DH-IPC-HFW3549T1-AS-PV

5MP Smart Dual Illumination Active Deterrence 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 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 Illuminators

Dahua Smart Dual Illuminators 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.

* The parameters and datasheets below can only be applied to 3549-PV-S4 series.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2960 × 1668) @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 IR LED; the max. IR illumination distance is 30 m and warm light distance is 30 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; buit-in dual MICs; 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.
- One-click 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 work normally after soaking in 1 m deep water for 30 minutes.
Wide voltage: The camera allows ±30% 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	128 MB
RAM	512 MB
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	30 m (98.43 ft) (IR) 30 m (98.43 ft) (warm light)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED) 2 (warm light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm; 3.6 mm
Field of View	2.8 mm: H: 97°; V: 70°; D: 128° 3.6 mm: H: 78°; V: 58°; D: 102°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 1.5 m (4.92 ft) 3.6 mm: 2.2 m (7.22 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	66.0 m (216.54 ft)	26.4 m (86.61 ft)	13.2 m (43.31 ft)	6.6 m (21.65 ft)
	3.6 mm	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft	7.8 m (25.59 ft)

Intelligence

IVS (Perimeter Protection)	Tripwire; intrusion (support the classification and accurate detection of vehicle and human)
SMD 4.0	Less false alarm, longer detection distance
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.
Quick Pick	With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events
AI SSA	Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.

Video

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+
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 2880 × 1620/2960 × 1668 @(1 fps–20 fps)/2688 × 1520 @(1 fps–30 fps) Sub stream: 704 × 576@(1 fps–25 fps)/704 × 480@(1 fps–30 fps) Third stream: 1920 × 1080@(1 fps–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.
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
Video Bit Rate	H.264: 3 kbps–20480 kbps H.265: 3 kbps–20480 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation	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)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	8 areas

Audio

Built-in MIC	Yes
Audio Compression	PCM; G.711a; G.711Mu; 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; scene changing; audio detection; voltage detection; external alarm; SMD; security exception

Network

Network	RJ-45 (10/100 Base-T)
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; SAMBA; PPPoE; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; P2P; RTMP
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	Smart PSS; 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: 5mA 3V–5 VDC
Alarm Output	1 channel out: 300mA 12 VDC

Power

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 3.3 W (12 VDC); 4.4 W (PoE) Max. (pulling stream+warning light+speaker+warm light on): 6.8 W (12 VDC); 8.2 W (PoE)

Environment

Operating Conditions	–40 °C to +60 °C (–40 °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	1.0 kg (2.20 lb)
Gross Weight	1.23 kg (2.71 lb)

Ordering Information

Type	Model	Description
5MP Camera	DH-IPC-HFW3549T1-AS-PV	5MP Smart Dual Illumination Active Deterrence Fixed-focal Bullet WizSense Network Camera
	IPC-HFW3549T1-AS-PV	5MP Smart Dual Illumination Active Deterrence Fixed-focal Bullet WizSense Network Camera
Accessories (Optional)	PFA135	Junction Box
	PFA130-E	Water-proof Junction Box
	PFA152-E	Pole Mount Backet
	PFM321D	12 VDC 1A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:



PFA135
Junction Box



PFA130-E
Water-proof Junction Box



PFA152-E
Pole Mount Bracket



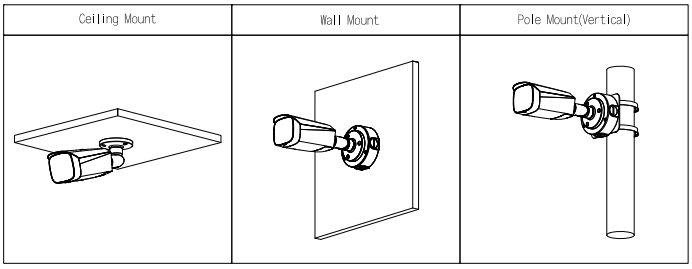
PFM321D
12 VDC 1A Power Adapter



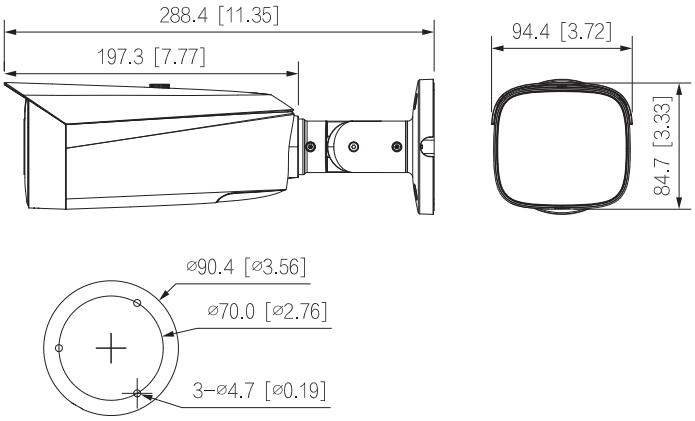
PFM900-E
Integrated Mount Tester



TF-P100
MicroSD Memory Card



Dimensions (mm[inch])



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