

# DH-IPC-HFW3549T1-ZAS-PV

5MP Smart Dual Light Active Deterrence Vari-focal Bullet WizSense Network Camera



#### Wiz Sense

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**

Dahua WizSense 3 Series Network Camera greatly saves on bandwidth and storage space through its AI Coding technology. Driven by its advanced deep learning algorithms, the camera supports intelligent functions such as perimeter protection, smart motion detection (SMD), AcuPick, and AI SSA (AI Scene Self-adaptation), making it easy and convenient to use. Starlight technology and its large aperture lens also allow the camera to produce clear, vivid images even in poor lighting conditions.

#### 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.

#### 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.

#### 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 white 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 white light is off and the IR illuminator is on, which reduces light pollution efficiently.

#### **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.

## \*The parameters and datasheets below can only be applied to 3549-PV-S5 series.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2960×1668) @20 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 functions support the classification and accurate detection of vehicle and human), stay detection, loitering detection; face detection (full image).
- 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. 512 G Micro SD card; built-in dual Mic; 1-ch speaker; support two-way talk.
- 12 VDC/PoE power supply.
- IP67 protection.
- · Sound and light alarm (red and blue lights).
- SMD 4.0.
- · Supports AI SSA and one-tap arming and disarming.
- SMD area can be set in warm light areas that support triggering alarms.



#### 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.

#### **Technical Specification**

Camera					
Image Sensor		1/2.7" CMOS			
Max. Resolution		2960 (H) × 1668 (V)			
ROM		256 MB			
RAM		1 GB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s			
Min. Illumination		0.003 lux@F1.0 (Color, 30 IRE) 0.0003 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on)			
S/N Ratio		>56 dB			
Illumination Distance		Up to 50 m (164.64 ft) (IR) Up to 40 m (131.23 ft) (Warm light)			
Illuminator On/Off Control		Auto;Manual			
Illuminator Number		2 (IR LED) 2 (warm light)			
Angle Adjustment		Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°			
Lens					
Lens Type		Motorized vari-focal			
Lens Mount		φ16			
Focal Length		2.7 mm–13.5 mm			
Max. Aperture		F1.0			
Field of View		H: 113°-36° V: 57°-20° D: 137°-40°			
Iris Control		Fixed			
Close Focus [	Distance	1.5 m (4.92 ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	65.2 m (213.91 ft)	26.1 m (85.63 ft)	13.0 m (42.65 ft)	6.5 m (21.33 ft)
	т	186.6 m (612.20 ft)	74.6 m (244.75 ft)	37.3 m (122.38 ft)	18.7 m (61.35 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), stay detection, loitering detection		
Face Detection (Full Image)	Face detection; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting.		
SMD	SMD 4.0		
AcuPick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets.		
AI SSA	Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.		

Smart Search	Work together with Smart NVR to perform refine				
Sinart Search	intelligent search, event extraction and merging to event videos				
Video					
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by sub stream)				
AI Coding	Al H.265; Al H.264 *Includes smart codec technology, Smart H.265+ and Smart H.264+				
Video Frame Rate	Main stream: 2880 × 1620/2960 × 1668@(1–20 fps)/2688 × 1520 @(1–30 fps) Sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps) Third stream: 1920 × 1080@(1–25/30 fps) *The values above are the max. frame rates of each stream; for multple streams, the values will be subjected to the total encoding capacity				
Stream Capability	3 streams				
Resolution	5M (2880 × 1620/2960 × 1668); 4M (2688 × 1520/2560 × 1440); 3M 2304 ×1296/2048 × 1536); 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/ABR				
Video Bit Rate	H.264:3 kbps–16384 kbps H.265:3 kbps–16384 kbps				
Day/Night	Auto(ICR)/Color/B/W				
BLC	Yes				
HLC	Yes				
WDR	120 dB				
Scene Self-adaptation (SSA)	Yes				
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)				
Image Stabilization	Electronic Image Stabilization (EIS)				
Smart Illumination	Yes				
Defog	Yes				
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 $\times$ 1520 resolution and lower)				
Mirror	Yes				
Privacy Masking	4 areas				
Audio					
Built-in MIC	Yes, built-in dual Mic				
Built-in Speaker	Yes, built-in speaker				
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723				
Alarm					
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; stay detection; loitering detection; face detection (full image); scene changing; audio detection; voltage detection; defocus detection; external alarm; SMD; security exception				

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#### Network

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; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP; P2P			
Interoperability	ONVIF (Profile S; Profile G; Profile T); CGI			
User/Host	20 (Total bandwidth: 64 M)			
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS			
Browser	IE: IE 9/11 Chrome Firefox			
Management Software	SmartPSS Lite; DSS; DMSS			
Mobile Client	iOS;Android			
Security	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			
Certification				
Certifications	CE-LVD: EN 62368-1; CE-EMC: Electromagnetc Compatbility Directve 2014/30/EU			
Port				
Audio Input	1 channel (RCA port)			
Audio Output	1 channel (RCA port)			
Alarm Input	1 channel in: wet contact, 5 mA 3–5 VDC			
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC			
Power				
Power Supply	12 VDC/PoE (802.3af)			
Power Consumption	Basic: 2.8 W (12 VDC); 3.6 W (PoE) Max. (H.265+WDR+ warm light+siren and light active deterrence + intelligence on): 7.9 W (12 VDC); 9.2 W (PoE)			
Environment				
Operating Temperature	-30 °C to +60 °C (-22 °F to +140 °F)			
Operating Humidity	≤95% (RH), non-condensing			
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)			
Storage Humidity	≤95% (RH), non-condensing			
Protection	IP67			
Structure				
Casing Material	Metal+plastic			
Product Dimensions	288.4 mm $\times$ 94.4 mm $\times$ 84.7 mm (11.35" $\times$ 3.72" $\times$ 3.33") (L $\times$ W $\times$ H)			
Net Weight	1.05 kg (2.31 lb)			
Gross Weight	1.35 kg (2.98 lb)			

Ordering Information				
Туре	Model	Description		
5MP Camera	DH-IPC-HFW3549T1-ZAS-PV	5MP Smart Dual Light Active Deterrence Vari-focal Bullet WizSense Network Camera		
	PFA135	Junction Box		
	PFA130-E	Junction Box		
Accessories	PFA152-E	Pole Mount Bracket		
(Optional)	PFM321D	12 VDC 1A Power Adapter		
	PFM900-E	Integrated Mount Tester		
	TF-P100	MicroSD Memory Card		

#### Accessories

#### Optional:







PFA135 Junction Box

PFA130-E Junction Box

PFA152-E Pole Mount Bracket

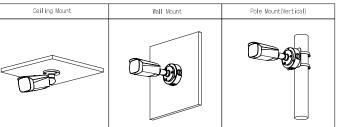




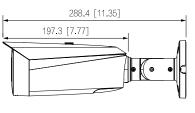


PFM321D 12 VDC 1A Power Adapter

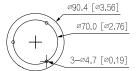
PFM900-E Integrated Mount Tester TF-P100 Integrated Mount Tester



#### Dimensions (mm[inch])







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