

DH-IPC-HFS8849G-Z3-LED

8MP High Temperature Tolerance WizMind Network Camera



WizMind

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

Dahua WizMind 8 Series provides powerful network cameras that come with advanced deep learning algorithms and are designed with unique, sturdy structures. To meet the needs of a variety of industries, this series offers multiple types of cameras, such as the Explosion-Proof Network Camera, Classroom Network Camera, Dual-Lens Network Camera, Corner Network Camera, and High Temperature Tolerance Network Camera. It is ideal for use in various industries such as retail, finance, health care, education, energy and for judiciary purposes.

Functions

Hyper DoF

With Hyper DoF technology, DoF and iris of the camera can be adjusted separately. With the largest iris, the camera can display the image of large DoF.

Video Metadata

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

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.

- The intelligent temperature control system automatically opens and closes based on the ambient temperature, making the device suitable for environments with high-temperatures such as steel plants and boiler plants.
- Works 24/7 in an environment that is 75°C (167°F), and works continuously for 12 hours in 85°C (185°F).
- Hyper DoF technology: DoF and iris of the camera can be adjusted separately. With the largest iris, the camera can display the image of large DoF.
- Time-Division Exposure technology ensures that when the device is taking multiple snapshots of more than one targets, the quality of the snapshots will not be affected. It can also be used to adjust the brightness, speed and more of targets, to produce high quality snapshots.
- Built-in GPU chips and deep learning algorithm, which can improve the detection accuracy.
- Five switchable intelligent resources: Video Metadata, face detection, face recognition, face statistics and perimeter protection.
- Five streams for three-channel HD video display.
- 8-MP 1/1.2" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 8 MP (3840 × 2160)@25/30 fps.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Alarm: 3 in, 2 out; audio: 2 in, 1 out; RS-485; BNC; supports max. 256 G Micro SD card.
- 100–240 VAC power supply, easy for installation.
- IP67 protection.



Time-Division Exposure

Time-Division Exposure technology ensures that when the device is taking multiple snapshots of more than one targets, the quality of the snapshots will not be affected. It can also be used to adjust the brightness, speed and more of targets, to produce high quality snapshots. It is widely used in scenes that have pedestrians and vehicles, and captures clear images of faces and license plates.

Technical Specification

Camera

Image Sensor	1/1.2" CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	8 GB
RAM	4 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.0003 lux@F1.2(Color, 30 IRE) 0.0001 lux@F1.2 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	80 m (262.47 ft) (warm light)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	6 (warm light)

Lens

Lens Type	Motorized vari-focal				
Lens Mount	CS				
Focal Length	12 mm–36 mm				
Max. Aperture	F1.2				
Field of View	H: 50°–17°; V: 28°–9°; D: 58°–19°				
Iris Control	Auto				
Close Focus Distance	1 m (3.28 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	176.5 m (579.07 ft)	70.6 m (231.63 ft)	35.3 m (115.81 ft)	17.6 m (57.74 ft)
	T	503.4 m (1651.57 ft)	203.1 m (666.34 ft)	100.6 m (330.05 ft)	50.3 m (165.03 ft)

Smart Event

IVS	Abandoned object; missing object
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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
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.

Face Recognition	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 (recognition priority and optimization snapshot); face angle filter; optimization time setting. Supports adding 5 group face databases; registering person one by one or in batches; setting face similarity; and supports face comparison with the face database containing up to 100,000 face pictures.
People Counting	Tripwire people counting and people counting in area, generating and exporting report (day/month/year); queue management, generating and exporting report (day/month); 4 rules can be set for tripwire, people counting in area and queue management
Video Metadata	Motor vehicle, non-motor vehicle, face, and human body detection; snapshot; snapshot optimization; optimal face snapshot upload. Motor vehicle attributes: License plate, plate color, vehicle color, vehicle logo, vehicle year, sun visor, seatbelt, smoking, calling, ornament, and annual inspection sticker and more. Non-motor vehicle attributes: Type, vehicle color, number of people, top type and color, and hat. Human body attributes: Top and bottom type and color, bag, hat, and gender. Face attributes: Gender, age, expressions, glasses, face mask, and beard.
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+
Video Frame Rate	Main Stream: 3840 × 2160@(1–25/30 fps) sub stream: 1920 × 1080@(1–25/30 fps) third stream: 1920 × 1080@(1–25/30 fps) fourth stream: 1920 × 1080@(1–25/30 fps) fifth stream: 704 × 576@(1–25 fps); 704 × 480@(1–30 fps)
Stream Capability	5 streams
Resolution	8M (3840 × 2160); 6M (3072 × 2048/3072 × 1728); 5M (2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–16384 kbps; H.265: 12 kbps–14050 kbps
Day/Night	Color
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)
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
Time-Division Exposure	Yes

Audio

Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G.722.1; G.729
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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; parking detection; scene changing; audio detection; voltage detection; defocus detection; external alarm; face detection; face recognition; people counting in area; people counting; people number error detection; security exception
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Network

Network Port	RJ-45 (10/100/1000 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
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE 11 and earlier; Chrome: 88.0.4324.190 and earlier; Firefox: 47.0.2 and earlier
Management Software	Smart PSS; DSS; PMS
Mobile Client	iOS; Android
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
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Port

RS-485	1 (baud rate range:1200 bps–115200 bps)
Audio Input	2 channels (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	3 channels in: 5 mA 3–5VDC
Alarm Output	2 channels out: 1,000 mA 30VDC/500 mA 50VAC

Power

Power Supply	100–240 VAC 0.6 A
Power Consumption	Basic: 22.5 W (220 V) Max. (Basic+ WDR+ Intelligence on + Illuminator on + Lens switching): 26 W (220 V)

Environment

Operating Temperature	–30 °C to +75 °C (–22 °F to +167 °F)
Operating Humidity	≤95%
Storage Temperature	–30 °C to +75 °C (–22 °F to +167 °F)
Protection	IP67

Structure

Casing Material	Metal + plastic
Product Dimensions	513.14 mm × 177.09 mm × 190.7 mm (20.20" × 6.97" × 7.50") (L × W × H)
Net Weight	4.8 kg (10.58 lb)
Gross Weight	6.45 kg (14.22 lb)

Ordering Information

Type	Model	Description
8MP Camera	DH-IPC-HFS8849G-Z3-LED	8MP High Temperature Tolerance WizMind Network Camera
	IPC-HFS8849G-Z3-LED	8MP High Temperature Tolerance WizMind Network Camera
Accessories	DH-PFA150-SG	Pole Mount Bracket
	DH-PFA162-SG	Pole Mount Bracket
	DH-PFB605W-SG	Wall Mount Bracket
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Included:



DH-PFB605W-SG
Wall Mount Bracket

Optional:



DH-PFA150-SG
Pole Mount Bracket



DH-PFA162-SG
Pole Mount Bracket

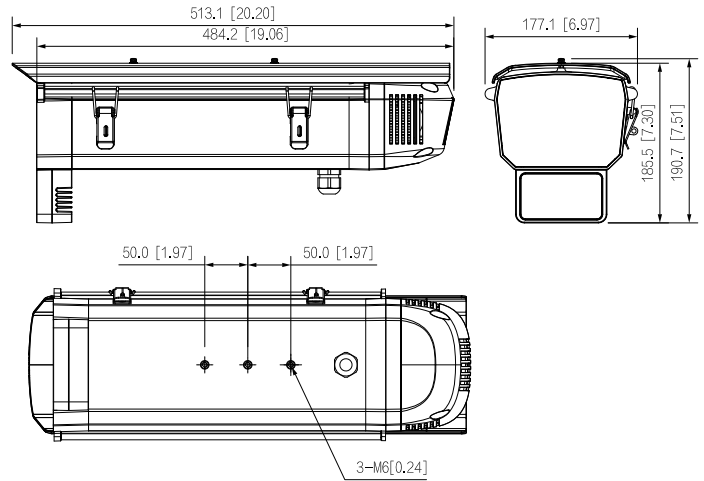


PFM900-E
Integrated
Mount Tester



TF-P100
MicroSD
Memory Card

Dimensions (mm[inch])



Wall Mount	Pole Mount(Horizontal)	Pole Mount(Vertical)