

DH-IPC-HFW2449S-S-LED

4MP Full-color Fixed-focal Bullet Wizsense Network Camera



WizSense

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

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.

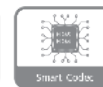
Perimeter Protection

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.

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.

- 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 warm light and the max. illumination 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.
- IP67 protection.
- SMD Plus.



Full-color

With high-performance sensor and large aperture lens, Dahua Full-color 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.

Protection (IP67, 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.

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					
Image Sensor		1/2.9" CMOS			
Max. Resolution		2688 (H) × 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		0.004 Lux@F1.0			
S/N Ratio		>56 dB			
Illumination Distance		Up to 30 m (98.43 ft) (Warm light)			
Illuminator On/Off Control		Auto; Manual			
Illuminator Number		2 (Warm light)			
Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		2.8 mm;3.6 mm			
Max. Aperture		F1.0			
Field of View		2.8 mm: H: 101°; V: 53°; D: 120° 3.6 mm: H: 82°; V: 43°; D: 94°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 1.5 m (4.92ft) 3.6 mm: 2.2 m (7.22 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	66.0 m (216.54 ft)	26.4 m (86.61 ft)	13.2 m (43.31 ft)	6.6 m (21.65 ft)
	3.6 mm	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 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 (the two functions support the classification and accurate detection of vehicle and human).			
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); 3.6M (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		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 (Rol)		Yes (4 areas)	
Smart Illumination		Yes	
Image Rotation		0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)	
Mirror		Yes	
Privacy Masking		4 areas	
Audio			
Built-in MIC		Yes	
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	
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	
Interoperability		ONVIF (Profile S; Profile G; Profile T); CGI	
User/Host		20 (Total bandwidth: 48 M)	
Storage		FTP; SFTP; Micro SD card (support max. 256 GB)	
Browser		IE; Chrome; Firefox	
Management Software		Smart PSS Lite;DSS;DMSS	
Mobile Client		iOS; Android	
Security		Trusted execution;Digest;security logs;WSSE;account lockout;syslog;802.1x;IP/MAC filtering;HTTPS;trusted upgrade;trusted boot;generation and importing of X.509 certification	

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
Power	
Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 2.7 W (12 VDC); 3.6 W (PoE) Max. (H.265+ intelligence on + WDR + illuminator intensity): 6.8 W (12 VDC); 8.3 W (PoE)

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

Structure

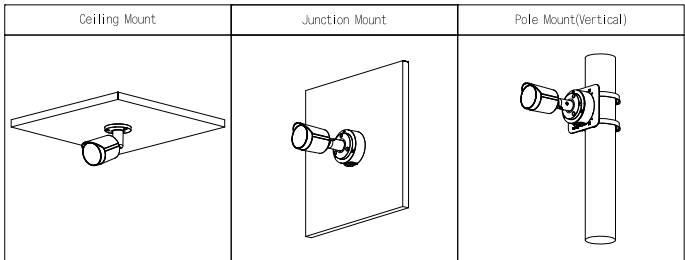
Casing Material	Metal
Product Dimensions	70.0 mm × 70.0 mm × 166.2 mm (2.76" × 2.76" × 6.54") (L × W × H)
Net Weight	0.47 kg (1.04 lb)
Gross Weight	0.59 kg (1.30 lb)

Ordering Information

Type	Model	Description
4MP Camera	DH-IPC-HFW2449S-S-LED	4MP Full-color Fixed-focal Bullet Wizsense Network Camera
Accessories (Optional)	PFA134	Junction Box
	PFA130-E	Water-proof Junction Box
	PFA152-E	Pole Mount Bracket
	PFM321D	12 VDC 1A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:



Dimensions (mm[inch])

