



# DH-IPC-HFW2249S-S-LED

# 2MP 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.

- 2-MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 2 MP (1920 × 1080)@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.

# **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, 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	on						1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280
Camera							Resolution	× 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Image Sensor		1/2.8" CMOS					Bit Rate Control	CBR/VBR
Max. Resolution		1920 (H) × 1080 (V)					Video Bit Rate	H.264: 32 kbps-6144 kbps H.265: 12 kbps-6144 kbps
ROM		128 MB					Day/Night	Color/B/W
RAM		128 MB					BLC	Yes
Scanning System		Progressive					HLC	Yes
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s					WDR	120 dB
Min. Illumination		0.002 lux@F1.0					White Balance	Auto; natural; street lamp; outdoor; manual; regional
S/N Ratio		>56 dB						custom
Illumination Distance		Up to 30 m (98.43 ft) (Warm light)					Gain Control	Auto; Manual
Illuminator On/Off Control		Auto; Manual					Noise Reduction	3D NR
Illuminator Number		2 (Warm light)					Motion Detection	OFF/ON (4 areas, rectangular)
Lens							Region of Interest (RoI)	Yes (4 areas)
Lens Type		Fixed-focal					Smart Illumination	Yes
Lens Mount		M12					Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower)
Focal Length		2.8 mm;3.6 mm					Mirror	Yes
Max. Aperture		F1.0					Privacy Masking	4 areas
Field of View		2.8 mm: H: 106°; V: 55°; D: 125° 3.6 mm: H: 85°; V: 45°; D: 100°					Audio	
Iris Control		Fixed					Built-in MIC	Yes
Close Focus Distance		2.8 mm: 1.0 m (3.28 ft)					Audio Compression	G.711a; G.711Mu; G.726; PCM
	Lens	3.6 mm: 1.7 i	Observe	Recognize	Identify		Alarm	
DORI Distance	2.8 mm	45.5 m (149.28 ft) 53.8 m	18.2 m (59.71 ft) 21.5 m	9.1 m (29.86 ft) 10.8 m	4.6 m (15.09 ft) 5.4 m		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
	3.6 mm	(176.51 ft)	(70.54 ft)	(35.43 ft)	(17.72 ft)		Network	
Intelligen	ce						Network Port	RJ-45 (10/100 Base-T)
IVS (Perimete	er Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and					SDK and API	Yes
Smart Search		human).  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event					Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; P2P
		videos					Interoperability	ONVIF (Profile S; Profile G; Profile T); CGI
Video		H265 H264 H264H H2645 : 1256 (2 h					User/Host	20 (Total bandwidth: 48 M)
Video Compression		H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)					Storage	FTP; SFTP; Micro SD card (support max. 256 GB)
Smart Codec		Smart H.265+; Smart H.264+					Browser	IE; Chrome; Firefox
Video Frame Rate		Main stream: 1920 × 1080@(1–25/30 fps) Sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps)					Management Software	Smart PSS Lite;DSS;DMSS
							Mobile Client	iOS; Android
		*The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.					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
Stream Capability		2 streams						encryption;generation and importing of X.509 certification

# Wiz Sense | DH-IPC-HFW2249S-S-LED

### Certification

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

# Power

Power Supply	12 VDC/PoE (802.3af)		
Power Consumption	Basic: 2 W (12 VDC); 2.7 W (PoE) Max. (H.265+ intelligence on + WDR + illuminator intensity): 6.2 W (12 VDC); 7.4 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 2MP Full-color Fixed-focal Bullet DH-IPC-HFW2249S-S-LED 2MP Camera Wizsense Network Camera PFA134 Junction Box PFA130-E Water-proof Junction Box PFA152-E Pole Mount Bracket Accessories (Optional) PFM321D 12 VDC 1A Power Adapter PFM900-E Integrated Mount Tester TF-P100 MicroSD Memory Card

# Accessories

# Optional:







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

Ceiling Mount	Junction Mount	Pole Mount(Vertical)

# Dimensions (mm[inch])





