DH-IPC-HDBW5441R-ASE-HDMI

4MP IR Fixed-focal Dome 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 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

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.

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.

Heat Map
Dahua heat map technology is used to display the crowd density and people appearance probability. Display the crowd status by different colors. Generally, the crowd status is the statistics of people quantity in space and time dimensions.

- 4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4MP (2688×1520) @25/30 fps.
- Built-in IR LED, and the max. illumination 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.
- With deep learning algorithm, it supports: video metadata, IVS, face detection, smart object detection, and people counting, etc.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 512 GB Micro SD card, built-in MIC.
- 12 VDC/PoE power supply; ePoE.
- IP54 and IK10 protection.
- Supports HDMI 1.4a and outputs a max resolution of 2560 × 1440@25/30 fps through the HDMI port. The max frame rate supported for 1080p and 720p is 50/60 fps.
- Features HDMI self-adaptation, which automatically adjusts the output resolution based on the max resolution supported by both the camera and the display.
- SMD 3.0.



Cyber Security
Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Protection (IK10, Wide Voltage)
IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (impact energy is 20J). 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	1/2.9" CMOS
Max. Resolution	2688 (H) × 1520 (V)
ROM	256 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.002 lux@F1.6 (Color, 30 IRE) 0.0002 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)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	2 (IR LED)
Angle Adjustment	Pan: 0°–355°; Tilt: 0°–80°; Rotation: 0°–355°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	3.6 mm; 6 mm; 2.8 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 101°; V: 55°; D: 121° 3.6 mm: H: 84°; V: 43°; D: 100° 6 mm: H: 52°; V: 28°; D: 61°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.1 m (3.61 ft) 3.6 mm: 1.7 m (5.58 ft) 6 mm: 3.2 m (10.50 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	63.6 m (208.66 ft)	25.4 m (83.33 ft)	12.7 m (41.67 ft)	6.4 m (21.00 ft)
	3.6 mm	85.4 m (280.18 ft)	34.2 m (112.20 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)
	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)

*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

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
Smart Object Detection	Smart abandoned object; smart missing object
SMD	SMD 3.0
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people 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 snapshot enhancement; face exposure; face attributes extraction including 6 attributes and 8 expressions; 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.
People Counting	Tripwire people counting and people counting in area; generating and exporting report (day/week/month/year); 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.

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 2688 × 1520@(1–25/30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) third stream: 1920 × 1080@(1–25/30 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.
Stream Capability	3 streams
Resolution	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
HDMI Output	2560 × 1440@25/30 fps; 1920 × 1080@25/30/50/60 fps; 1280 × 720@25/30/50/60 fps
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
Defog	Yes
Image Rotation	Yes
Mirror	Yes
Privacy Masking	4 areas
LDC	Yes

Audio

Built-in MIC	Yes, built-in Mic
Audio Compression	PCM; G.711a; G.711Mu; 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; abandoned object; missing object; 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 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; PPPoE; SNMP; P2P
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE 11 and later; Chrome: Chrome 45 and later; Firefox: Firefox 46 and later; Safari: Safari 12 and later
Management Software	SmartPSS Lite; DSS; DMSS
Mobile Client	iOS;Android
Cyber Security	Video encryption;Firmware encryption;Configuration encryption;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

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU

Port

HDMI	HDMI 1.4a, type A, female plug
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; PoE (802.3af); 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: 3.6 W (12 VDC), 4.5 W (PoE); Max.: 5.9 W (12 VDC), 6.9 W (PoE) (H.265+ WDR+ Intelligence on+IR on)

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	IP54; IK10

Structure

Casing Material	Metal
Product Dimensions	Φ122.0 mm × 94 mm (4.80" × Φ3.70")
Net Weight	0.55 kg (1.21 lb)
Gross Weight	0.73 kg (1.61 lb)

Ordering Information

Type	Model	Description
IP CAMERA	DH-IPC-HDBW5441R-ASE-HDMI	4MP IR Fixed-focal Dome WizMind Network Camera
Accessories (Optional)	DH-PFA109	Mount adapter
	DH-PFB220C	Ceiling Mount Bracket
	DH-PFB305W	Wall mount bracket
	DH-PFA151	Corner mount bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFB206W	Wall Mount Bracket
	DH-PFA156	Pole Mount Bracket
	DH-PFA137	Junction box
	DH-PFB5203C	In-ceiling Mount Bracket
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM321D-EN	DC12V 1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester
	DHI-TF-P100/512GB	MicroSD Card

Accessories

Optional:



DH-PFA109
Mount adapter



DH-PFB220C
Ceiling Mount Bracket



DH-PFB305W
Wall mount bracket



DH-PFA151
Corner mount bracket



DH-PFA150
Pole Mount Bracket



DH-PFB206W
Wall Mount Bracket



DH-PFA156
Pole Mount Bracket



DH-PFA137
Junction box



DH-PFB5203C
In-ceiling Mount Bracket



DH-PFM321-EN
DC12V1A power adapter



DH-PFM321D-EN
DC12V 1A power adapter



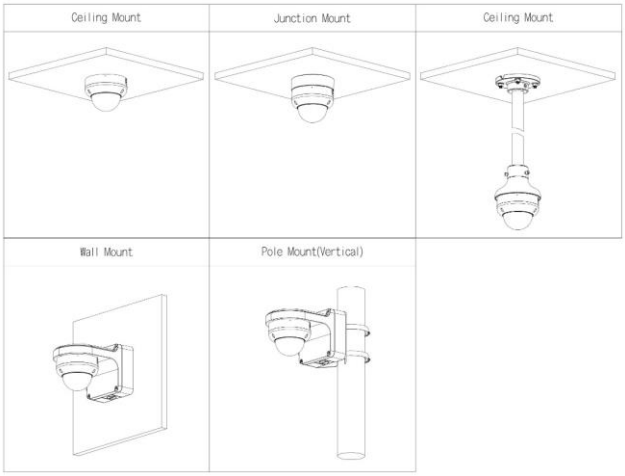
DH-PFM320D-EN
DC12V2A power adapter



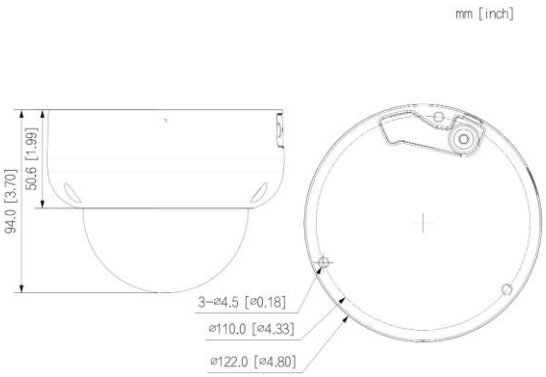
PFM900-E
Integrated Mount Tester



DHI-TF-P100/512GB
MicroSD Card



Dimensions (mm[inch])



Rev 002.000 ©2024 Dahua. All rights reserved. Design and specifications are subject to change without notice.
Pictures in the document are for reference only, and the actual product shall prevail.