

DH-SD50432GB-HNR

4MP 32x Starlight WizSense Network PTZ 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.

System Overview

With its powerful optical zoom, and accurate pan and tilt capabilities, the PTZ camera provides an all-in-one solution for large-scale monitoring. It harnesses the latest starlight technology, allowing it to produce highly detailed images even in low light conditions. The camera offers smooth control and high-grade protection that enable it to meet the requirements of video surveillance in small and medium-sized scenes.

Functions

Starlight Technology

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

- 1/2.8" 4Megapixel STARVIS™ CMOS.
- 32x optical zoom.
- Starlight technology.
- Max. 25/30 fps@4MP.
- Auto-tracking.
- Perimeter protection.
- Face detection.
- SMD4.0.
- IP67.
- IK10.



Protection (IP67, TVS 6000 V)

IP67, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, and more, and uses secondary recognition during target detection to improve alarm accuracy.

Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

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.

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Technical Specification

Camera

Camera				
Image Sensor	1/2.8" CMOS			
Pixel	4 MP	4 MP		
Max. Resolution	2560 (H) × 1440 (V)			
ROM	4 GB	4 GB		
RAM	1 GB	1 GB		
Electronic Shutter Speed	1/1 s-1/30,00	1/1 s-1/30,000 s		
Scanning System	Progressive			
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6			
Lens				
Focal Length	4.8 mm-154	mm		
Max. Aperture	F1.6-F4.0	F1.6-F4.0		
Field of View	H: 55.8°-2.3° V: 31.9°-1.3° D: 63.7°-2.7°			
Optical Zoom	32×			
Focus Control	Auto; semi-auto; manual			
Close Focus Distance	0.1 m–1.5 m	0.1 m-1.5 m		
Iris Control	Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	3,080 m (10,104.99 ft)	1216.6 m (3,991.47 ft)	616 m (2,021.00 ft)	308 m (1,010.50 ft)
PTZ				
Pan/Tilt Range		Tilt: 0° to +90°, auto flip 180 Pan: 0° to 360° endless		
Manual Control Speed	Pan: 0.1°/s-3	Pan: 0.1°/s-350°/s; Tilt: 0.1°/s-250°/s		
Preset Speed	Pan: 500°/s; Tilt: 500°/s			
Preset	300			
Tour	8 (up to 32 pr	8 (up to 32 presets per tour)		
Pattern	5	5		
Scan	5			
Power-off Memory	Yes	Yes		
Idle Motion	Pattern; Preset; Scan; Tour			
PTZ Protocol	DH-SD	DH-SD		
Intelligence				
Video Metadata	Detects motor and non-motor vehicles, faces and human bodies. It also performs tracking, takes snapshots, uploads high-quality face images and optimizes images. It extracts attributes from motor vehicles, detecting up to 10 attributes for them.			
IVS (Perimeter Protection)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking			

Face Detection	Supports face detection, optimization, tracking, capturing pictures, uploading high-quality face snapshots, and face enhancement; Supports attributes extraction. 6 attributes	
	and 8 expressions: Gender, age, glasses, expressions (angry, sad, hate, scary, surprise, calm, happy and confused), mask, mustache; Supports face cutout: Face, one-inch photo. Capturing strategies include real-time capturing, optimization, and quality first.	
People Counting	Supports tripwire for people counting at entrances and exits, counting the number of people staying in an area and queuing in an area, and displaying and exporting reports based on the day, week and month.	
Auto Tracking	Yes	
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.	
Auto Patrol	It triggers the IVS rule when a target is detected and makes the camera link with the PTZ to rotate to the position of the target and patrol based on its presets.	
Video		
Video Compression	H.264H; H.264B; Smart H.265+; H.264; H.265; MJPEG (Sub Stream1); Smart H.264+	
Streaming Capability	3 streams	
Resolution	4M (2560 × 1440); 3M (2048 × 1536); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)	
Video Frame Rate	Main stream: 4M/3M/1080p/1.3M/720p (1–25/30 fps) Sub stream 1: D1/VGA/CIF (1–25/30 fps) Sub stream 2: 1080p/1.3M/720p (1–25/30 fps)	
Bit Rate Control	CBR/VBR	
Video Bit Rate	H264: 96–14848 Kbps H265: 38–8960 Kbps	
Day/Night	Auto (ICR)/Color/B/W	
BLC	Yes	
WDR	120 dB	
HLC	Yes	
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp	
Gain Control	Auto; manual	
Noise Reduction	2D NR; 3D NR	
Motion Detection	Yes	
Region of Interest (RoI)	Yes	
Image Stabilization	Electronic(EIS)	
Defog	Electronic	
Digital Zoom	16×	
Image Rotation	180°	
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view	
S/N Ratio	≥55 dB	
Audio		
Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723	
S/N Ratio Audio	view ≥55 dB	

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Network	
Network Port	RJ-45 (10/100 Base-T)
Network Protocol	FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	ONVIF(Profile S&G&T);CGI;SDK
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions iOS 10 and later versions
Management Software	DSS Pro; DMSS
Mobile Client	iOS; Android
Certification	
Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014 UL: UL62368-1 + CAN/CSA C22.2, No. 62368-1
Port	
Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Alarm Linkage	Capture; recoding; send email; preset; tour; pattern; alarm digital output; audio
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Alarm I/O	2/1
Audio I/O	1/1
Power	
Power Supply	24 VDC/2.5 A ± 25% (Included) PoE+ (802.3at)
Power Consumption	Basic: 13 W Max.: 16 W (PTZ)
Environment	
Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Operating Humidity	≤ 95%
Protection	IP67; IK10; 6000V lightning proof; surge protection; voltage transient protection
Structure	
Product Dimensions	Φ186 mm × 253 mm (Φ7.32" × 9.96")
Net Weight	2.5 kg (5.51 lb)
Gross Weight	4.5 kg (9.92 lb)

When the vertical field of view is between 0° and 10°, the image might present different degrees of ghosting.

Ordering Information				
Туре	Model	Description		
4MP WizSense PTZ Camera	DH-SD50432GB-HNR	4MP 32x Starlight WizSense Network PTZ Camera		
	SD50432GB-HNR	4MP 32x Starlight WizSense Network PTZ Camera		
Accessories	PFB300S	Wall Mount Bracket		
	PFA110	Mount Adapter		
	DC 24 V/2.5 A	Power Adapter		
	PFA140	Power Box		
	PFB300C	Ceiling Mount Bracket		
	PFA120	Junction Box		
	PFA150	Pole Mount Bracket		
	PFA151	Corner Mount Bracket		
	PFB303S	Parapet Mount Bracket		
	PFB301S-E	Plane Mount Bracket		
	TF-P100	MicroSD Memory Card		
	PFM900-E	Integrated Mount Tester		

Accessories

Included:

Optional:







- PFB300S Wall Mount Bracket
- PFA110 Mount Adapter
- DC24V/2.5A Power Adapter





PFA140 Power Box

PFB300C Ceiling Mount Bracket

PFA120 Junction Box



PFA150 Pole Mount Bracket

PFA151 Corner Mount Bracket







PFB301S-E Plane Mount Bracket

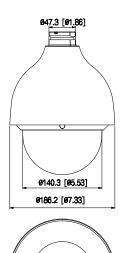
TF-P100 MicroSD Memory Card

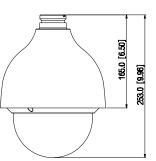
PFM900-E Integrated Mount Tester

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Wall Mount.	Ceiling Mount	Ceiling Mount
PFA110+PFB300S+PFA120	PFA110+PFB300C	PFA110+PFB301C
Pole Mount(Vertical)	Pole Mount(Horizontal)	Corner Mount
PFA110+PFB300S+PFA150	PFA110+PFB300C+PFA150	PFA110+PFB300S+PFA151
Plane Mount	Parapet Mount	
PFB301S-E	PFA110+PFB303S	

Dimensions (mm[inch])





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