



DH-SD5A432XA-HNR

4MP 32x Starlight IR WizSense Network PTZ Camera



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













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.

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

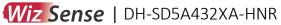
This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

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 Camera				Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
Image Sensor	1/2.8" STARVIS™ CMOS			Face Detection	Support
Pixel	4MP			Auto Tracking	Support
Max. Resolution	2560 (H) × 1440 (V)			SMD PLUS	Support
ROM	4 GB			Video	
RAM	1 GB			Compression	H.265; H.264B; H.264M; H.264H; MJPEG (Sub Stream);
Electronic Shutter Speed	1/1 s-1/30000 s			·	H.265+; H.264+
Scanning System	Progressive			Streaming Capability	3 streams
Min. Illumination	Color: 0.005 Lux@F1.35 B/W: 0.0005 Lux@F1.35			Resolution	4M (2560 × 1440); 3M (2048 × 1536); 1080P (1920 × 1080); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Illumination Distance	0 Lux (IR on) 150 m (492.13 ft)			Frame Rate	Main stream: 4M/3M/1080P/1.3M/720P (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 720P (1–25/30 fps)
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR			Bit Rate Control	Variable/Constant
Illuminator Number	4			Bit Rate	H.264: 3 Kbps-20480 Kbps H.265: 3 Kbps-20480 Kbps
Lens				Day/Night	Auto (ICR)/Color/B/W
Focal Length	4.9 mm–156 mm			BLC	Support
Max. Aperture	F1.35-F4.4			WDR	120 dB
Field of View	H: 61.6°-2.1°; V: 35.1°-1.3°; D: 68.2°-2.5°			HLC	Support
Optical Zoom	32x			White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/ Natural light/Street lamp
Focus Control	Auto/Semi-Auto/Manual			Gain Control	Auto/Manual
Close Focus Distance	1 m-1.5 m (3.28 ft-4.92 ft)			Noise Reduction	2D/3D
Iris Control	Auto/Manual/Fixed			Motion Detection	Support
	Detect Observe	Recognize	Identify	Region of Interest (RoI)	Support
DORI Distance	3120 m 1232 m (10236.22 ft) (4041.99	624 m ft) (2047.24 ft)	312 m (1023.62 ft)	Image Stabilization	Electronic
	(10230.22 1.)	(20 1/12 1 1 1)	(1023102111)	Defog	Electronic
PTZ	Z			Digital Zoom	16x
Pan/Tilt Range	Pan: 0°–360° endless Tilt: –15° to +90°, auto flip 180			Flip	180°
Manual Control Speed	Pan: 0.1°/s-300°/s Tilt: 0.1°/s-200°/s			Privacy Masking	Up to 24 areas, and up to 8 areas in the same view
Preset Speed	Pan: 400°/s			S/N Ratio	≥ 55 dB
	Tilt: 300°/s			Audio	
Presets Tour	8 (up to 32 presets per tour)			Compression	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2; G722.1; G729; G723
Pattern	5			Network	
Scan	5			Ethernet	RJ-45 (10/100Base-T)
Power-off Memory	Support			Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SMMPv1/v2c/v3 (MIB-2); DNS; DDNS; NTP; RTSP;
Idle Motion	Preset/Tour/Pattern/Scanning			Interoperability	RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPOE; ARP; RTCP ONVIF Profile S&G&T CGI
Protocol	DH-SD Pelco-P/D (auto recognition)			Interoperability Stroaming Mothod	Unicast/Multicast
Artificial Intelligence				Streaming Method	20 (total bandwidth 64M)
Smart Capture	Support human, motor vehicle and non-motor vehicle			User/Host	
	image capture.			Storage	FTP; Micro SD card (256G); NAS



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Browser	IE7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari				
Management Software	Smart PSS; DSS; DMSS; Easy4ip; IVSS				
Mobile Phone	IOS, Android				
Certification					
Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1				
Port					
Audio Input	1				
Audio Output	1 (LINE OUT; bare wire)				
Two-way Audio	Support				
Alarm I/O	2/1				
Power					
Power Supply	AC 24V/3A ± 25% (standard) PoE+ (802.3at)				
Power Consumption	Basic: 12W Max: 20W				
Environment					
Operating Temperature	-40°C to +70°C (-40°F to +158°F)				

≤ 95%

IP67; IK10; 6000V lightning proof; surge protection;

voltage transient protection

4.7 kg (10.36 lb)

8 kg (17.64 lb)

Ф190 mm × 332 mm (Ф7.48" × 13.07")

Operating Humidity

Protection

Structure

Dimensions

Net Weight

Gross Weight

Ordering Information						
Туре	Model	Description				
4MP WizSense PTZ Camera	DH-SD5A432XA-HNR	4MP 32x Starlight IR WizSense Network PTZ Camera				
	DH-SD5A432XAN-HNR	4MP 32x Starlight IR WizSense Network PTZ Camera				
	SD5A432XA-HNR	4MP 32x Starlight IR WizSense Network PTZ Camera				
	SD5A432XAN-HNR	4MP 32x Starlight IR WizSense Network PTZ Camera				
Accessories	PFB305W	Wall Mount Bracket				
	AC24V/3A	Power Adapter				
	PFA111	Mount Adapter				
	PFA140	Power Box				
	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

AC24V/3A Power Adapter

Optional:



PFA111 Mount Adapter



PFA120 Junction Box



PFA140 Power Box



PFA150 Pole Mount Bracket



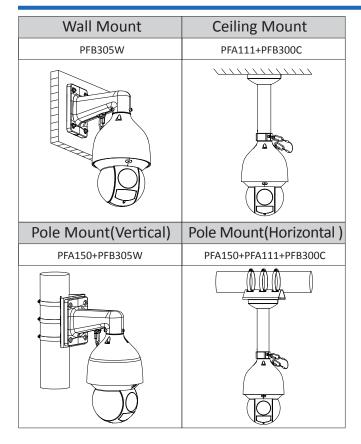
PFB300C Ceiling Mount Bracket



PFA151 Corner Mount Bracket



PFB303S Parapet Mount Bracket



Dimensions (mm[inch])

