



DH-SD49225XA-HNR

2MP 25x 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

Dahua PTZ WizSence network camera adopts advanced CNN deep learning algorithms to support Perimeter Protection with high accuracy. This camera possess wide monitor range, PFA algorithm that can always present a clear, focused image while zooming. The camera has very excellent low light performance due to adopting the latest starlight technology. The camera is equipped with smooth control, high quality image and good protection, which make it can meet most of the requirements of video surveillance applications.

Functions

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.

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.

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.

- · 1/2.8" 2Megapixel CMOS
- · Powerful 25x optical zoom
- · Starlight technology
- · Max. 50/60fps@1080P
- · Perimeter protection
- · Support PoE+
- · IR distance up to 100m
- · SMD PLUS
- · IP66













Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for 6KV lightning rating, which provides effective protection for both the camera and its structure against lightning.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

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 vehicle intrude.



Technical Specification					General Intelligence	
Camera			Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal		
Image Sensor	1/2.8" STARVIS™ CMOS				IVS	Access, Storage anomaly Object Abandoned/Missing
Pixel	2MP				Artificial Intelligence	Object / Buildoned/ Missing
Max. Resolution	1920 (H) × 10	080 (V)			Al tilicial ilitelligence	Tripwire and intrusion. Support alarm triggering by
ROM	4GB 1GB				Perimeter Protection	target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
		00.5			SMD PLUS	Support
Electronic Shutter Speed	1/1 s-1/30,000 s				Face Detection	Support
Scanning System Min. Illumination	Progressive Color: 0.005Lux@F1.6 B/W: 0.0005Lux@F1.6 OLux@F1.6 (IR light on)				Smart Capture Video	Support human, motor vehicle and non-motor vehicle image capture.
					Compression	H.265+/H.265/H.264+/H.264/MJPEG (sub stream)
Illumination Distance	100 m (328.0	08 ft)			Streaming Capability	3 streams
Illuminator On/Off Control Illuminator Number	Zoom Prio/N	lanual/SmartII	3		Resolution	1080P (1920 × 1080); 1.3 M (1280 × 960); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Lens					Frame Rate	Main stream: 1080P/1.3 M/720P (1–50/60fps) Sub stream 1: D1/CIF (1–25/30fps) Sub stream 2: 1080P/1.3M/720P/D1/CIF (1–25/30fps)
Focal Length	4.8 mm-120 mm				Bit Rate Control	Variable/Constant
Max. Aperture	F1.6-F4.4				Bit Rate	H.265/H.264: 3 kbps–20480 kbps
Field of View	H: 62.8°–2.6°; V: 33.2°–1.7°; D: 67.3°–3.9°				Day/Night	Auto(ICR)/Color/B/W
Optical Zoom	25x				BLC	Support
Focus Control	Auto/Semi-Auto/Manual				WDR	120 dB
Close Focus Distance	0.1 m-1.5 m (0.33 ft-4.92 ft)				HLC	Support
Iris Control	Auto/Manua	Auto/Manual				Auto/Indoor/Outdoor/Track/Manual/Sodium lamp/
	Detect	Observe	Recognize	Identify	White Balance	Natural light/Street lamp
DORI Distance	1613 m	646 m	323 m	161 m	Gain Control	Auto/Manual
	(5291.99 ft)	(2119.42 ft)	(1059.71 ft)	(528.22 ft)	Noise Reduction	Ultra DNR (2D/3D)
PTZ					Motion Detection	Support
Pan/Tilt Range	Pan: 0°-360°		°)		Region of Interest (RoI)	Support
Manual Control Speed	Tilt: -15°-90° (auto flip 180°) Pan: 0.1°-200°/s				Image Stabilization	Electronic
Walladi Collifor Speed	Tilt: 0.1°-120	l°/s			Defog	Electronic
Preset Speed	Tilt: 200°/s	Pan: 240°/s Tilt: 200°/s			Digital Zoom	16x
Presets	300				Flip	180°
Tour	8 (up to 32 presets per tour)				Privacy Masking	Up to 24 areas, and up to 8 areas in the same view
Pattern	5				Audio	
Scan	5				Compression	G.711a; G.711Mu; AAC; G.722.1; G.726; MPEG2-Layer2 G.729
Speed Adjustment	eed Adjustment Support				Network	
Power-off Memory	Support				Ethernet	RJ-45 (10/100Base-T)
Idle Motion	Preset/Tour/Pattern/Scanning				Protocol	IPv4; IPv6; HTTP; HTTPS; SSL; TCP/IP; UDP; UPnP; ICMF IGMP; SNMPv1/v2c/v3(MIB-2); ARP; RTCP; RTSP; RTP;
Protocol	DH-SD Pelco-P/D (auto recognition)					SMTP; NTP; DHCP; DNS; PPPOE; DDNS; FTP; IP Filter; QoS; Bonjour; 802.1x

Wiz Sense | DH-SD49225XA-HNR

Interoperability	ONVIF Profile S&G&T CGI	
Streaming Method	Unicast/Multicast	
User/Host	19	
Storage	NAS; Local PC; Micro SD card (256G)	
Browser	IE7 and newer versions Chrome 45 and newer versions Firefox 52 and earlier versions Safari (no version restrictions)	
Management Software	Smart PSS; DSS; DMSS	
Mobile Phone	IOS/Android	

Certification

	CE: EN55032/EN55024/EN50130-4
Certifications	FCC: Part15 subpartB, ANSI C63.4-2014
	UL: UL62368-1+CAN/CSA C22.2,No. 62368-1

Port

Audio Input	1
Audio Output	1
Alarm I/O	2/1

Power

Power Supply	DC 12V/3A PoE+ (802.3at)
Power Consumption	13W 22W (IR on)

Environment

Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Operating Humidity	≤95%
Protection	IP66; TVS 6000V lightning proof; Surge protection

Structure

Dimensions	Φ160 mm × 295 mm (6.30" × 11.61")
Net Weight	3 kg (6.61 lb)
Gross Weight	4.8kg (10.58lb)

Ordering Information			
Туре	Model	Description	
	DH-SD49225XA-HNR	2MP 25x Starlight IR WizSense Network PTZ Camera, WDR, PAL	
2M WizSense PTZ Camera	DH-SD49225XAN-HNR	2MP 25x Starlight IR WizSense Network PTZ Camera, WDR, NTSC	
	SD49225XA-HNR	2MP 25x Starlight IR WizSense Network PTZ Camera, WDR, PAL	
	SD49225XAN-HNR	2MP 25x Starlight IR WizSense Network PTZ Camera, WDR, NTSC	

Accessories	PFB305W	Wall Mount Bracket	
	PFA111	Mount Adapter	
	DC12V/3A	Power Adapter	
	PFA140	Power Box	
	PFB300C	Ceiling Mount Bracket	
	PFA120	Water-proof Junction Box	
	PFA150	Pole Mount Bracket	
	PFA151	Corner Mount Bracket	
	PFB303S	Parapet Mount Bracket	

Accessories

Included:



PFB305W Wall Mount Bracket

Optional:



PFA111 Mount Adapter



Power Adapter



PFA140 Power Box



PFB300C Ceiling Mount Bracket



PFA120 Water-proof Junction Box



PFA150 Pole Mount Bracket



Corner Mount Bracket



Bracket

Wiz Sense | DH-SD49225XA-HNR

Ceiling Mount	Junction Mount	Power Box Mount
PFA111+PFB300C	PFB305W + PFA120	PFB305W + PFA140
Pole Mount	Corner Mount	Parapet Mount
PFB305W+PFA150	PFB305W+PFA151	PFA111+PFB303S

Dimensions (mm[inch])

