DH-IPC-HFW3549E-AS-LED

5MP Full-color Fixed-focal Warm LED Bullet WizSense Network Camera

WizSense

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 some 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 ultra-low 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.

· 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
· Outputs max. 5MP (2592 × 1944) @20 fps, and supports 4MP (2688 × 1520) @25/30 fps
· H.265 codec, high compression rate, low bit rate
· Built-in warm light, max. illumination 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, 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) 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 ±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"5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (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
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.4 ft) (Warm light)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (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
Max. Aperture	F1.0
Field of View	2.8 mm: Horizontal 98° × Vertical 71° × Diagonal 129° 3.6 mm: Horizontal 77° × Vertical 56° × Diagonal 101°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 1.2 m (3.9 ft) 3.6 mm: 2.4 m (7.9 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	56.0 m (183.7 ft)	22.4 m (73.5 ft)	11.2 m (36.7 ft)	5.6 m (18.4 ft)
	3.6 mm	80.0 m (262.5 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)	8.0 m (26.3 ft)

Professional, Intelligent

IVS (Perimeter Protection)	Tripwire; intrusion (support the classification and accurate detection of vehicle and human)
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

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+
Video Frame Rate	Main stream: 2592 × 1944 @1–20 fps 2688 × 1520 @1–25/30 fps Sub stream: 704 × 576 @1–25 fps/704 × 480 @1–30 fps Third stream: 1280 × 720@1–25/30 fps
Stream Capability	3 streams
Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3M (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)
Bit Rate Control	CBR/VBR

Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	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 DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G726

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

Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
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
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
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI;P2P;Milestone; Genetec
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE8, IE9, IE11 Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

Certification

| Certification | CE-LVD: EN62368-1
CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
FCC: 47 CFR FCC Part 15, Subpart B
UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07 |

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	< 8.4W

Environment

Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than 95%
Strorage Conditions	-40°C to +60°C (-40°F to +140°F)
Ingress Protection	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

Type	Part Number	Description
5MP Camera	DH-IPC-HFW3549EP-AS-LED	5MP Full-color Fixed-focal Warm LED Bullet WizSense Network Camera, PAL
	DH-IPC-HFW3549EN-AS-LED	5MP Full-color Fixed-focal Warm LED Bullet WizSense Network Camera, NTSC
Accessories (optional)	PFA130-E	Junction Box
	PFA152-E	Pole Mount
	PFM321D	12V DC 1A Power Adapter
	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

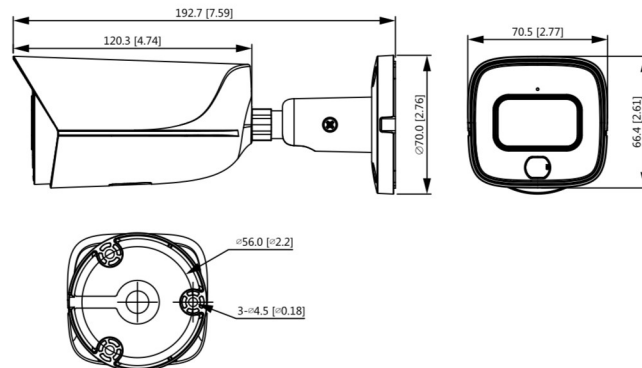LR1002-1ET/1EC
Single-port Long Reach Ethernet over Coax Extender

PFM900-E
Integrated Mount Tester

PFM114
TLC SD Card

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

Dimensions (mm[inch])