



dahua DH-IPC-HFW2541E-S 5MP IR Fixed focal Bullet WizSense Network Camera User Manual

[Home](#) » [Dahua](#) » dahua DH-IPC-HFW2541E-S 5MP IR Fixed focal Bullet WizSense Network Camera User Manual

dahua DH-IPC-HFW2541E-S 5MP IR Fixed focal Bullet WizSense Network Camera User Manual



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.

Contents [[hide](#)]

- [1 System Overview](#)
- [2 Functions](#)
- [3 Technical Specification](#)
- [4 Ordering Information](#)
- [5 Accessories](#)
- [6 Dimensions \(mm\[inch\]\)](#)
- [7 Documents / Resources](#)
- [8 Related Posts](#)

System Overview

With advanced deep learning algorithm, Dahua WizSense 2 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

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.

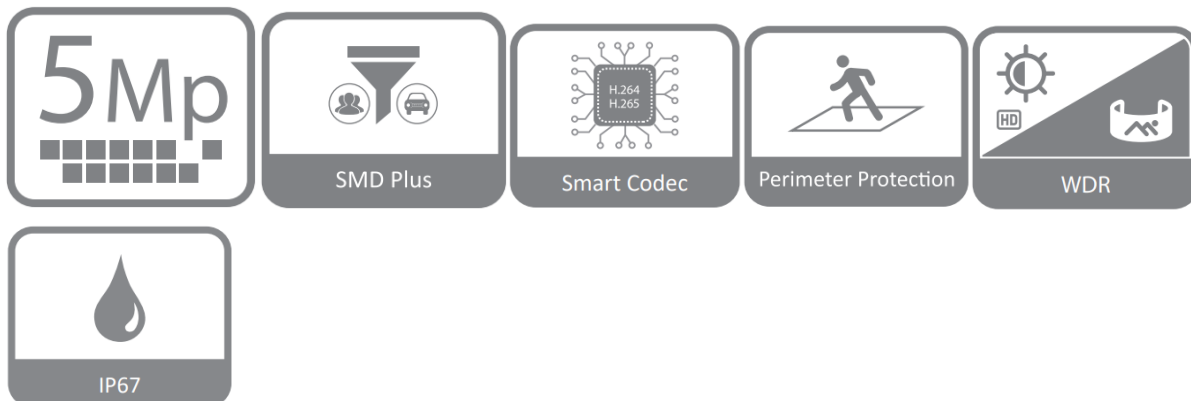
Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy

WDR

With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2592 × 1944) @20 fps, and supports 4 MP (2688 × 1520) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 30 m.
- ROI, SMART 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 and tripwire(the two functions 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, and voltage detection.
- Supports max. 256 G Micro SD card; built in 1-channel MIC.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- SMD Plus.



Technical Specification

Camera

Image Sensor	1/2.7" 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	0.005 lux@F1.6(Color,30 IRE) 0.0005 lLux@F1.6(B/W,30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	30 m (98.43 ft) (IR LED)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	1(IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type		Fixed-focal			
Lens Mount		M12			
Focal LengthMax. Aperture		2.8 mm; 3.6 mmF1.6			
Field of View		2.8 mm: H: 97°; V: 71° ; D: 129° 3.6 mm: H: 80°; V: 57° ; D: 107°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 1.1 m (3.61 ft) 3.6 mm: 1.7 m (5.58 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	63.6 m (208.66 f t)	25.4 m (83.33 ft)	12.7 m (41.67 ft)	6.4 m (21.00 ft)
	3.6 mm	85.4 m (280.18 f t)	34.2 m (112.20 f t)	17.1 m (56.10 ft)	8.5 m (27.89 ft)

Intelligence

IVS (Perimeter Protection)	Tripwire; intrusion(the two functions support the classification and accurate detection of vehicle and human)
Smart 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)
Stream Capability	2 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	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 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; PCM; G.726

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; SMD; security exception
-------------	--

Network

Network Port	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
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTP; 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; P2P; Milestone; Genetec
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE Chrome Firefox

Management Software	Smart PSS; DSS; DMSS
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
----------------	---

Power

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 3.2 W (12 VDC); 3.8 W (PoE) Max(WDR + IR in tensity + Intelligence): 5.5 W (12 VDC); 6.2 W (PoE)

Environment

Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Protection	IP67

Structure

Casing	Metal
Product Dimensions	192.7 mm × 70.5 mm × 66.4 mm (7.59" × 2.78" × 2.61") (L × W × H)
Net Weight	590 g (1.30 lb)
Gross Weight	780 g (1.72 lb)

Ordering Information

Type	Model	Description
5MP Camera	DH-IPC-HFW2541E-S-0280B	5MP IR Fixed-focal Bullet WizSense Network Camera
	DH-IPC-HFW2541E-S-0360B	5MP IR Fixed-focal Bullet WizSense Network Camera
Accessories (Optional)	PFA130-E	Junction Box
	PFA152-E	Pole Mount
	PFM321D	12 VDC 1 A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional

- PFA130-E Junction Box



- PFA152-E Pole Mount



- PFM321D 12V DC 1A Power Adapter

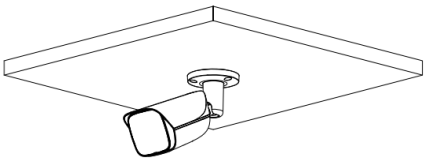
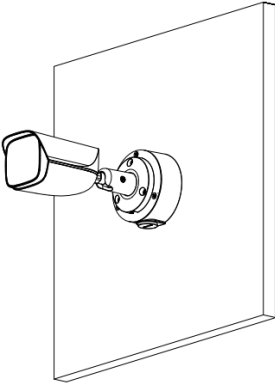
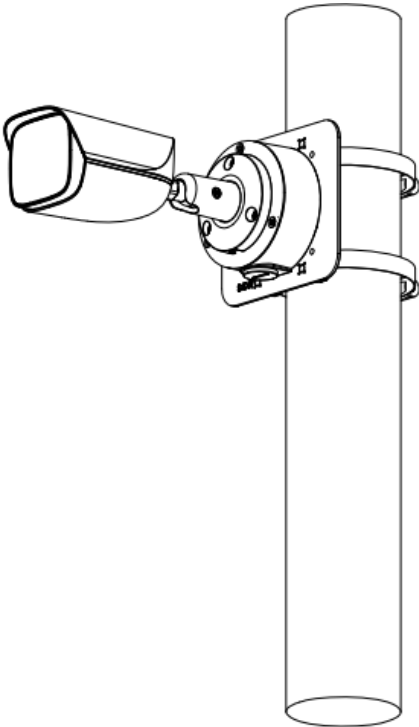


- PFM900-E Integrated Mount Tester

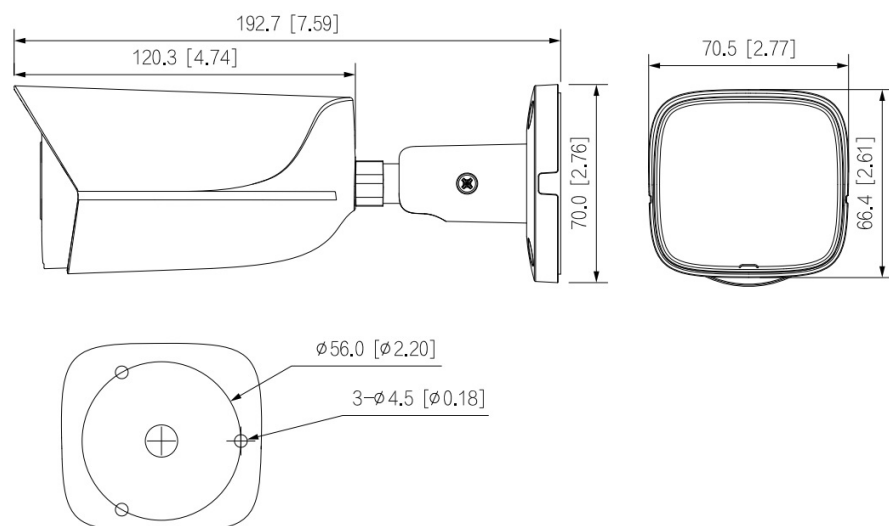


- TF-P100 MicroSD Memory Card



Ceiling Mount	Junction Mount	Pole Mount(Vertical
 <p>A line drawing showing a Dahua camera mounted to a square ceiling plate using a bracket.</p>	 <p>A line drawing showing a Dahua camera mounted to a rectangular wall plate using a bracket.</p>	 <p>A line drawing showing a Dahua camera mounted to a vertical pole using a bracket with two straps.</p>

Dimensions (mm[inch])



Rev 002.000 © 2022 Dahua. All rights reserved. Design and specifications are subject to change without notice. The images, specifications and information mentioned in the document are only for reference, and might differ from the actual product.

www.dahuasecurity.com



Documents / Resources

	<p>dahua DH-IPC-HFW2541E-S 5MP IR Fixed focal Bullet WizSense Network Camera [pdf] User Manual</p> <p>DH-IPC-HFW2541E-S 5MP IR Fixed focal Bullet WizSense Network Camera, DH-IPC-HFW2541E-S, 5MP IR Fixed focal Bullet WizSense Network Camera, Bullet WizSense Network Camera, WizSense Network Camera</p>
--	--