

# DH-SD4E425GB-HNR-A-PV1

4MP 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

The Three-in-One Camera (TiOC) solution combines 24/7 monitoring, active deterrence and real-time alarms with artificial intelligence into one smart, innovative solution. TiOC PTZ cameras adopt auto-tracking 3.0 technology, greatly improving the monitoring scope of key targets. For distributors and installers, it not only saves time, but also reduces cost.

#### Functions

#### Starlight Technology

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

#### Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

#### **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.

- 1/2.8" 4Megapixel STARVIS™ CMOS.
- 25x optical zoom.
- Starlight technology.
- Max. 25/30fps@4M.
- IR distance up to 100 m.
- Auto-tracking 3.0.
- Perimeter protection.
- Face detection.
- SMD 4.0.
- IP66.
- Full-color illuminator; red and blue warning light.



#### **Face Detection**

Dahua Face Detection technology can detect the face in the image. With deep learning algorithm, the technology supports detecting, tracking, capturing and selecting the best face image, and then outputs face snapshot.

#### Protection (IP66, TVS 6000 V)

IP66, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

#### 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.

#### SMD 4.0

Dahua Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

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#### Tripwire; intrusion; crossing fence detection; loitering **Technical Specification** detection; abandoned/missing object; fast moving; IVS (Perimeter Protection) parking detection; people gathering; vehicle/human Camera alarm classification; linkage tracking 1/2.8" CMOS Image Sensor Supports face detection, face bounding box, capturing snapshots, uploading face snapshots, 4 MP Pixel enhancing face images, and selecting a preferred image among a group of snapshots. Attribute 2560 (H) × 1440 (V) Extraction is also supported, where 6 attributes Max. Resolution and 8 expressions can be detected. The attributes are gender, age, glasses, mask, mustache and 4 GB ROM expressions. The expressions are angry, sad, hate, Face Detection scared, surprised, calm, happy and confused. Face 1 GB RAM cutout is also offered, where you can cutout one face at a time and customize the size to be a one-1/1 s-1/30,000 s **Electronic Shutter Speed** inch photo. The supported methods for capturing snapshots are real-time capturing, quality first, Progressive Scanning System and selecting a preferred image among a group of snapshots. Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 Min. Illumination Auto Tracking Yes 0 lux@F1.6 (illuminator on) 100 m (328.08 ft) (IR) SMD Yes Illumination Distance 50 m (164.04 ft)(White light) With AI NVR, quickly pick up the human/vehicle **Ouick Pick** targets that users are interested in from SMD events. Illuminator On/Off Control Zoom Prio; Manual; Auto; Off Active Deterrence 2 (IR) Illuminator Number 2 (Dual light fusion) Red and blue warning light. They can be configured to Light Warning flash for 5 to 30 seconds with a high, medium or low Lens frequency. Focal Length 5 mm-125 mm Offers 11 types of sound alarms, and supports Sound Warning importing custom sound alarms. F1.6-F3.6 Max. Aperture Video H: 51.9°-3.0°; Field of View V: 39.7°-2.2°; H.264H;H.264B;Smart H.265+;H.265;MJPEG(Sub D: 63.1°-3.7° Video Compression Stream);Smart H.264+;H.264M 25× **Optical Zoom** Streaming Capability 3 streams Focus Control Auto; semi-auto; manual 4M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p **Close Focus Distance** 0.1 m-0.5 m (0.33 ft-1.64 ft) Resolution (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) Auto: manual Iris Control Main stream: 4M/3M/1080p/1.3M/720p@ (1-25/30 fps) Observe Identify Detect Recognize Video Frame Rate Sub stream 1: D1/CIF/VGA@(1-25/30 fps) Sub stream **DORI** Distance 2: 1080p/1.3M/720p@(1-25/30 fps) 2500 m 987.5 m 500 m 250 m (8208.10 ft) (3239.83 ft) (1640.42 ft) (820.21 ft) **Bit Rate Control** CBR/VBR PTZ H264: 64 kbps-10496 kbps Video Bit Rate H265: 25 kbps-6400 kbps Pan: 0° to 360° endless Pan/Tilt Range Tilt: -15° to +90°, auto flip 180° Day/Night Auto (ICR)/Color/B/W Pan: 0.1°/s-200°/s Manual Control Speed Tilt: 0.1°/s-120°/s BLC Yes Preset Speed Pan: 240°/s; Tilt: 200°/s WDR 120 dB 300 Preset HLC Yes Tour 8 (up to 32 presets per tour) Auto/Indoor/Outdoor/Tracking/Manual/Sodium White Balance lamp/Natural light/Street lamp 5 Pattern Gain Control Auto/Manual 5 Scan Noise Reduction 2D/3D Power-off Memory Yes Yes **Motion Detection** Pattern; Preset; Scan; Tour Idle Motion

Intelligence

Region of Interest (Rol)

Image Stabilization

Defog

Yes

Electronic (EIS)

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Digital Zoom	16×	
Image Rotation	180°	
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view; multiple colors available	
S/N Ratio	≥ 55 dB	
Audio		
Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723	
Network		
Network Port	RJ-45 (10/100 Base-T)	
Network Protocol	FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTP5; SMMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; 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 Pro	
Mobile Client	iOS;Android	
Certification		
Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014	
Port		
Audio Input	1 channel	
Audio Output	1 channel	
Alarm Linkage	Capture; recording; send email; preset; pattern; tour; alarm digital input; audio; warning light	
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	
Audio I/O	1/1	
Power		
Power Supply	12 VDC/3 A ± 10% PoE+ (802.3at)	
Power Consumption	Basic: 7.0 W Max.: 13 W (illuminator+heater+PTZ+speaker)	
Environment		
Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)	
Operating Humidity	≤95%	
Protection	IP66; TVS 6000 V lightning proof; surge protection; voltage transient protection	

Structure	
Product Dimensions	269.9 mm × Φ160.0 mm (10.59" × Φ6.30")
Net Weight	2.6 kg (5.73 lb)
Gross Weight	4 kg (8.82 lb)

Ordering Information			
Туре	Model	Description	
4MP WizSense PTZ Camera	DH-SD4E425GB-HNR- A-PV1	4MP 25x Starlight IR WizSense Network PTZ Camera	
	SD4E425GB-HNR-A-PV1	4MP 25x Starlight IR WizSense Network PTZ Camera	
Accessories	PFB305W	Wall Mount Bracket	
	DC 12 V/3A	Power Adapter	
	PFA126	Junction Box	
	PFA111	Mount Adapter	
	PFB300C	Ceiling Mount Bracket	
	PFB301C	Ceiling Mount Bracket	
	PFA151	Corner Mount Bracket	
	PFB303S	Parapet Mount Bracket	
	PFB301S-E	Plane Mount Bracket	
	PFA150	Pole Mount Bracket	

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#### Accessories

#### Included:



PFB305W Wall Mount Bracket

#### Optional:



DC 12 V/3A Power Adapter





PFB300C Ceiling Mount Bracket



PFB303S Parapet Mount Bracket





PFA111

Mount Adapter

PFB301C Ceiling Mount Bracket

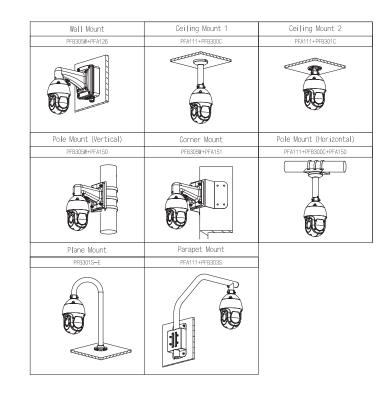


PFB301S-E Plane Mount Bracket



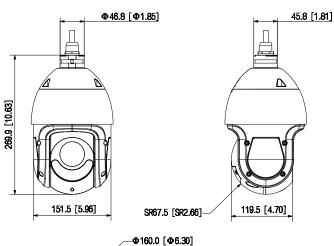
PFA151

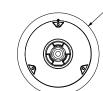
PFA150 Pole Mount Bracket



#### Dimensions (mm [inch])

Installation





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