



DH-IPC-HFW3249E-AS-LED

2MP Full-color Warm LED 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 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. In addition, with full-color technology, it provides a better image effect in the condition of low illuminance.

Functions

Full-color

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

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.

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.

- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 2MP (1920 × 1080) @30 fps
- H.265 codec, high compression rate, low bit rate
- · Built-in Warm LED, max. LED distance: 30 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire (support the classification and accurate detection of vehicle and human)
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card, built-in Mic
- 12V DC/PoE power supply
- 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) are largely reduced.

Cyber Security

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading 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 works normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.



Wiz Sense | DH-IPC-HFW3249E-AS-LED

CBR; VBR

Bit Rate Control

Earning Serrice 128 20 for 170 10 for	Technical Specification						Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps	
Max. Resolution 100 Mily 1000 Mily	Camera						Day/Night	Color/B/W	
ROM	Image Sensor		1/2.8"2Megapixel progressive CMOS				BLC	Yes	
Second	Max. Resolution		1920 (H) × 1080 (V)				WDR	120 dB	
Standing System Standing	ROM		128 MB				White Balance		
Mote Reduction 10 DRR 1	RAM		512 MB				Gain Control		
Motion Detection Motion Detection OFF/ON 4 areas, rectangular) Motion Ves Motion OFF/ON 4 areas, rectangular) Motion Ves Motion Ves Motion OFF/ON 4 areas OFF/ON OFF/O	Scanning System		Progressive				Noise Reduction	3D DNR	
Minimination	Electronic Shutter Speed		Auto/Manual 1/3 s–1/100, 000 s					OFF/ON (4 areas rectangular)	
SAN Ratio	Min. Illumination		0.0015 Lux@l	F1.0					
Illumination Ork/Off Control Auto/Manual	S/N Ratio		> 56 dB						
Illuminator On/Off Control Illuminator Number	Illumination Dis	stance	30 m (98.4 ft)				Siliart illullillation		
Illuminator Number 1 (warm LED) Pan/Titf, Rotation Range Part: 0"-360", Titl: 0"-360", Rotation: 0"-360" Privacy Masking 4 areas	Illuminator On/	Off Control	Auto/Manual				Image Rotation		
Audio	Illuminator Nun	nber	1 (warm LED)					Mirror	Yes
Lens Type	Pan/Tilt/Rotation	on Range	Pan: 0°-360°;	Tilt: 0°–90°; R	otation: 0°–36)°		Privacy Masking	4 areas
Mount Type	Lens					Audio			
Focal Length 2.8 mm; 3.6 mm	Lens Type		Fixed-focal			Built-in MIC	Yes		
Max. Aperture	Mount Type		M12				Audio Compression	G.711a; G.711Mu; G726	
Field of View 2.8 mm: Horizontal 107" × vertical 55" × diagonal 127" 3.6 mm: Horizontal 84" × vertical 45" × diagonal 99" Iris Type Fixed Close Focus Distance 2.8 mm: 0.8 m (2.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.1 m (7.7 m (3.9 m) (12.8 ft) 3.6 mm: 1.1 m (7.7 m (3.9 m) (12.8 ft) 3.6 mm (12.6 ft) (2.5 3 ft) (12.8 ft) 3.6 mm (12.6 ft) (2.5 3 ft) (12.8 ft) 3.6 mm (12.6 ft) (2.5 3 ft) (12.8 ft) 3.6 mm (12.6 ft) (2.5 3 ft) (12.8 ft) 4.6 mm: 1.7 m (5.6 ft) 3.6 mm: 1.7 m (5.6 ft) 3.9 mm 7.7 m 3.9 m 7.	Focal Length		2.8 mm; 3.6 mm				Alarm		
Field of View 2.8 mm; Horizontal 107" x vertical 55" x diagonal 127" 3.6 mm; Horizontal 84" x vertical 45" x diagonal 199" Alarm Event IP conflict; Illegal access; voltage detection; security exception; motion detection; wild campening; scene changing; input abnormal; intensity change; tripwire; intrusion; SMD	Max. Aperture		F1.0				Alarm Event	of SD card (smart card supports); network disconnection; IP conflict; illegal access; voltage detection; security exception; motion detection; video tampering; scene changing; input abnormal; intensity change; tripwire;	
Close Focus Distance 2.8 mm: 0.8 m (2.6 ft) 3.6 mm: 1.7 m (5.6 ft) DORI Distance 2.8 mm 3.6 m (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) (12.8 ft) 3.6 mm (126.6 ft) (50.5 ft) (25.3 ft) (12.8			3.6 mm: Horizontal 84° × vertical 45° × diagonal 99°						
Lens	пъ туре						Network		
Defect Observe Recognize Identify	Close Focus Dis	tance	, ,					RL45 (10/100 Rassa-T)	
DORI Distance 2.8mm 38.6 m (12.6 ft) (50.5 ft) (25.3 ft) (12.8 ft) (12.8 ft) (12.8 ft) (25.3 ft) (12.8 ft) (12.8 ft) (12.8 ft) (12.8 ft) (12.8 ft) (12.6 ft) (12.0 ft) (18.0 f		Lens	Detect	Observe	Recognize	Identify			
3.6mm 55.2 m (181.1 ft) 22.1 m (18.0 ft) (72.5 ft) (36.1 ft) (72.5 f	DORI Distance	2.8mm						SDK and API	
Perimeter Protection Tripwire, intrusion (Recognition of vehicle and people) Work together with Smart NVR to perform refine intelligent Search Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Video Video Interoperability ONVIF(Profile S/Profile G/Profile T);CGI;P2P;Milestone; Genetec 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 (1920 × 1080) @ 1–25/30 fps) sub stream (1920 × 1080 @ 1–25/30 fps) Sib stream (1920 × 1080) # 1–25/30 fps) Stream Capability 3 streams Management Software Nanagement Software Video Encryption; Cirmware encryption; configuration encryption; Cirmware encryption; Configuration encryption; Cirmware encryption; Configuration encryption; Cirmware encryption; Configuration encryption; Cirmset intelligent encryption; Cirmset intelligen		3.6mm						Protocol	SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;
Perimeter Protection Tripwire, intrusion (Recognition of vehicle and people) Work together with Smart NVR to perform refine intelligent Search Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Video Video Interoperability Scene self-adaptation Yes User/Host Storage FTP; SFTP; Micro SD Card (support max. 256 G); NAS Video Frame Rate Main stream (1920 × 1080); 1-30 fps) sub stream (1280 × 720 @ 1-25/30 fps) third stream (1280 × 720 @ 1-25/30 fps) Stream Capability Resolution Tripwire, intrusion (Recognition of vehicle and people) Cyber Security Cyber Security Encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 card (support and importing of X.509 card (support devenerable) and interportability ONVIF(Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec Video Compression Ves User/Host Storage FTP; SFTP; Micro SD Card (support max. 256 G); NAS FTP; SFTP; Micro SD Card (support max. 256 G); NAS FIE: IES; IE9; IE11 Chrome Firefox Stream Capability Stream Capability 3 streams Management Software Mobile Phone IOS; Android	Professiona	l, Intellige	ent						Video encryption: firmware encryption: configuration
Work together with Smart NVR to perform refine intelligent Search work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Interoperability ONVIF(Profile S/Profile G/Profile T);CGI;P2P;Milestone; Genetec	Perimeter Prote	ection	Tripwire, intrusion (Recognition of vehicle and people)				Cyber Security	encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted	
Video Interoperability Genetec Video Compression H.265; H.264; H.264H; H.264B; MJPEG(only supported by the sub stream) Scene self-adaptation Yes Smart Codec Smart H.265+/ Smart H.264+ User/Host 20 (Total bandwidth: 64M.) Video Frame Rate Main stream (1920 × 1080 @ 1–25/30 fps) sub stream (704 × 576 @ 1–25/704 × 480 @ 1-30 fps) third stream (1280 × 720 @ 1–25/30 fps) Browser IE: IE8; IE9; IE11 Chrome Firefox Stream Capability 3 streams Management Software Smart PSS; DSS; DMSS Resolution 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	Intelligent Sear	ch	intelligent search, event extraction and merging to event						
Video Compression the sub stream) User/Host 20 (Total bandwidth: 64M.) Smart Codec Smart H.265+/ Smart H.264+ Storage FTP; SFTP; Micro SD Card (support max. 256 G); NAS Video Frame Rate Main stream (1920 × 1080 @ 1–25/30 fps) sub stream (704 × 576 @ 1–25/704 × 480 @ 1-30 fps) third stream (1280 × 720 @ 1–25/30 fps) Browser IE: IE8; IE9; IE11 Chrome Firefox Stream Capability 3 streams Management Software Smart PSS; DSS; DMSS Resolution 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	Video						Interoperability		
Smart Codec Smart H.265+/ Smart H.264+ Storage FTP; SFTP; Micro SD Card (support max. 256 G); NAS Video Frame Rate Main stream (1920 × 1080 @ 1–25/30 fps) sub stream (704 × 576 @ 1–25/704 × 480 @ 1-30 fps) third stream (1280 × 720 @ 1–25/30 fps) Browser IE: IE8; IE9; IE11 Chrome Firefox Stream Capability 3 streams Management Software Smart PSS; DSS; DMSS Resolution 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	Video Compression						Scene self-adaptation	Yes	
Video Frame Rate Main stream (1920 × 1080 @ 1–25/30 fps) sub stream (704 × 576 @ 1–25/704 × 480 @ 1-30 fps) third stream (1280 × 720 @ 1–25/30 fps) Browser IE: IE8; IE9; IE11 Chrome Firefox Stream Capability 3 streams Management Software Smart PSS; DSS; DMSS Resolution 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	Smart Codec						User/Host	20 (Total bandwidth: 64M.)	
Video Frame Rate sub stream (704 × 576 @ 1–25/704 × 480 @ 1-30 fps) third stream (1280 × 720 @ 1–25/30 fps) Browser IE: IE8; IE9; IE11 Chrome Firefox Stream Capability 3 streams Management Software Smart PSS; DSS; DMSS Resolution 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	S. idi t codec						Storage	FTP; SFTP; Micro SD Card (support max. 256 G); NAS	
Management Software Smart PSS; DSS; DMSS 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	Video Frame Rate		sub stream (704 × 576 @ 1–25/704 × 480 @ 1-30 fps)				Browser	Chrome	
Resolution 720); D1 (704 × 576/704 × 480); VGA (640 × 480); Mobile Phone IOS; Android	Stream Capability		3 streams				Management Software	Smart PSS; DSS; DMSS	
	Resolution	Resolution		720); D1 (704 × 576/704 × 480); VGA (640 × 480);				Mobile Phone	IOS; Android

Certification

Wiz Sense | DH-IPC-HFW3249E-AS-LED

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC

Power

Power Supply	12V DC/PoE
Power Consumption	< 8.1W

Environment

Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than≤95%		
Storage Conditions	-40°C to +60°C (-40°F to +140°F)		
Protection Grade	IP67		

Structure

Casing	Metal	
Dimensions	192.7 mm × 70.5 mm × 66.4 mm (7.6"×2.8"×2.6") (L × W × H)	
Net Weight	590 g (1.3 lb)	
Gross Weight	780 g (1.7 lb)	

Ordering Information			
Туре	Part Number	Description	
2MP Camera	DH-IPC-HFW3249EP-AS-LED	2MP Full-color Warm LED Bullet WizSense Network Camera, PAL	
	DH-IPC-HFW3249EN-AS-LED	2MP Full-color Warm LED Bullet WizSense Network Camera, NTSC	
	PFA130-E	Junction Box	
	PFA152-E	Pole Mount	
Ai	PFM321D	DC12V1A Power Adapter	
Accessories (optional)	LR1002-1ET/1EC	Single-port Long Reach Ethernet Over Coax Extender	
	PFM900-E	Integrated Mount Tester	
	PFM114	TLC SD Card	

Accessories

Optional:







PFA130-E Junction Box

PFA152-E Pole Mount

PFM321D DC12V1A Power

Adapter





PFM114 TLC SD card

LR1002-1ET/1EC Single-port long reach ethernet over coax extender

PFM90	0-E
ntegrated	Moun
teste	er
teste	r

Pole Mount	Junction Mount
PFA130-E+PFA152-E	PFA130-E
	033)

Dimensions (mm[inch])





