

DH-IPC-HDBW2449F-AS-IL

4MP Smart Dual Light Fixed-focal Dome WizSense Network Camera



Wiz Sense

Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

With advanced deep learning algorithm, Dahua WizSense 2 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

Functions

Smart Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

SMD Plus

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

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.

- 4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520) @20 fps, and supports 2560 × 1440@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in multi-core light, the max. IR distance is 30 m and the max. warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Supports max. 256 G Micro SD card; built in Mic.
- 12 VDC/PoE power supply, easy for installation.
- IP67 and IK10 protection.
- SMD Plus.



Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Full-color

With high-performance sensor and large aperture lens, Dahua Fullcolor technology can display clear colorful image in the environment of ultra-low illuminance. With this photosensitivity technology, the camera can capture more available light, and display more colorful image details.

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 (IP67, IK10, Wide Voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normally after soaking in 1 m deep water for 30 minutes.

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 $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Camera					
Image Sensor		1/2.9" CMOS			
Max. Resolution		2688 (H) x 1520 (V)			
ROM		128 MB			
RAM		128 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s			
Min. Illumination		0.006 lux@F1.6 (Color, 30 IRE); 0.0006 lux@F1.6 (B/W, 30 IRE); 0 lux (Illuminator on)			
S/N Ratio		>56 dB			
Illumination Distance		Up to 30 m (98.43 ft) (IR) Up to 30 m (98.43 ft) (Warm light)			
Illuminator On/Off Control		Auto;Manual			
Illuminator Number		4 (Multi-core (IR + warm) light)			
Angle Adjustment		Pan: -30° to 30°; Tilt: 0° to 80°; Rotation: 0° to 360°			
Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		2.8 mm; 3.6 mm			
Max. Aperture		F1.6			
Field of View		2.8 mm: H: 101°; V: 54°; D: 120° 3.6 mm: H: 83°; V: 43°; D: 100°			
Iris Control		Fixed			
Close Focus D	istance	2.8 mm: 1.1 m (3.61 ft) 3.6 mm: 1.7 m (5.58 ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	63.6 m (208.66 ft)	25.4 m (93.33 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)
	*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.				

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 (the two functions support the classification and accurate detection of vehicle and human)
SMD	SMD Plus
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: 2688 × 1520@(1–20 fps)/2560 × 1440@(1–25/30 fps) sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 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	2 streams		
Resolution	4M (2688 × 1520/2560 × 1440); 3M (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–6144 kbps; H.265: 12 kbps–6144 kbps		
Day/Night	Auto(ICR)/Color/B/W		
BLC	Yes		
HLC	Yes		
WDR	120 dB		
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		
Smart Dual Light	Yes		
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 \times 1520 resolution and lower)		
Mirror	Yes		
Privacy Masking	4 areas		
Audio			
Built-in MIC	Yes, built-in Mic		
Audio Compression	G.711a; G.711Mu; G.726; PCM		
Alarm			
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; SMD; security exception; external alarm		
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; NTP; Multicast; ICMP; IGMP; P2P		

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Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI	
User/Host	6 (Total bandwidth: 36 M)	
Storage	FTP; SFTP; Micro SD card (support max. 256 GB)	
Browser	IE; Chrome;Firefox	
Management Software	Smart PSS Lite; DSS; DMSS; DoLynk Care	
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.50 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		
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)	
Power Consumption	Basic: 2.3 W (12 VDC), 2.8 W (PoE); Max.: 7.1 W (12 VDC), 8.5 W (PoE) (H.265 + intelligence on+ WDR + illuminator intensity)	
Environment		
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	
Operating Humidity	≤95%	
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	
Storage Humidity	≤95%	
Protection	IP67; IK10	
Structure		
Casing Material	Metal	
Product Dimensions	55.0 mm × Φ 108.9 mm (2.17" × Φ 4.29")	
Net Weight	0.41 kg (0.90 lb)	
Gross Weight	0.55 kg (1.21 lb)	

Ordering Information				
Туре	Model	Description		
IP CAMERA	DH-IPC-HDBW2449F-AS-IL	4MP Smart Dual Light Fixed focal Dome WizSense Network Camera		
	DH-PFB220C	Ceiling Mount Bracket		
	DH-PFA106	Mount Adapter		
	DH-PFB305W	Wall mount bracket		
	DH-PFA151	Corner mount bracket		
	DH-PFA150	Pole Mount Bracket		
	DH-PFA152-E	Pole Mount Bracket		
Accessories (Optional)	DH-PFB204W	Wall mount bracket		
	DH-PFA139	Junction box		
	DH-PFM321-EN	DC12V1A power adapter		
	DH-PFM321D-EN	DC12V 1A power adapter		
	DH-PFM320D-EN	DC12V2A power adapter		
	РҒМ900-Е	Integrated Mount Tester		
	DHI-TF-P100/256GB	MicroSD Card		

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Accessories

Optional:



DH-PFB220C Ceiling Mount Bracket



DH-PFA151 Corner mount bracket



DH-PFB204W Wall mount bracket



DH-PFM321D-EN DC12V 1A power adapter DC12V2A power adapter



DHI-TF-P100/256GB MicroSD Card



DH-PFA106 Mount Adapter



DH-PFA150 Pole Mount Bracket



DH-PFA139 Junction box



DH-PFM320D-EN



DH-PFB305W Wall mount bracket



DH-PFA152-E Pole Mount Bracket

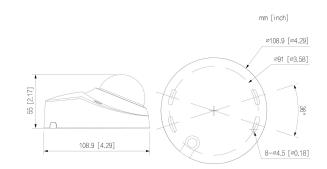


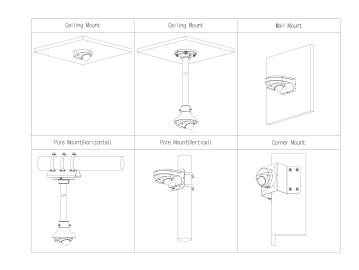
DH-PFM321-EN DC12V1A power adapter



PFM900-E Integrated Mount Tester

Dimensions (mm[inch])





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