bracket



DH-PFB2203W Wall Mount Bracket



DH-PFB220C Ceiling Mount Bracket



DH-PFB305W Wall Mount Bracket



DH-PFM320D-EN DC12V2A power adapter



DHI-TF-P100/1TB MicroSD Card



G3416GW G3/4" Water Joint



PFM900-E Integrated Mount Tester

