DH-IPC-HDW5541T-ZE

5MP IR Vari-focal Eyeball 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. The series camera supports dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

Functions

Face Attributes

With deep learning algorithm, the network camera can recognize face attributes, such as gender, age, expression, glasses, mouth mask, and beard.

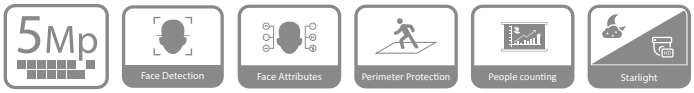
Face Detection

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.

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

- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944) @20 fps, 2MP(1920 × 1080) @60 fps
- Built-in IR LED, max. IR distance: 40 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human), abandoned object, missing object, loitering detection, people gathering, parking detection, heat map, face detection, face attributes and people counting
- Supports max. 256 G Micro SD card, built-in Mic
- 12V DC/PoE power supply, ePoE network transmission over long distance, easy for installation
- IP67 protection



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/weekly/daily reports to meet your requirements.

ePoE

Dahua ePoE technology provides a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

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 ±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	1/2.7”5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 Lux @F1.5
S/N Ratio	>56 dB
Illumination Distance	40 m (131.2 ft) (IR LED)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Motorized vari-focal
Mount Type	ϕ14
Focal Length	2.7 mm-13.5 mm
Max. Aperture	F1.5
Field of View	2592 × 1944: Horizontal: 100°–28° Vertical: 72°–21° Diagonal: 133°–35° 2688 × 1520: Horizontal: 104°–29° Vertical: 55°–16° Diagonal: 125°–33°
Iris Type	Auto
Close Focus Distance	0.8 m (2.6 ft)

DORI Distance

Lens	Detect	Observe	Recognize	Identify
W	64 m (210.0 ft)	25.6 m (84.0 ft)	12.8 m (42.0 ft)	6.4 m (21.0 ft)
T	212.0 m (695.5 ft)	84.8 m (278.2 ft)	42.4 m (139.1 ft)	21.2 m (69.6 ft)

Smart Event

IVS	Abandoned object; missing object
Heat Map	Yes

Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion; fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection; people gathering; parking detection
Face Detection	Face detection; track; optimization; snapshot; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear), mask, beard; face matting setting: face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization time setting
People Counting	Support the counting of enter number, leave number, and pass number, and displaying and outputting yearly/monthly/weekly/daily reports. Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm. Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm
Intelligent 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 H265+/H264+
Video Frame Rate	Main stream: 2592 × 1944 (1 fps–20 fps) 2688 × 1520 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps) Sub stream:D1 (1 fps–50/60 fps) Third stream: 1080p (1 fps–25/30 fps)
Stream Capability	3 streams
Resolution	2592×1944; 2688 × 1520; 2560 × 1440; 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: 32 kbps–8192 kbps H.265: 19 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)

Electronic Image Stabilization (EIS)	Yes
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support with 2592×1944 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G.726; AAC; G.723

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; defocus detection; scene changing; tripwire; intrusion; abandoned object; missing object; fast moving; parking detection; loitering detection; people gathering; audio detection; people counting; face detection; voltage detection; people counting in area; stay alarm; people No. exception detection, queue management

Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD Card (support max. 256 G); Dahua Cloud; NAS
Browser	IE: IE8 and later Chrome Firefox Safari: Safari 12 and later
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

Certification

Certification	CE-LVD: EN62368-1 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

Power

Power Supply	12V DC (±30%)/PoE (802.3af)
Power Consumption	＜7.7W

Environment

Operating Conditions	–30°C to +60°C (–22°F to +140°F)/Less than 95% RH
Strorage Conditions	–40°C to +60°C (–40°F to +140°F)
Protection Grade	IP67

Structure

Casing	Inner core: Metal Cover: Metal Decoration ring: Plastic Decoration ring
Dimensions	Φ122.0 mm × 108.3 mm (Φ4.8" × 4.3")
Net Weight	740 g (1.6 lb)
Gross Weight	910 g (2.0 lb)

Ordering Information

Type	Model	Description
5MP Camera	DH-IPC-HDW5541TP-ZE	5MP IR Vari-focal Eyeball WizMind Network Camera, PAL
	DH-IPC-HDW5541TN-ZE	5MP IR Vari-focal Eyeball WizMind Network Camera, NTSC
	IPC-HDW5541TP-ZE	5MP IR Vari-focal Eyeball WizMind Network Camera, PAL
	IPC-HDW5541TN-ZE	5MP IR Vari-focal Eyeball WizMind Network Camera, NTSC
Accessories (Optional)	PFA130-E	Junction Box
	PFB203W	Wall Mount
	PFA106	Mount Adapter
	PFB220C	Ceiling Mount
	PFA152-E	Pole Mount
	PFM321D	DC12V1A Power Adapter
	LR1002	ePoE Over Coax Converter
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Accessories

Optional:

PFA130-E
Junction Box

PFB203W
Wall Mount

PFA106
Mount Adapter

PFB220C
Ceiling Mount

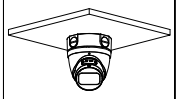
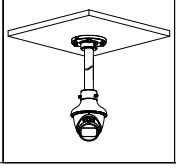
PFA152-E
Pole Mount

PFM321D
DC12V1A Power
Adapter

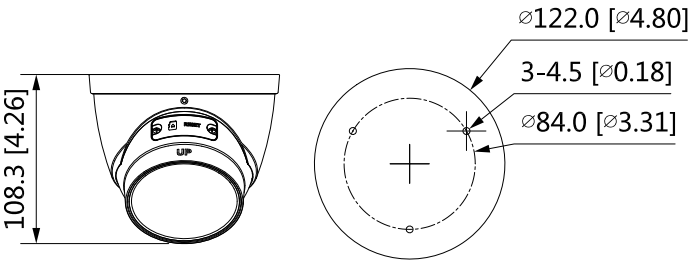
LR1002
ePoE Over Coax
Converter

PFM900-E
Integrated Mount
tester

PFM114
TLC SD card

Junction Mount	Wall Mount	Ceiling Mount	Pole Mount
PFA130-E	PFB203W	PFA106+PFB220C	PFB203W+PFA152-E
			

Dimensions (mm[inch])



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