

DH-SD5A432XB-HNR

4MP 32x Starlight IR WizSense Network PTZ 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.

System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, this camera provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with infrared illumination and Starlight Technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day, and True WDR for applications with direct sunlight or glare.

Functions

Perimeter Protection

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

Starlight+ Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

- · 1/2.8" 4Megapixel STARVIS™ CMOS
- · Powerful 32x optical zoom
- · Max. 25/30 fps@4M
- · IR distance up to 150 m
- · Deep-learning-based auto tracking and perimeter protection
- · SMD PLUS
- · PoE+
- · IP67, IK10
- · Face Detection











SMD PLUS

With Deep-Learning Algorithm, Dahua SMD PLUS filters the motion detection alarm triggered by non-concerned target and recognizes human and vehicle effectively, sending alarms when human and vehicles intrude.

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.



Technical Specification		IVS (Perimeter Protection)	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering		
Camera	Camera		(i c.i.iictel i rotestion)	false alarms caused by animals, rustling leaves, bright lights, etc.	
Image Sensor	1/2.8" CMOS		Face Detection	Yes	
Pixel	4 MP		Auto Tracking	Yes	
Max. Resolution	2560 (H) × 1440 (V)		SMD PLUS	Yes	
ROM	4 GB		Video		
RAM	1 GB		Video Compression	Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; H.264H; MJPEG (Sub Stream)	
Electronic Shutter Speed	1/1 s-1/30,000 s		Streaming Capability	3 streams	
Scanning System	Progressive			4M (2560 × 1440); 3M (2048 × 1536); 1080p (1920 ×	
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)		Resolution	1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240) Main stream: 4M/3M/2M/1.3M/720p (1-25/30 fps)	
Illumination Distance	150 m (492.13 ft) (IR)		Video Frame Rate	Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 2M/1.3M/720p (1–25/30 fps)	
Illuminator On/Off Control	Zoom Prio; Manual; SmartIR		Bit Rate Control	CBR; VBR	
Illuminator Number Lens	4 (IR)	4 (IR)		H.264: 3 kbps–20480 kbps H.265: 3 kbps–20480 kbps	
	40 454		Day/Night	Auto (ICR); Color; B/W	
Focal Length	4.8 mm-154 mm		BLC	Yes	
Max. Aperture	F1.6-F4.0		WDR	120 dB	
Field of View	H: 55.81°–2.37°; V: 31.92°–1.34°; D: 63.71°–2.71°		HLC	Yes	
Optical Zoom Focus Control	Auto: Somi auto: Manual		White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp	
Close Focus Distance	Auto; Semi-auto; Manual 0.8 m-5.0 m (2.62 ft-16.40 ft)		Gain Control	Auto; Manual	
Iris Control	Auto; Manual		Noise Reduction	2D NR; 3D NR	
mis control	Detect Observe Recognize Identify		Motion Detection	Yes	
DORI Distance		25 m 212 m	Region of Interest (RoI)	Yes	
	(6,968.50 ft) (2,752.62 ft) (1,394	4.36 ft) (695.54 ft)	Image Stabilization	EIS	
PTZ	D 081 2508 II		Defog	Electronic	
Pan/Tilt Range	Tilt: –15° to +90°, auto flip 180°	Pan: 0° to 360° endless Tilt: –15° to +90°, auto flip 180°		16×	
Manual Control Speed	Pan: 0.1°-300°/s Tilt: 0.1°-200°/s		Image Rotation	180°	
Preset Speed	Pan: 400°/s; Tilt: 300°/s		Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view	
Preset	300		S/N Ratio	≥ 55 dB	
Tour	8 (up to 32 presets per tour)		Audio		
Pattern	5		Audio Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1;	
Scan	5		Network	G729; G723	
Power-off Memory	Yes		Network Port	RJ-45 (10/100 Base-T)	
Idle Motion	Preset; Pattern; Tour; Scan		Network Protocol	HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS;	
PTZ Protocol	DH-SD Pelco-P/D (Auto recognition)			DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; RTMP; TCP	
Intelligence			Interoperability	ONVIF Profile S&G&T CGI	
Smart Capture	Support human, motor vehicle and non-motor vehicle image capture.		Streaming Method	Unicast; Multicast	

Wiz Sense | DH-SD5A432XB-HNR

Wiz Sense D	DH-SD5A432XB-HNR	
User/Host	20 (total bandwidth: 64 M)	
Storage	FTP; Micro SD card (512 GB); NAS	
Browser	IE: IE7 and later Chrome: 42 and earlier Firefox: 52 and earlier Safari	
Management Software	Smart PSS; DSS; DMSS; Easy4ip; IVSS	
Mobile Client	iOS; Android	
Certification		
Certifications	CE-LVD: EN 62368-1 CE-EMC: EN55032:2015/EN61000-3-2; 2019/EN61000 3-3: 2013+A1: 2019 /EN50130-4: 2011/A1: 2014/EN55024: 2010/A1: 2015/ EN55035: 2017 FCC: CFR 47 FCC Part15, Subpart B UL: UL60950-1+CAN/CSA C22.2, No.60950-1	
Port		
Two-way Audio	Yes	
Alarm Linkage	Capture; preset; tour; pattern; recording; triggering on-off value output; audio; sending email	
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection memory card state detection; memory space detection; power exception detection	
Alarm I/O	2/1	
Audio I/O	1/1	
Power		
Power Supply	24 VDC, 2.5 A (± 25%) PoE+ (802.3at)	
Power Consumption	Basic: 13 W Max.: 22 W (illuminator + PTZ working)	
Environment		
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	
Operating Humidity	≤ 95%	
Protection	IP67; IK10; TVS 6000 V lightning proof; surge protection; voltage transient protection	
Structure		
Product Dimensions	331.9 mm × Φ190.4 mm (13.07" × Φ7.50")	
Net Weight	4.7 kg (10.36 lb)	

8 kg (17.64 lb)

Ordering Information					
Туре	Model	Description			
4M WizSense Network PTZ Camera	DH-SD5A432XB-HNR	4MP 32x Starlight IR WizSense Network PTZ Camera			
	SD5A432XB-HNR	4MP 32x Starlight IR WizSense Network PTZ Camera			
	PFB305W	Wall Mount Bracket			
	DC24V/2.5A	Power Adapter			
	PFA111	Mount Adapter			
	PFA140	Power Box			
Accessories	PFB300C	Ceiling Mount Bracket			
	PFA120	Junction Box			
	PFA150	Pole Mount Bracket			
	PFA151	Corner Mount Bracket			
	PFB303S	Parapet Mount Bracket			

Accessories

Included:





PFB305W Wall Mount Bracket

DC24V/2.5A Power Adapter

Optional:







PFA140 Power Box



PFB300C Ceiling Mount Bracket



PFA120 Junction Box



PFA150 Pole Mount Bracket



PFA151 Corner Mount Bracket



PFB303S Parapet Mount Bracket

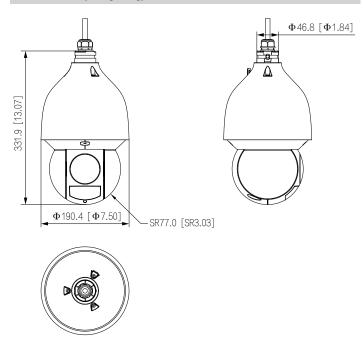


Gross Weight

Wiz Sense | DH-SD5A432XB-HNR

Wall Mount	Ceiling Mount	Ceiling Mount
PFB305W+PFA120	PFA111+PFB300C	PFA111+PFB301C
Pole Mount(Vertical)	Corner Mount	Pole Mount(Horizontal)
PFB305W+PFA150	PFB305W+PFA151	PFA111+PFB300C+PFA150

Dimensions (mm[inch])





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