DH-IPC-HDPW5541G-ZE

5MP IR Vari-focal 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).
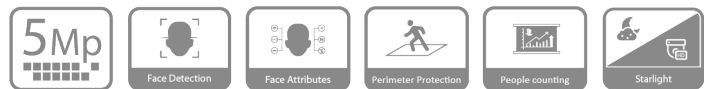
Functions

Face 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.

· 1/2.7'' 5Megapixel progressive scan CMOS.

· ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.

· Outputs max. 5MP (2592 × 1944)@20 fps , and supports 4MP (2688 × 1520)@25/30 fps.

· 20 fps@2592 × 1944, 50/60 fps@1080P (1920 × 1080).

· WDR (120 dB), Day/Night (ICR), 3D DNR, AWB, AGC, BLC.

· Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS.

· 2.7 mm–13.5 mm motorized lens.

· 1/1 Alarm in/out, 1/1 audio in/out.

· Max. IR LEDs Length 40 m.

· Micro SD memory.

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.

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.

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.

Technical Specification

Camera

Image Sensor	1/2.7" 5Megapixel progressive scan CMOS
Max. Resolution	2592 (H) × 1944 (V)
RAM/ROM	1 GB/128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
S/N Ratio	Yes
Minimum Illumination	0.005Lux@F1.5
Illumination Distance	Distance up to 40 m (131 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0˚–355˚; Tilt: 0˚–75˚; Rotation: 0˚–355˚

Lens

Lens Type	Motorized vari-focal
Mount Type	Board-in
Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.5
Angle of View	H: 100°–28°, V: 72°–21° (2592 × 1944) H: 104°–29°, V: 55°–16° (2688 × 1520)
Aperture Type	Auto
Close Focus Distance	0.8 m (2.62 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	64 m (210 ft)	26 m (85 ft)	13 m (43 ft)	6 m (20 ft)
	T	212 m (696 ft)	85 m (279 ft)	42 m (138 ft)	21 m (69 ft)

Artificial Intelligence

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
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
People Counting	Support the counting of enter number, leave number, and pass number, and displaying and outputting yearly/monthly/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

General Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly
General Intelligence	Object Abandoned/Missing
Heat Map	Yes

Video

Compression	H.265,H.264,H.264B,H.264H, MJPEG (only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Streaming 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)
Frame Rate	Main Stream: 2592 × 1944 (1 fps–20 fps) 2560 × 1440 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps) Sub Stream: D1 (1 fps–20/30 fps) D1 (1 fps–50 fps) Third Stream: 1080P (1 fps–17 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC/HLC/WDR (120 dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off/On (4 Zone, Rectangle)
Region of Interest	Off/On (4 Zone)
Electronic Image Stabilization (EIS)	Yes
Smart Illumination	Yes
Defog	Yes
Flip	0°/90°/180°/270° (Support 90°/270° with 4M resolution and lower)
Mirror	Off/On
Privacy Masking	Off/On (4 Area, Rectangle)

Audio

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;intrusion;tripwire;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; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T), CGI, Milstone, Genetec, P2P
User/Host	20 Users
Storage	NAS;FTP;SFTP;Dahua Cloud;Micro SD card 256 GB
Browser	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)
Management Software	Smart PSS, DSS, DMSS
Mobile Phone	iOS, Android

Certifications

Certifications	CE-LVD:EN60950-1 CE-EMC:Electromagnetic Compatibility Directive 2014/30/EU FCC:47 CFR FCC Part 15, Subpart B

Interface

Audio Interface	1/1 channel In/Out
Alarm	1 channel In: 5 mA 5 VDC 1 channel Out: 300 mA 12 VDC

Power

Power Supply	DC 12V (±30%), PoE (802.3af)
Power Consumption	Basic: 2.4 W (12 VDC); 2.9 W (PoE) Max. (H.265 + three streams + intelligence on + IR on): 9.6 W (12 VDC); 11 W (PoE)

Environmental

Operating Conditions	−30° C to +60° C (-22° F to +140° F)/Less than 95% RH
Storage Conditions	−40° C to +60° C (-40° F to +140° F)

Construction

Casing	plastic
Dimensions	Φ180.5 mm × 131.4 mm (7.11" × 5.17")
Net Weight	0.51 kg (1.12 lb)
Gross Weight	0.73 kg (1.61 lb)

Ordering Information

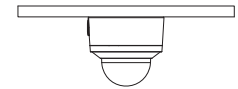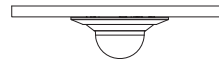| Type	Part Number	Description
5MP camera	DH-IPC-HDPW5541GP-ZE	5MP IR Vari-focal WizMind Network Camera, PAL
	DH-IPC-HDPW5541GN-ZE	5MP IR Vari-focal WizMind Network Camera, NTSC
	IPC-HDPW5541GP-ZE	5MP IR Vari-focal WizMind Network Camera, PAL
	IPC-HDPW5541GN-ZE	5MP IR Vari-focal WizMind Network Camera, NTSC
Accessories (Optional)	PFA701	Junction Box

Accessories

Optional:

PFA701
Junction Box

LR1002
ePoE Over Coax
Converter

In-ceiling Mount	Ceiling Mount
	PFA701

Dimensions (mm[inch])

131.4 [5.17]
76.7 [3.02]

⌀180.5 [⌀7.1]
⌀124.6 [⌀4.91]
⌀96.8 [⌀3.81]