

DH-SD49225XA-HNR-S3

2MP 25x Starlight IR 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

Dahua PTZ WizSense network camera adopts advanced CNN deep learning algorithms to support Perimeter Protection with high accuracy. This camera possesses 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 makes it meet most of the requirements of video surveillance applications.

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" 2Megapixel STARVIS™ CMOS
- Powerful 25x optical zoom
- Starlight technology
- Max. 25/30 fps@1080p
- IR distance up to 100 m
- Perimeter protection
- Face detection
- SMD Plus
- IP66



Environment

Dahua camera can operate in extreme temperature environments, rated for use in temperatures from -40 °C to +65 °C (-40 °F to +149 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating make it suitable for demanding outdoor applications.

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.

Protection

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

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					Face Detection	Yes
Camera					SMD	Yes
Image Sensor					Video	
Pixel					Video Compression	Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; H.264H; MJPEG (Sub Stream)
Max. Resolution					Streaming Capability	3 streams
ROM					Resolution	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
RAM					Video Frame Rate	Main stream: 1080p/1.3M/720p (25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 720p (1–25/30 fps)
Electronic Shutter Speed					Bit Rate Control	CBR; VBR
Scanning System					Video Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 32 Kbps–8192 Kbps
Min. Illumination					Day/Night	Auto (ICR); Color; B/W
Illumination Distance					BLC	Yes
Illuminator On/Off Control					WDR	120 dB
Illuminator Number					HLC	Yes
Lens						
Focal Length					White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Max. Aperture					Gain Control	Auto; Manual
Field of View					Noise Reduction	2D NR; 3D NR
Optical Zoom					Motion Detection	Yes
Focus Control					Region of Interest (RoI)	Yes
Close Focus Distance					Defog	Electronic
Iris Control					Image Rotation	180°
DORI Distance	Detect	Observe	Recognize	Identify	Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view
	2400 m (7874.02 ft)	948 m (3110.24 ft)	480 m (1574.80 ft)	240 m (787.40 ft)	S/N Ratio	≥ 55 dB
PTZ						
Pan/Tilt Range					Network	
Manual Control Speed					Network Port	1 RJ-45 Port 10/100Base-T
Preset Speed					Network Protocol	HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTP; RTCP; RTP; PPPoE; RTMP; TCP
Presets					Interoperability	ONVIF Profile S&G&T; CGI
Tour					Streaming Method	Unicast; Multicast
Pattern					User/Host	20 (total bandwidth: 64 M)
Scan					Storage	FTP; Micro SD card (512 GB); NAS
Power-off Memory					Browser	IE7 and later versions Chrome Firefox Safari
Idle Motion					Management Software	Smart PSS; DSS; IVSS; Configtool; NVR; Smart Player
PTZ Protocol					Mobile Client	iOS; Android
Intelligence						
IVS (Perimeter Protection)					Certification	
Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.					Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Port

Alarm Linkage	Capture; preset; tour; pattern; recordings on SD card; alarm digital input; sending email
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
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Power

Power Supply	12 VDC, 3 A ($\pm 10\%$) PoE+ (802.3at)
Power Consumption	Basic: 12 W Max.: 21 W (illuminator + PTZ working)

Environment

Operating Conditions	-40 °C to +65 °C (-40 °F to +149 °F)
Operating Humidity	$\leq 95\%$ RH
Protection	IP66; TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Casing	Aluminum alloy ADC12
Product Dimensions	295 mm \times Φ 160 mm (11.61" \times Φ 6.30")
Net Weight:	2.8 kg (6.17 lb)
Gross Weight	4.3 kg (9.48 lb)

Ordering Information

Type	Model	Description
Wizsense 2MP IP PTZ Camera	DH-SD49225XA-HNR-S3	2MP 25x Starlight IR WizSense Network PTZ Camera
	SD49225XA-HNR-S3	2MP 25x Starlight IR WizSense Network PTZ Camera
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



DC12V/3A
Power Adapter



PFA140
Power Box



PFB300C
Ceiling Mount Bracket



PFA120
Water-proof Junction Box



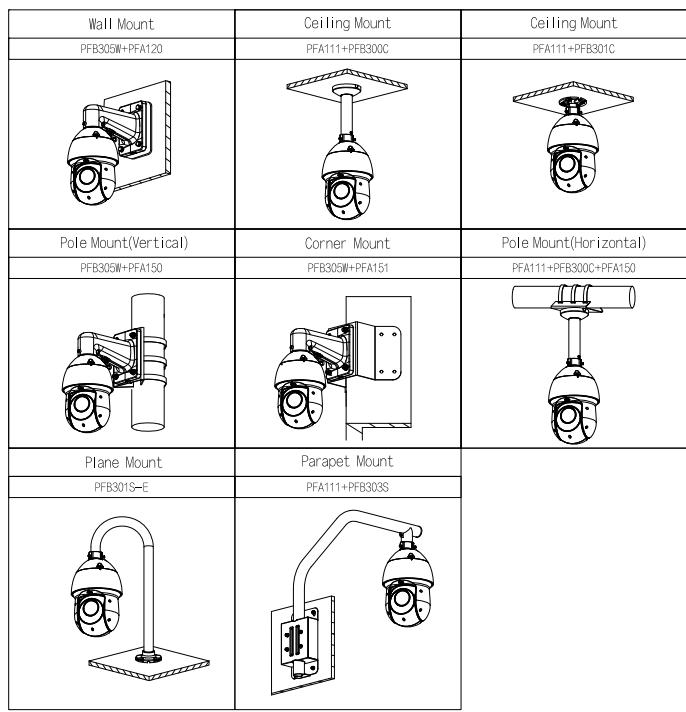
PFA150
Pole Mount Bracket



PFA151
Corner Mount Bracket



PFB303S
Parapet Mount Bracket



Dimensions (mm[inch])

