

DH-IPC-HDW2841T-S

8MP IR Fixed-focal Eyeball 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

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

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.

- 8-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 8 MP (3840 × 2160) @20 fps, and supports 2688 × 1520 (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, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, 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 MIC.
- 12 VDC/PoE power supply.
- IP67 protection.
- SMD Plus.



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.

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 $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

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<table-container>Network with the second of th</table-container>	Technical Specification							Stream Capability	2 streams
Image	Camera								3072 ×1728 (3072 × 1728); 2880 × 1620 (2880 × 1620); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA
Note of the second sec	Image Sensor		1/2.7" CMOS					Resolution	
<table-container>NetworkStateStateStateStateStateSameStateStateStateStateStateStateSameStateStateStateStateStateStateSameStateStateStateStateStateStateSameStateStateStateStateStateSameStateStateStateStateStateSameState</table-container>	Max. Resolution		3840 (H) × 2160 (V)					Resolution	
<table-container>NoteNotifies the second of the s</table-container>	ROM		128 MB					Rit Rate Control	
Note: The second of the secon	RAM		256 MB						
letter in the second of the	Scanning System		Progressive					Video Bit Rate	
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numberSolve (Solve	S/N Ratio								
InductionRank ControlRank ControlRest Control <td colspan="2">Illumination Distance</td> <td colspan="4">30 m (98.43 ft) (IR)</td> <td></td> <td>White Balance</td> <td></td>	Illumination Distance		30 m (98.43 ft) (IR)					White Balance	
Pan/Titl/Event Panel Pan/Title/To-78° Title To-78° Title To-78° T	Illuminator (Dn/Off Control	Auto;Manual					Gain Control	Auto; Manual
Part / Title / Vertice / Title / Vertice / Title / Vertice	Illuminator Number		1 (IR LED)					Noise Reduction	3D NR
Region of Interest (Roo)Kea (A areas)Lens YoueKea (A areas)Smart IlluminationYea (A areas)Lens YoueKa 2 - V - V - V - V - V - V - V - V - V -	Pan/Tilt/Rotation Range		Tilt: 0°–78°					Motion Detection	OFF/ON (4 areas, rectangular)
Lens NoKeid forSmart IIIuminationYesLens MoutM12 $(-)^{(0)}(130)(720) (Support 90)(720) with 268.8 x 150)Field rUe2.8 mm; 3.6 mm; 1.9 mm; 1.$			Rotation: 0°–360°					Region of Interest (RoI)	Yes (4 areas)
Image Rotationmage Rotationmage Rotationmage RotationLens Mov $2.8 \text{ mm}; 3.6 \text{ mm}; 4.27 \text{ m}; 3.6 \text{ mm}; 4.27 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ mm}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ m}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ m}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ m}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ m}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ m}; 1.8 \text{ m}; 7.427 \text{ m}; 5.5°; 5.12°; 3.6 \text{ m}; 1.8 \text{ m}; 1.2 \text{ m}; $								Smart Illumination	Yes
Focal Length2.8 mm; 3.6 mm; 1.2 mm; 2.5 mm; 3.5 mm; 2.6 mm; 2.5 mm;								Image Rotation	
Max. Aperture2.0Privacy Masking4 areasField of View $2.8 \text{ mm}: H: 88^\circ; V: 56^\circ; D: 12^\circ areasAudioField of View3.6 \text{ mm}: H: 88^\circ; V: 46^\circ; D: 134^\circAudio CompressionGuill-in MICIris Control6.8 \text{ mm}: H: 88^\circ; V: 46^\circ; D: 134^\circAudio CompressionGuill-in MICClose focus8.8 \text{ mm}: H: 88^\circ; V: 46^\circ; D: 134^\circIdentify3.6 \text{ mm}: H: 88^\circ; V: 46^\circ; D: 134^\circ12.5 \text{ m}Identify3.6 \text{ mm}: 19 \text{ mm}: 19^\circ (28.37 \text{ ft})12.5 \text{ m}8.6 \text{ m}3.6 \text{ mm}: 106.7 \text{ m}22.7 \text{ m}10.7 \text{ m}(28.87 \text{ ft})3.6 \text{ mm}: 106.7 \text{ m}22.7 \text{ m}(21.3 \text{ m})10.7 \text{ m}3.6 \text{ mm}: 106.7 \text{ m}22.7 \text{ m}(21.3 \text{ m})10.7 \text{ m}3.6 \text{ mm}: 106.7 \text{ m}22.7 \text{ m}(21.3 \text{ m})10.7 \text{ m}105.7 \text{ m}: 106.7 $								Mirror	Yes
Field of View $2,8 \text{ mm; H: BF; V: 56°; D: 125°}3.6 mm; H: 8F; V: 46°; D: 144°AudioAudioField of View8,m; H: BF; V: 56°; D: 125°3.6 mm; H: 8F; V: 46°; D: 144°8,000000000000000000000000000000000000$	-							Privacy Masking	4 areas
Field of View3.6 mm :H: 88"; V: 46"; D: 104"Built- in MICYesIris ControlFixed $2.6 mm : 1.5 \ (.2.7 ft) \\ 3.6 mm : 1.5 \ (.2.3 ft) $								Audio	
Lose Focus $2.8 \text{ mm: } 1.5 \text{ m: } 1.5 m:$	Field of View							Built-in MIC	Yes
Close Focus 2.8 mm: 1.3 mi (1.2 mi) 2.8 mm: 1.3 m (4.2 mi) 3.6 mm: 1.5 m (4.2 mi) Adarm DRI Detect Observe Recognize Identify DRI 0.8 mm 3.5.2 mi 17.6 mi 8.8 mi 3.6 mm (28.7 mi) (115.4 mi) (28.8 mi) (25.8 mi) 10.7 mi 3.6 mm (36.0 mi) (140.0 mi) (21.3 mi) (35.0 mi) 10.7 mi (35.0 mi) (36.0 mi) (20.0 mi) (20.0 mi) (20.0 mi) (20.0 mi) Intrusion, tripurite (the two functions support the clossification = monormize tripurite; intrusion; and detection; voltage detecti	Iris Control		Fixed					Audio Compression	G.711a: G.711Mu: PCM: G.726
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3.6 mm (350.07 ft) (140.09 ft) (69.88 ft) (35.10 ft) Network Intelligence Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human) Network Port RJ-45 (10/100 Base-T) INS (Perimeter Protection) Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human) SDK and API Yes Smart Search Work together with Smart NVR to perform refine intelligent search, event extraction and accurate detection of vehicle and human) Network Protocol IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; Multicast; ICMP; IGMP; NFS; PPPoE; Boujour Video Video H_265; H.264; H.264H; H.264B; MJPEG (DI V supported by the sub stream) Network Protocol Interoperability Video Compression H_265; H.264; H.264H; H.264B; MJPEG (DI V supported by the sub stream) Smart H.265+; Smart H.264+ Support V Video Frame Rate Main stream: 3840 × 2160@(1-20 fps)/2688 × 1520@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@		2.8 mm						Alarm Event	disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio
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IVS (Perimeter Protection) classification and accurate detection of vehicle and human) SDK and API Yes Smart Search Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; DNS; DDNS; QOS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Boujour Video Interoperability ONVIF (Profile S/Profile G/Profile C/Profile T); CGI; P2P; Milestone Video Compression H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream) User/Host 20 (Total bandwidth: 48 M) Smart Codec Smart H.265+; Smart H.264+ Storage FTP; SFTP; Micro SD card (support max. 256 GB); NAS Video Frame Rate Main stream: 3840 × 2160@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) sub stream; for multiple streams, the values will be subjected Management Software Smart PS; DS; DMSS Video Frame Rate Main stream; 364 × 2160@(1-25 fps)/704 × 480@(1-30 fps) sub stream; for multiple streams, the values will be subjected Management Software Smart PS; DS; DMSS	Intelligen	ce						Network Port	RJ-45 (10/100 Base-T)
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Video Compression H.265; H.264; H.264B; MJPEG (Only supported by the sub stream) User/Host 20 (Total bandwidth: 48 M) Smart Codec Smart H.265+; Smart H.264+ Storage FP; SFTP; Micro SD card (support max. 256 GB); NAS Main stream: 3840 × 2160@(1-20 fps)/2688 × 1520@ (1-25/30 fps) stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected stream; for multiple streams, the values will be subjected Browser E Chrome Firefox Management Software Smart PSS; DMSS Smart PSS; DMSS	Smart Search		Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event					Network Protocol	SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;
Video Compression by the sub stream) Storage FTP; SFTP; Micro SD card (support max. 256 GB); NAS Smart Codec Smart H.265+; Smart H.264+ Storage FTP; SFTP; Micro SD card (support max. 256 GB); NAS Main stream: 3840 × 2160@(1-20 fps)/2688 × 1520@ (1-25/30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected Browser IE Chrome Firefox Management Software Smart PSS; DSS; DMSS	Video							Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone
Smart Lodec Smart H.265+; Smart H.264+ Main stream: 3840 × 2160@(1-20 fps)/2688 × 1520@ (1-25/30 fps) sub stream: 704 × 576@(1-25 fps)/704 × 480@(1-30 fps) Browser IE Chrome Firefox Video Frame Rate Is Nain stream: 304 × 576@(1-25 fps)/704 × 480@(1-30 fps) Management Software *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected Management Software Smart PSS; DSS; DMSS	Video Compression							User/Host	20 (Total bandwidth: 48 M)
Main stream: 3840 × 2160@(1-20 tps)/2688 × 1520@ (1-25/30 fps) Browser Chrome Firefox Video Frame Rate fps) Management Software Smart PSS; DSS; DMSS *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected Management Software Smart PSS; DMSS	Smart Codec		Smart H.265+; Smart H.264+					Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
*The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected Mobile Client iOS: Android	Video Frame Rate		(1–25/30 fps) sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected					Browser	Chrome
								Management Software	Smart PSS; DSS; DMSS
								Mobile Client	iOS; Android

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Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification				
Certification					
Certifications	CE-LVD: EN62368-1; 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				
Power					
Power Supply	12 VDC/PoE (802.3af)				
Power Consumption	Basic: 2.7 W (12 VDC); 3.4 W (PoE) Max. (H.265+ max. resolution + max. stream+ WDR + IR intensity + IVS): 4.5 W (12 VDC); 5.4 W (PoE)				
Environment					
Operating Temperature	-40 °C to +55 °C (-40 °F to +131 °F)				
Operating Humidity	≤95%				
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)				
Storage Humidity	≤95%				
Protection	IP67				
Structure					
Casing Material	Inner core: Metal Cover: Plastic				
Product Dimensions	100.9 mm × Φ109.9 mm (3.97"× Φ4.33")				
Net Weight	0.37 kg (0.82 lb)				
Gross Weight	0.56 kg (1.23 lb)				

Ordering Information

Туре	Model	Description
8MP Camera	DH-IPC-HDW2841T-S	8MP IR Fixed-focal Eyeball WizSense Network Camera
	PFA13G	Junction Box
	PFB205W-E	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
Accessories	PFA109	Mount Adapter
(Optional)	PFB220C	Ceiling Mount Bracket
	PFM321D	12 VDC 1A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Junction Box

PFA109 Mount Adapter

Optional:



PFB205W-E

Wall Mount Bracket



PFA152-E Pole Mount Bracket

PFM321D

12 VDC 1A Power

Adapter



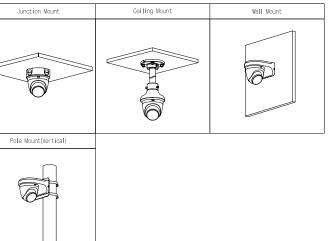
PFB220C Ceiling Mount Bracket



PFM900-E Integrated Mount Tester

TF-P100 MicroSD Memory

oSD Memory Card



Dimensions (mm[inch])

