

DH-SD1A404XB-GNR

4M 4x 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 WizSense PTZ camera adopts advanced CNN deep learning algorithms to support primeter protection with high accuracy. The camera is equipped with smooth control, high quality image, and good protection, meeting compact size demands of video surveillance applications.

Functions

People Counting

People Counting function uses advanced image processing technology to capture depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting 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.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30 °C to +60 °C (-22 °F to +140 °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.

- · 1/2.8" 4Megapixel STARVIS™ CMOS
- · Starlight technology
- · Max. 25/30fps@4MP
- · 4x optical zoom
- · Face Detection, People Counting, Perimeter Protection
- · IR distance up to 15m
- · SMD Plus
- · PoE
- · IP66, IK08

















Protection

The camera allows for $\pm 15\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

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 optimizes both the bright and dark areas of a scene at the same time to provide usable video.

H.265+

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. H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.





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Technical Specification				Artificial Intelligence		
Camera Image Sensor	1/2.8" STARVIS™ CMOS				People Counting	Count people entering and exiting the area (crossing people counting); count people staying in the area (inarea people counting); display and export reports by
Pixel	4MP					day, week and month. Tripwire and intrusion. Support alarm triggering by
Max. Resolution	2560 (H) × 1440 (V)				Perimeter Protection	target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
ROM	4GB				SMD Plus	Support
RAM	1GB				Face Detection	Support
Electronic Shutter Speed	1/1 s-1/30,000 s				Video	
Scanning System	Progressive					H.265; H.264BaselineProfile; H.264MainProfile;
Min. Illumination	Color: 0.005Lux@F1.8 B/W: 0.0005Lux@F1.8 0Lux (IR light on)				Compression Streaming Capability	H.264HighProfile; MJPEG (Sub Stream); H.265+; H.264-3 streams
Illumination Distance	15 m (49.21	ft)			Danahatian	4M (2560 x 1440); 3M (2048 x 1536); 1080P (1920 x
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR				Resolution	1080); 1.3M (1280 x 960); 720P (1280 x 720); D1 (704 x 576/704 x 480); CIF (352 x 288/352 x 240)
Illuminator Number	3				Frame Rate	Main stream: 4M/3M (1–25/30fps), 1080P/1.3M/720P (1–25/30fps) Sub stream 1: D1/CIF (1–25/30fps)
Lens					Bit Rate Control	Sub stream 2: 720P (1–25/30fps), D1/CIF (1–25/30fps) Variable Bit Rate/Constant Bit Rate
Focal Length	2.8 mm–12 mm				Bit Rate	H.264/H.265/MJPEG: 3 kbps–20480 kbps
Max. Aperture	F1.8-F2.7				Day/Night	Auto (ICR)/Color/B/W
Field of View	H: 31.6°-96.9° V: 17.8°-51.4° D: 36.4°-116.2°				BLC	Support Support
Optical Zoom	4x				WDR	120 dB
Focus Control	Auto/Semi-Auto/Manual				HLC	Support
Close Focus Distance	0.2 m-0.5 m (0.66 ft-1.64 ft)				White Balance	Auto/Indoor/Outdoor/Track/Manual/Sodium lamp/ Natural light/Street lamp
Iris Control	Auto				Gain Control	Auto/Manual
DORI Distance	Detect	Observe	Recognize	Identify	Noise Reduction	2D/3D
DOM Distance	147.0 m (482.28 ft)	58.8 m (192.91 ft)	29.4 m (96.46 ft)	14.7 m (48.23 ft)	Motion Detection	Support
PTZ					Region of Interest (RoI)	Support
Pan/Tilt Range	Pan: 0°-355)°			Electronic Image Stabilization	Support
Married Cantral Coasia	Tilt: 5°-90° Pan: 0.1°/s-70°/s				Electronic Defog	Support
Manual Control Speed		Tilt: 0.1°/s-30°/s			Digital Zoom	16x
Preset Speed	Pan: 80°/s Tilt: 40°/s	Pan: 80°/s Tilt: 40°/s			Flip	0°/180°
Presets	300				Privacy Masking	Up to 24 areas, and up to 8 areas in the same view
Tour	8 (up to 32 presets per tour)				Audio	
Speed Adjustment	Support				Compression	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2; G.722.1 G.729; G.723
Power-off Memory	Support				Network	,
Idle Motion	Preset/Tour				Ethernet	RJ-45 (10/100Base-T)
General Intelligence	Motion deta	ection Videot	ampering Sce	ne changing	Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMPv1/v2c/v3(MIB-2); DNS; DDNS; NTP; RTSP;
Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly				Interoperability	RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPOE; ARP; RTCP ONVIF Profile S&G&T CGI
IVS	Object Abandoned/Missing				Streaming Method	Unicast/Multicast



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User/Host	20	
Storage	FTP; Micro SD card (256G); P2P	
Browser	IE; Chrome; Firefox; Safari (no version restriction)	
Management Software	SmartPSS DSS	
Mobile Phone	iOS/Android	

Certification

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

Port

Audio Input	1(Line in; bare wire or built in Mic)
Audio Output	1

Power

Power Supply	DC12V/1.5A±15% PoE (802.3af)
Power Consumption	3W 8.5W (IR on)

Environment

Operating Temperature	-30°C to +60°C (-22°F to 140°F)
Operating Humidity	≤95%
Protection	IK08; IP66; TVS 6000V lightning proof; surge protection

Structure

Dimensions	Φ128.0 mm × 65.4 mm (5.04" × 2.57")	
Net Weight	0.485 kg (1.06 lb)	
Gross Weight	0.7 kg (1.54 lb)	

Ordering Information

Туре	Model	Description		
4MP WizSense PTZ Camera	DH-SD1A404XB-GNR	4M 4x Starlight IR WizSense NetworkPTZ Camera, PAL		
	DH-SD1A404XBN-GNR	4M 4x Starlight IR WizSense NetworkPTZ Camera, NTSC		
	SD1A404XB-GNR	4M 4x Starlight IR WizSense NetworkPTZ Camera, PAL		
	SD1A404XBN-GNR	4M 4x Starlight IR WizSense NetworkPTZ Camera, NTSC		
Accessories	PFA107	Mount Adapter		
	PFB305W	Wall Mount Bracket		
	DH-PFA120	Junction Box		
	DH-PFA140	Power Box		
	DH-PFA151	Corner Mount Bracket		
	PFB220C	Ceiling Mount Bracket		
	DH-PFA150	Pole Mount Bracket		
	DC12V/1.5A	Power Adapter		

Accessories

Optional:



PFA107 Mount Adapter



PFB305W Wall Mount Bracket



DH-PFA120 Junction Box



DH-PFA140 Power Box



Pole Mount Bracket



DH-PFA151 Corner Mount Bracket



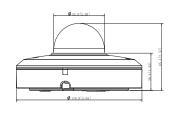
PFB220C Ceiling Mount Bracket

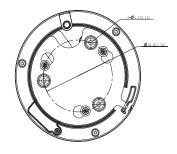


DC12/1.5A Power Adapter

Ceiling Mount (1)	Wall Mount	Ceiling Mount (2)
	PFA107+PFB305W	PFA107+PFB220C
Pole Mount (1)	Pole Mount (2)	Corner Mount
PFA107+PFB305W+PFA150	PFA107+PFB220C+PFA150	PFA107+PFB305W+PFA151

Dimensions (mm[inch])





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