

DH-SD5A825GA-HNR

8MP 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

Unique and elegant, the black semicircular sphere discreetly monitors from a distance without drawing undue attention to itself. It has a powerful optical zoom, and accurate pan, tilt and zoom capabilities, providing an all-in-one solution for long distance video surveillance of outdoor scenes. Together with infrared illumination and Starlight Technology, the camera is a great solution for dark, low light conditions. The series combines a day and night mechanical IR cut filter to produce high quality images in variable lighting conditions during the day, and True WDR for locations with direct sunlight and glare.

Functions

Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, and more, and uses secondary recognition during target detection to improve alarm accuracy.

Starlight+ Technology

For challenging low-light conditions, Dahua's Starlight Ultra-low Light Technology offers the best in light sensitivity, capturing color in vivid detail, even in lighting as low as 0.001 lux. The camera uses a set of optical features to balance light throughout the scene, producing clear images in dark environments.

PFA Technology

PFA technology has introduced new methods of judgment that ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms that ensure image clarity when zooming and that shorten focus time. This makes the camera highly advanced in its functions, substantially improving the quality of your experience.

- 1/1.8" 8Megapixel CMOS.
- Powerful 25x optical zoom.
- Starlight+ Technology
- Max. 25/30fps@8MP.
- IR distance up to 150 m.
- · Deep-learning-based perimeter protection.
- Auto-tracking and IVS.
- PoE+.
- IP67, IK10.



Interoperability

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

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

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, a flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality videos without straining the network. Smart H.265+ technology outranks standard H.265 video compression, reducing bit rate and storage requirements by up to 70%.

Auto Tracking

This feature controls the pan, tilt and zoom actions of the camera to automatically track an object in motion, to keep it in view of the camera. Tracking 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.

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Technical Specification Camera Image Sensor 1/1.8" CMOS 8 MP Pixel Face Detection Max. Resolution 3840 × 2160 4 GB ROM 1 GB RAM **Electronic Shutter Speed** 1 s-1/30,000 s Auto Tracking Scanning System Progressive SMD Color: 0.005 lux@F1.6 Video Min. Illumination B/W: 0.0005 lux@F1.6 0 lux@F1.6 (IR light on) Video Compression 150 m (492.13 ft) (IR) Illumination Distance Streaming Capability Illuminator On/Off Control Zoom Prio; Manual; Auto; Off 4 (IR) Illuminator Number Resolution Lens 5 4 mm–135 mm **Focal Length** Video Frame Rate F1.6-F4.0 Max. Aperture Field of View H: 61.6°-3.6°; V: 35.7°-2°; D: 66.6°-4° Bit Rate Control **Optical Zoom** 25× Video Bit Rate **Focus** Control Auto; semi-auto; manual Day/Night 0.1 m-2 m **Close Focus Distance** BLC Auto: manual: fixed Iris Control WDR Detect Observe Recognize Identify HLC DORI Distance 2700 m 1066 m 540 m 270 m (8858.27 ft) (3497.38 ft) (1771.65 ft) (885.83 ft) White Balance PTZ Gain Control Pan: 0° to 360° endless Pan/Tilt Range Noise Reduction Tilt: -15° to +90°, auto flip 180° Pan: 0.1°/s-300°/s Motion Detection Manual Control Speed Tilt: 0.1°/s-140°/s Region of Interest (Rol) Preset Speed Pan: 400°/s; Tilt: 300°/s **Image Stabilization** Preset 300 Defog Tour 8 (up to 32 presets per tour) **Digital Zoom** Pattern 5 Image Rotation Scan 5 Power-off Memory Yes **Privacy Masking**

Electronic 16× 180 Up to 24 areas can be set, with up to 8 areas in the same view multiple colors available S/N Ratio ≥ 55 dB

Supports face detection, face bounding box, capturing snapshots, uploading face snapshots, enhancing face images, and selecting a preferred image among

a group of snapshots. Attribute Extraction is also supported, where 6 attributes and 8 expressions can

be detected. The attributes are gender, age, glasses, mask, mustache and expressions. The expressions

are angry, sad, hate, scared, surprised, calm, happy and confused. Face cutout is also offered, where you

can cutout one face at a time and customize the size to be a one-inch photo. The supported methods for

capturing snapshots are real-time capturing, quality first, and selecting a preferred image among a group

H.264H;H.264B;Smart H.265+;H.265;Smart

4K (3840 × 2160); 4M (2560 × 1440); 3M (2048 ×

(1280 × 720); D1 (704 × 576/704 × 480); CIF (352 ×

1536); 1080p (1920 × 1080); 960p (1920 × 960); 720p

Main stream: 8M/4M/3M/1080p/1.3M/720p (1-25/30

Auto; indoor; outdoor; tracking; manual; sodium lamp;

PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1;

H.264+:MJPEG:H.264M

288/352 × 240); VGA (640 × 480)

H.264: 128 kbps-16,384 kbps

H.265: 51 kbps-12,288 kbps

Auto (ICR)/Color/B/W

natural light; street lamp

Auto; manual

2D NR; 3D NR

Electronic(EIS)

G729: G723

Sub stream 1: D1/CIF/VGA (1-25/30 fps)

Sub stream 2: 1080p/1.3M/720p (1-25/30 fps)

of snapshots.

Yes

Yes

3 streams

fps

Yes

Yes

Yes

Yes

DWDR

CBR/VBR

Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking

Pattern;Preset;Scan;Tour

DH-SD Pelco-P/D (Auto recognition)

Idle Motion

PTZ Protocol

Intelligence

IVS (Perimeter Protection)

Audio

Audio Compression

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Network

Network		
Network Port	RJ-45 (10/100 Base-T)	
Network Protocol	FTP;RTMP;IPv6;Bonjour;IPv4;DNS;RTCP;PPPoE;NTP;RT P;802.1x;HTTPS;SNMP;TCP/IP;DDNS;UPnP;NFS;ICMP;U DP;IGMP;HTTP;SSL;DHCP;SMTP;Qos;RTSP;ARP	
Interoperability	CGI;SDK;ONVIF(Profile S&G&T);P2P	
Streaming Method	Unicast/Multicast	
User/Host	20 (total bandwidth: 64 M)	
Storage	Micro SD card (512 GB); FTP/SFTP; NAS	
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions	
Management Software	DSS;DMSS;Easy4ip;Smart PSS;IVSS	
Mobile Client	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 channel (LINE IN, bare wire)	
Audio Output	1 channel (LINE OUT,bare wire)	
Alarm Linkage	Capture; recordings; send email; preset; tour; pattern; alarm digital input	
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card status detection; memory space 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: 12 W Max.: 21 W (IR light + PTZ)	
Environment		
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	
Operating Humidity	≤ 95%	
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	
Storage Humidity	≤ 95%	
Protection	IP67, IK10, TVS 6000 V lightning proof; surge protection; voltage transient protection	
Structure		
Product Dimensions	Φ190 mm × 332 mm (Φ7.48" × 13.07")	
Net Weight	4.7 kg (10.36 lb)	
Gross Weight	8.0 kg (17.64 lb)	

Ordering Information		
Туре	Model	Description
8MP WizSense PTZ Camera	DH-SD5A825GA-HNR	8MP 25x Starlight IR WizSense Network PTZ Camera
	SD5A825GA-HNR	8MP 25x Starlight IR WizSense Network PTZ Camera
Accessories	PFB305W	Wall Mount Bracket
	DC 24 V/2.5 A	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

DC 24 V/2.5 A Power Adapter

Optional:



PFA111

Mount Adapter

PFA140

Power Box



PFB300C Ceiling Mount Bracket





Pole Mount Bracket

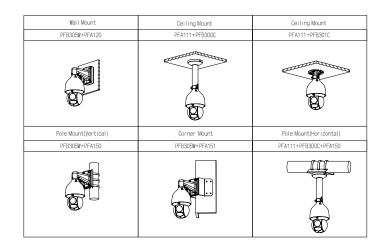
PFA151 Corner Mount Bracket

PFA120

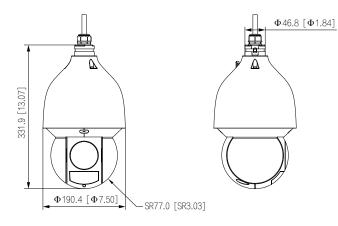
Junction Box

PFB303S Pole Mount Bracket

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Dimensions (mm[inch])





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