

DH-IPC-HFS8449G-Z7-LED

4MP 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.
- Ghosting Diminishment: Motion blur does not occur when objects are moving at night with WDR enabled.
- 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.
- 4-MP 1/1.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520)@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.

Ghosting Diminishment

Ghosting Diminishment technology prevents motion blur from occurring when objects are moving with WDR enabled and reduces ghosting in surveillance image to allow moving objects to appear clear.

Technical Specification

Camera

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| Image Sensor | 1/1.8" CMOS |
| Max. Resolution | 2688 (H) × 1520 (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; Zoomprio; Manual |
| Illuminator Number | 6 (warm light) |

Lens

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|----------------------|--------------------------------------|
| Lens Type | Motorized vari-focal |
| Lens Mount | Module |
| Focal Length | 8 mm–56 mm |
| Max. Aperture | F1.2 |
| Field of View | H: 41°–9° V: 23°–5° D: 47°–11° |
| Iris Control | Auto |
| Close Focus Distance | 1 m (3.28 ft) |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---------------|------|--------------------|--------------------|-------------------|-------------------|
| | W | 151 m (495.41 ft) | 60.7 m (199.15 ft) | 30.3 m (99.41 ft) | 15.1 m (49.54 ft) |
| | T | 640 m (2099.73 ft) | 256 m (839.90 ft) | 128 m (419.95 ft) | 64 m (209.97 ft) |

Smart Event

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|-----|----------------------------------|
| IVS | Abandoned object; missing object |
|-----|----------------------------------|

Intelligence

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|----------------------------|---|
| 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. |

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| 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 bread. |
| Smart Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos |

Video

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| 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: 2688 × 1520@(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 | 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–10240 kbps; H.265: 12 kbps–9472 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 |

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| 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

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|-------------------|---|
| Audio Compression | PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G.722.1; G.729 |
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Alarm

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|-------------|--|
| 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

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|---------------------|---|
| 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; |
| 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 |
|----------------|---|

Port

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|--------------|---|
| 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 30 VDC/500 mA 50 VAC |

Power

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|-------------------|---|
| 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

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|-----------------------|--------------------------------------|
| 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

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|--------------------|---|
| 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 |
|-------------|------------------------|---|
| 4MP Camera | DH-IPC-HFS8449G-Z7-LED | 4MP High Temperature Tolerance WizMind Network Camera |
| | IPC-HFS8449G-Z7-LED | 4MP 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

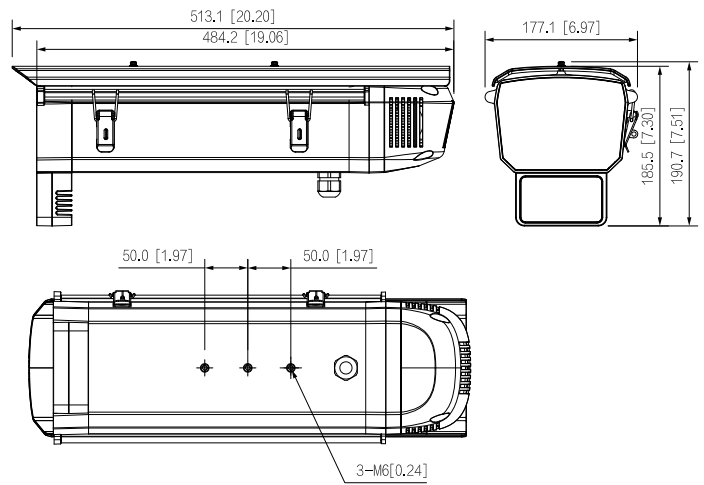


PFM900-E
Integrated
Mount Tester



TF-P100
MicroSD
Memory Card

Dimensions (mm[inch])



| Wall Mount | Pole Mount(Horizontal) | Pole Mount(Vertical) |
|------------|------------------------|----------------------|
| | | |