

DH-IPC-HFW3849T1-ZAS-PV

8MP Smart Dual Light Active Deterrence Vari-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 3 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

Siren And Light Active Deterrence

Dahua siren and light active deterrence network camera supports the light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing.

Smart Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the warm light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the warm light is off and the IR illuminator is on, which reduces light pollution efficiently.

SMD 4.0

Dahua Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

- 8-MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 8 MP (3840 × 2160) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light and IR LED; the max. IR illumination distance is 50 m and warm light distance is 40 m.
- ROI, SMART H.264+/H.265+, AI 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 function support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card; built-in dual Mic; built-in speaker; support two-way talk.
- 12 VDC/PoE power supply.
- IP67 protection.
- · Sound and light alarm (red and blue lights).
- SMD 4.0.
- · One-tap arming/disarming through alarm input.













One-tap Disarming

Dahua One-tap Disarming function, which is convenient and easy for operation, is the switch for event linkage. Customers can close and recover event linkage through mobile App, which meets multi-scenarios needs.

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 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.

Max	Technical Specification						Smart Codec	Smart H.265+; Smart H.264+
Max. Resolution					Al Coding	AI H.265; AI H.264		
Max	Image Sensor		1/2.8" CMOS					Main stream: 3840 × 2160@ (1–30 fps) Sub stream: 704 × 576@ (1–25 fps)/704 × 480@ (1–30
## Note	Max. Resolution		3840 (H) × 2160 (V)				Video Frame Rate	fps)
RAM	ROM		128 MB					*The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected
Second	RAM		1 GB				6. 6. 199	
	Scanning Sys	stem	Progressive				Stream Capability	
Min.	Electronic Sh	nutter Speed	Auto/Manual 1/3 s-1/100,000 s					1728/2592 × 1944); 4M (2688 × 1520); 3M (2048 ×
Illumination Distance	Min. Illumination		0.0004 lux@	F1.0 (B/W, 30 II			Resolution	1536/2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Illumination Distance	S/N Ratio		>56 dB				Bit Rate Control	CBR/VBR
BBC Yes Second Picture Proceedings Processional, intelligent Processional, power of the image to suit the conditions. Processional Processional, power of the image to suit the conditions. Processional Processional, power placetical power processional	Illumination	Distance		, , ,	n light)		Video Bit Rate	·
Huc	Illuminator On/Off Control		Auto/Manua				Day/Night	Auto (ICR)/Color/B/W
Angle Adjustment Pan: 0"-360" Til: 0"-30" Til: 0"-30" Rotation: 0"-360" Til: 0"-30" WDR 120 dB	Illuminator Number						BLC	Yes
Lens Type	Angle Adjustment		Pan: 0°–360° Tilt: 0°–90°				HLC	Yes
Lens Type Motorized vari-focal White Balance Auto; natural; street lamp; outdoor; manual; region custom Auto; manual Mount Type \$\phi16 \$\phi							WDR	120 dB
Mount Type	Lens						Scene Self-adaptation	Yes
Max. Aperture F1.0 Motion Detection OFF/ON (4 areas)	Lens Type		Motorized va	ri-focal			White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Max. Aperture F1.0 Motion Detection OFF/ON (4 areas) Field of View Horizontal: 108"-34" Vertical: 56"-19" Diagonal: 130"-39" Image Stabilization Electronic Image Stabilization (EIS) Iris Type Fixed Smart Illumination Yes Close Focus Distance 1.5 m (4.92 ft) Defog Yes Lens Detect Observe Recognize Identify Defog Yes DORI Distance 7 257.4 m 103.0 m (294.95 ft) (118.11 ft) (59.06 ft) (29.53 ft) (108.91 ft) (29.53 ft) (108.91 ft) (108.95 ft) (10	Mount Type		ф16				Gain Control	Auto; manual
Field of View Vertical: 568"—34" Vertical: 566"—19" Diagonal: 130"—39" Image Stabilization Electronic Image Stabilization (EIS) Iris Type Fixed Smart Illumination Yes Close Focus Distance 1.5 m (4.92 ft) Defog Yes Lens Detect Observe Recognize Identify DORI Distance 7 (294.95 ft) (118.11 ft) (59.06 ft) (29.53 ft) T 257.4 m 103.0 m (337.93 ft) (168.96 ft) (84.32 ft) Professional, intelligent IVS (Perimeter Protection) Tripwire; intrusion (support the classification and accurate detection of vehicle and human) SMD 4.0 Less false alarm, longer detection distance Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Video Compression H.265; H.264H; H.264B; MJPEG (only supported) Wideo Compression H.265; H.264H; H.264B; MJPEG (only supported) Region of Interest (RoI) Yes (4 areas) Image Stabilization Electronic Image Stabilization (EIS) Smart Illumination Yes Defog Yes Image Rotation 0"/90"/180"/270" (Support 90"/270" with 2688 × 1 resolution and lower) Mirror Yes Audio Mirror Yes Audio Built-in Mic Yes, built-in dual Mic Yes, built-in speaker Yes, built-in speaker Audio Compression Audio Compression PCM; G.711a; G.711Mu; G.726 of Test	Focal Length	ı	2.7 mm-13.5	mm			Noise Reduction	3D NR
Field of View Vertical: 56"-19" Diagonal: 130"-39" Image Stabilization Electronic Image Stabilization (EIS) Iris Type Fixed Smart Illumination Ves Close Focus Distance 1.5 m (4.92 ft) Defog Yes Lens Detect Observe Recognize Identify Defog Yes Lens Detect Observe Recognize Identify (29.53 ft) (118.11 ft) (59.06 ft) (29.53 ft) (29.53 ft) (4.84.49 ft) (337.93 ft) (118.11 ft) (59.06 ft) (29.53 ft) (4.84.49 ft) (337.93 ft) (168.96 ft) (84.32 ft) Privacy Masking 4 areas Professional, intelligent IVS (Perimeter Protection) Tripwire; intrusion (support the classification and accurate detection of vehicle and human) SMD 4.0 Less false alarm, longer detection distance Built-in Mic Yes, built-in speaker Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Audio Compression Algient Search, event extraction and merging to event videos Als SA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Network Network Network Network	Max. Aperture		F1.0				Motion Detection	OFF/ON (4 areas)
Iris Type Fixed Close Focus Distance Lens Detect Defect Defect Defect Defect Defect Defect Defect Defect Defect Def	Field of View	V					Region of Interest (RoI)	Yes (4 areas)
Close Focus Distance Lens Detect Dobserve Recognize Lens Defeg Ves Lens Defeg Ves Image Rotation O',90°,180°,720° (Support 90°,720° with 2688 × 1 resolution and lower) Mirror Ves Professional, intelligent IVS (Perimeter Protection) Tripwire; intrusion (support the classification and accurate detection of vehicle and human) SMD 4.0 Less false alarm, longer detection distance With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Al SSA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Mideo Compression Network Network Network			Diagonal: 130°–39°				Image Stabilization	Electronic Image Stabilization (EIS)
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DORI Distance W 89.9 m (294.95 ft) (118.11 ft) (59.06 ft) (29.53 ft) T 257.4 m (844.49 ft) (337.93 ft) (168.96 ft) (84.32 ft) Professional, intelligent IVS (Perimeter Protection) Tripwire; intrusion (support the classification and accurate detection of vehicle and human) SMD 4.0 Less false alarm, longer detection distance Quick Pick With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Al SSA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Wideo Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported) Image Rotation Professional (Py60/1807/270 (Support 907/270 with 2688 x 1 resolution and lower) Mirror Yes Audio Mirror Yes, built-in dual Mic Yes, built-in speaker Yes, built-in speaker Audio Compression Audio Compression PCM; G.711a; G.711Mu; G.726 (G.723) Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; wideo tampering; tripwire; intrusion; see changing; audio detection; voltage detection; defo detection; voltage detection; voltage detection; defo detection; voltage detection; voltage detection; voltage detection; defo detection; voltage detection; volt	Close Focus	Distance	1.5 m (4.92 f	t)			Defog	Yes
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IVS (Perimeter Protection) Tripwire; intrusion (support the classification and accurate detection of vehicle and human) SMD 4.0 Less false alarm, longer detection distance Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Alarm Alarm Event Wideo Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported) Built-in Mic Yes, built-in speaker Yes, built-in speaker Audio Compression PCM; G.711a; G.711Mu; G.726 G.723 Alarm Audio Compression Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; sce changing; audio detection; voltage detection; defo detection; external alarm; SMD; security exception		Т					Privacy Masking	4 areas
SMD 4.0 Less false alarm, longer detection distance Quick Pick With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Al SSA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Video Video Wideo Compression Built-in Mic Fes, built-in speaker Yes, built-in speaker Yes, built-in speaker Yes, built-in speaker Audio Compression Audio Compression PCM; G.711a; G.711Mu; G.726 G.723 Alarm Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; soc changing; audio detection; voltage detection; defo detection; external alarm; SMD; security exception Video Compression Network	Professio	nal, intellige	ent				Audio	
Quick Pick With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Al SSA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Alarm Event Audio Compression PCM; G.711a; G.711Mu; G.726 G.723 Alarm Alarm Alarm Alarm Event Alarm Event Alarm Event Alarm Event No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scenaring; audio detection; voltage detection; defo detection; external alarm; SMD; security exception Video Compression Network	IVS (Perimeter Protection)					on and	Built-in Mic	Yes, built-in dual Mic
Quick Pick With All NVP, quickly pick up the humany venicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scenaring; audio detection; voltage detection; deformation detection; external alarm; SMD; security exception Video Wideo Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported) Network	SMD 4.0		Less false ala	rm, longer dete	ection distance		Built-in speaker	Yes, built-in speaker
Smart Search intelligent search, event extraction and merging to event videos Al SSA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Alarm Event Alarm	Quick Pick						Audio Compression	Audio Compression PCM; G.711a; G.711Mu; G.726; G.723
videos Al SSA Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions. Alarm Event			Work together with Smart NVR to perform refine				Alarm	
Video Video Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported Network			videos Adopt deep l	earning algoritl	nms to adjust t		Alarm Event	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; defocus
Video Compression	Video						Maharada	uetection; external alarm; SMD; security exception
Network RJ-45 (10/100 Base-T)	Video Compression		H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)					DI 45 /40/400 D

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SDK and API	Yes	
Cyber Security	Video encryption; firmware encryption; configuration encryption; 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	
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP	
Interoperability	ONVIF (Profile S; Profile G; Profile T); CGI	
User/Host	20 (Total bandwidth: 72 M)	
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS	
Browser	IE: IE8/9/11 Chrome Firefox	
Management Software	SmartPSS Lite; DSS; DMSS	
Mobile Phone	iOS; Android	
Certification		
Certification	CE-LVD: EN 62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B; UL/CUL:UL62368-1 & CAN/CSA C22.2 No. 62368-1-14	
Port		
Audio Input	1 channel (RCA port)	
Audio Output	1 channel (RCA port)	
Alarm Input	1 channel in: wet contact, 5 mA 3 V–5 VDC	
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC	
Power		
Power Supply	12V DC/PoE (802.3af)	
Power Consumption	Basic: 4.3 W (12 VDC); 5.5 W (PoE) Max. (H.265+main stream/IR intensity+warm light on): 7.9 W (12 VDC); 9.8 W (PoE)	
Environment		
Operating Conditions	-30 °C to +60 °C (-22 °F to +140 °F)/Less than 95% RH	
Storage Conditions	-40 °C to +60 °C (-40 °F to +140 °F)	
Protection Grade	IP67	
Structure		
Casing	Metal + plastic	
Dimensions	288.4 mm × 94.4 mm × 84.7 mm (11.35" × 3.72" × 3.33") (L × W × H)	
Net Weight	1.05 kg (2.31 lb)	
Gross Weight	1.35 kg (2.98 lb)	

Ordering Information							
Туре	Model	Description					
8MP Camera	DH-IPC-HFW3849T1-ZAS-PV	8MP Smart Dual Light Active Deterrence Vari-focal Bullet WizSense Network Camera					
	IPC-HFW3849T1-ZAS-PV	8MP Smart Dual Light Active Deterrence Vari-focal Bullet WizSense Network Camera					
	PFA135	Junction Box					
	PFA130-E	Junction Box					
Accessories	PFA152-E	Pole Mount Backet					
(Optional)	PFM321D	12 VDC 1A Power Adapter					
	PFM900-E	Integrated Mount Tester					
	TF-P100	TLC SD Card					

Accessories

Optional:







PFA135 Junction Box

PFA130-E Junction Box

PFA152-E Pole Mount Bracket



PFM321D 12 VDC 1A Power Adapter



PFM900-E Integrated Mount Tester



TF-P100 TLC SD Card

Ceiling Mount	Wall Mount	Pole Mount(Vertical)
	9	

Dimensions (mm[inch])





