

DH-IPC-HFW2649TL-S-PRO

6MP WizColor Fixed-focal Bullet WizSense Network Camera





Launched by Dahua Technology, WizSense is a series of Al products and solutions that adopt independent Al 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

WizColor Technology

Dahua WizColor Technology seamlessly combines with the powerful AI-ISP, large pixel size sensor and large aperture in cameras. This unique integration enables cameras to effortlessly capture high-quality images with vibrant colors during nighttime scenarios, ensuring fine details are preserved and minimizing motion blur. Unlike traditional self-illuminating cameras, Dahua WizColor Technology maximizes the utilization of weak light sources, such as moonlight and city lights reflected in the sky, delivering captivating full-color images of the entire scene. It also ensures that monitoring distances are not compromised at night due to limited illumination ranges, facilitating full-color image capture even over long distances.

AI-ISP

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

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.

- 1/1.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 6 MP (3288 ×1850) @20 fps, and supports 4MP (2688 × 1520) @25/30 fps.
- · H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light, and the max. illumination distance is 50 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 protection.
- SMD Plus















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.

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.

Camera			Technical Specification					Work together with Smart NVR to perform refine
						Smart Search	intelligent search, event extraction and merging to event videos	
Image Sensor		1/1.8" CMOS					Video	
Max. Resolution		3288 (H) × 1850 (V)					Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
ROM		128 MB					Smart Codec	Smart H.265+; Smart H.264+
RAM		256 MB						Main stream: 3288 × 1850@(1–20 fps)/2688 ×
Scanning System		Progressive				Video Frame Rate	$1520@(1-25/30\ fps)$ sub stream: $704\times576@(1-25\ fps)/704\times480@(1-30\ fps)$ *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.	
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s						
Min. Illumination		0.0007 Lux@F1.0						
S/N Ratio		>56 dB						
Illumination Distance		Up to 50 m (164.04 ft) (Warm light)					Streaming Capability	2 streams
Illuminator On/Off Control Illuminator Number		Auto;Manual 4 (Warm light)					Resolution	6M (3288 × 1850/3200 × 1800); 5M (2880 × 1620); 4M (2688 × 1520); 3M (2048 × 1536); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 ×
Angle Adjustment		Pan: 0° – 360° Tilt: 0° – 90°						480); CIF (352 × 288/352 × 240)
		Rotation: 0°–360°					Bit Rate Control	VBR;CBR
Lens Tyne		Fixed focal					Video Bit Rate	H.264: 32 kbps–8192 kbps; H.265: 12 kbps–8192 kbps
Lens Type		Fixed-focal					Day/Night	Color/B/W
Lens Mount		M16					BLC	Yes
Focal Length		2.8 mm; 3.6 mm; 6 mm					HLC	Yes
Max. Aperture		F1.0					WDR	120 dB
Field of View		2.8 mm: H: 92°; V: 51°; D: 107° 3.6 mm: H: 78°; V: 42°; D: 91° 6 mm: H: 48°; V: 25°; D: 56°					White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Iris Control		Fixed					Gain Control	Auto/Manual
		2.8 mm: 2.8 m (9.19 ft)					Noise Reduction	3D NR
Close Focus Distance		3.6 mm: 4 m (13.12 ft) 6 mm: 12 m (39.37 ft)					Motion Detection	OFF/ON (4 areas, rectangular)
Le	.ens	Detect	Observe	Recognize	Identify		Region of Interest (RoI)	Yes (4 areas)
2.5	2.8 mm	84.0 m	33.6 m	16.8 m	8.4 m		Smart Illumination	Yes
		(275.59 ft) 102.0 m	(110.24 ft) 40.8 m	(55.12 ft) 20.4 m	(27.56 ft) 10.2 m		Image Rotation	$0^{\circ}/90^{\circ}/180^{\circ}/270^{\circ}$ (Support $90^{\circ}/270^{\circ}$ with 2688×1520 resolution and lower)
	3.6 mm	(334.65 ft) (133.86 ft	(133.86 ft)	(66.93 ft)	(33.46 ft)		Mirror	Yes
DORI Distance	5 mm	169.0 m (554.46 ft)	67.6 m (221.78 ft)	33.8 m (110.89 ft)	16.9 m (55.45 ft)		Privacy Masking	4 areas
	*DORI (Detect, Observe, Recognize, Identify) is a standard system						LDC	Yes
		N-62676-4) for defining the ability of a person viewing the deo to distinguish persons or objects within a covered area.					Audio	
	The numbers in this table do not reflect intelligent function						Built-in MIC	Yes, built-in Mic
		r intelligent function distances, refer to installation ioning manual/project design tool.					Audio Compression	G.711a; G.711Mu; PCM; G.726
Intelligence							Alarm	
IVS (Perimeter Protection)		Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)					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
SMD		SMD Plus					Network	
							Network Port	RJ-45 (10/100 Base-T)

Yes			
IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; P2P; Bonjour; Auto Registration			
ONVIF (Profile S & Profile G & Profile T); CGI			
20 (Total bandwidth: 48 M)			
FTP; SFTP; Micro SD card (support max. 256 GB); NAS			
IE; Chrome; Firefox			
Smart PSS Lite; DSS; DMSS			
iOS;Android			
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;Session security;Security warning			
CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU			
12 VDC (±30%); PoE (802.3af)			
Basic: 2.3 W (12 VDC); 3.2 W (PoE); Max.: 6.1 W (12 VDC); 7.4 W (PoE) (H.265+ intelligence on + WDR + illuminator intensity)			
-40 °C to +60 °C (-40 °F to +140 °F)			
≤95% (RH), non-condensing			
-40 °C to +60 °C (-40 °F to +140 °F)			
≤95% (RH), non-condensing			
IP67			
Metal			
197.9 mm × 80.2 mm × 76.2 mm (7.79" × 3.16" × 3.00") (L × W × H)			
0.57 kg (1.26 lb)			

Ordering Information								
Туре	Model	Description						
IP CAMERA	DH-IPC-HFW2649TL-S-PRO	6MP WizColor Fixed-focal Bullet WizSense Network Camera						
	DH-PFA151	Corner Mount Bracket						
Accessories (Optional)	DH-PFA130-E	Water-proof Junction Box						
Accessories (Optional)	G3416GW	G3/4" Water Joint						
	DH-PFA157	Pole Mount Bracket						

0.72 kg (1.59 lb)

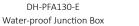
Gross Weight

Туре	Model	Description
	DH-PFA134	Junction Box
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester
	DHI-TF-W100-256GB	MicroSD Card
	DHI-TF-P100/256GB	MicroSD Card

Accessories

Optional:







DH-PFA134 Junction Box



DH-PFA151 Corner Mount Bracket



DH-PFA157 Pole Mount Bracket



DH-PFM320D-EN



DH-PFM321-EN DC12V2A power adapter DC12V1A power adapter



DHI-TF-P100/256GB MicroSD Card



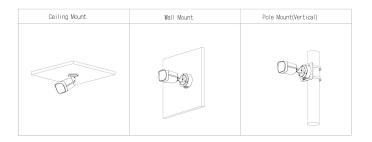
DHI-TF-W100-256GB MicroSD Card



G3416GW G3/4" Water Joint



PFM900-E Integrated Mount Tester



Dimensions (mm[inch])

