DH-IPC-HFW2449S-S-LED

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



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.

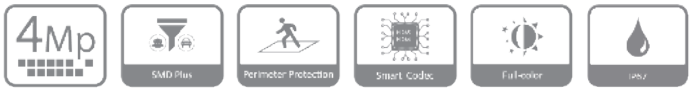
Perimeter Protection

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 ±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)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	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 (RoI)	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:



PFA134
Junction Box



PFA130-E
Water-proof
Junction Box



PFA152-E
Pole Mount
Bracket



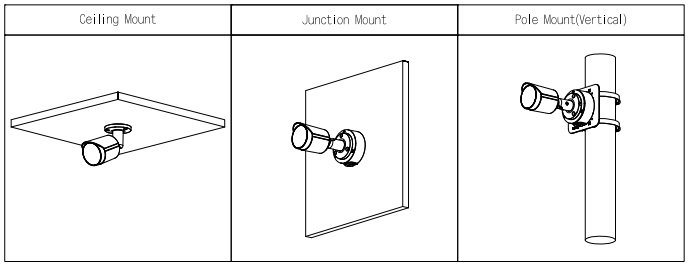
PFM321D
12 VDC 1 A
Power Adapter



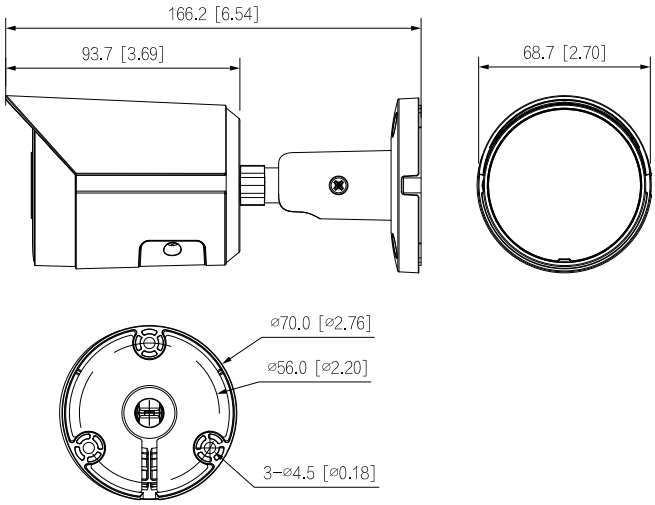
PFM900-E
Integrated
Mount Tester



TF-P100
MicroSD
Memory Card



Dimensions (mm[inch])



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