

# DH-SD6C3425XB-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

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, this camera can provide large monitoring range and great detail. 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 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 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, producing clear images in dark environments.

### 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.

### Smart Capture

Supports human, motor vehicle and non-motor vehicle image capture.

- 1/2.8" 4Megapixel STARVIS™ CMOS
- Powerful 25x optical zoom
- Starlight technology
- IR distance up to 150 m
- Perimeter protection
- Face detection
- Metadata
- Full-color illuminator; red and blue warning light
- IP66
- Smart dual illuminators (recommended to use within 50 m)



### Face Detection

Supports 6 attributes and 8 expressions: Gender, age, glasses, mask, beard and expressions (anger, sadness, disgust, fear, surprise, calm, happiness, and confusion). It also supports face cutout settings: Face, and single inch photo. Three snapshot methods are also featured: Real-time snapshot, priority snapshot, and quality priority.

### 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.

### Siren and Light Active Deterrence

The camera supports the red and blue light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in the alarm voice, and supports customized voice importing.

**Technical Specification**

**Camera**

|                          |  |
|--------------------------|--|
| Image Sensor             | 1/2.8" CMOS  |
| Pixel                    | 4 MP   |
| Max. Resolution          | 2560 (H) × 1440 (V)  |
| Electronic Shutter Speed | 1/1 s–1/30,000 s   |
| ROM                      | 4 GB   |
| RAM                      | 1 GB   |
| Min. Illumination        | Color: 0.005 lux@F1.6<br>B/W: 0.0005 lux@F1.6<br>0 lux (IR light on) |
| Illumination Distance    | 150 m (492.13 ft) (IR)<br>50 m (164.04 ft) (white light)             |
| Illuminator Number       | 2 (IR light)<br>2 (dual light fusion)                                |

**Lens**

|                      |  |                        |                        |                      |
|----------------------|--|------------------------|------------------------|----------------------|
| Focal Length         | 4.8 mm–120 mm                                |                        |                        |                      |
| Max. Aperture        | F1.6–F3.5                                    |                        |                        |                      |
| Field of View        | H: 55.8°–2.9°; V: 31.6°–1.6° ; D: 63.7°–3.3° |                        |                        |                      |
| Optical Zoom         | 25x  |                        |                        |                      |
| Focus Control        | Auto; semi-auto; manual                      |                        |                        |                      |
| Close Focus Distance | 0.8 m–5.0 m (2.62 ft–16.40 ft)               |                        |                        |                      |
| Iris Control         | Auto; manual                                 |                        |                        |                      |
| DORI Distance        | Detect                                       | Observe                | Recognize              | Identify             |
|                      | 1,655 m<br>(5,429.79 ft)                     | 653 m<br>(2,142.39 ft) | 331 m<br>(1,085.96 ft) | 165 m<br>(541.34 ft) |

**PTZ**

|                      |   |
|----------------------|---|
| Pan/Tilt Range       | Pan: 0° to 360° endless<br>Tilt: –20° to +90°, auto flip 180° |
| Manual Control Speed | Pan: 0.1°/s–160°/s<br>Tilt: 0.1°/s–60°/s                      |
| Preset Speed         | Pan: 240°/s; Tilt: 150°/s                                     |
| Preset               | 300   |
| Tour                 | 8 (up to 32 presets per tour)                                 |
| Pattern              | 5   |
| Scan                 | 5   |
| Power-off Memory     | Yes   |
| Idle Motion          | Preset; Tour; Pattern; Scanning                               |
| PTZ Protocol         | DH-SD<br>Pelco-P/D (auto recognition)                         |

**Intelligence**

|                            |  |
|----------------------------|--|
| Video Metadata             | Support human body, human face, motor vehicle and non-motor vehicle image capture.   |
| IVS (Perimeter Protection) | Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc. |

|                |     |
|----------------|-----|
| Face Detection | Yes |
| SMD            | Yes |
| Auto Tracking  | Yes |

**Active Deterrence**

|               |  |
|---------------|--|
| Light Warning | Red and blue warning light<br>Flash duration: 5 s–30 s<br>Flash frequency: High, medium, low |
| Sound Warning | Sound warning alarm: Customizable  |

**Video**

|                          |   |
|--------------------------|---|
| Video Compression        | Smart H.265+; H.265; Smart H.264+; H.264B; H.264H; MJPEG  |
| Streaming Capability     | 3 streams   |
| Resolution               | 4M (2560 × 1440); 3M (2048 × 1536); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288)        |
| Video Frame Rate         | Main stream: 4M/3M/1080p/1.3M/720p (1–25/30 fps)<br>Sub stream 1: D1/CIF (1–25/30 fps)<br>Sub stream 2: 1080p/1.3M/720p (1–25/30 fps) |
| Bit Rate Control         | CBR; VBR  |
| Video Bit Rate           | Default resolution of the main stream:<br>H264: 2816 kbps–8192 kbps<br>H265: 1024 kbps–7936 kbps                                      |
| Day/Night                | Auto (ICR); Color; B/W  |
| BLC                      | Yes   |
| WDR                      | 120 dB  |
| HLC                      | Yes   |
| White Balance            | Auto; manual; tracking; indoor; outdoor; outdoor auto; sodium lamp; sodium lamp auto  |
| Gain Control             | Auto; manual  |
| Noise Reduction          | 2D NR; 3D NR  |
| Motion Detection         | Yes   |
| Region of Interest (RoI) | Yes   |
| Image Stabilization      | EIS   |
| Defog                    | Electric  |
| Digital Zoom             | 16x   |
| Privacy Masking          | Up to 24 areas can be set, with up to 8 areas in the same view; supports multiple colors and mosaic blocks                            |
| S/N Ratio                | ≥ 55 dB   |

**Audio**

|                   |  |
|-------------------|--|
| Audio Compression | G.711a; G.711Mu; G.726; G722.1; G.729; MPEG2-Layer2; G723; PCM |
|-------------------|--|

**Network**

|                  |   |
|------------------|---|
| Network Port     | RJ-45 (10/100 Base-T)   |
| Network Protocol | HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; SSL; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; IP Filter; RTMP; Bonjour; TCP; SMB; NFS |
| User/Host        | 20 (total bandwidth: 64 M)  |
| Interoperability | ONVIF (Profile S&G&T)   |

|                     |  |
|---------------------|--|
| Storage             | FTP; Micro SD card (256 GB); NAS   |
| Browser             | IE 7 and later versions<br>Chrome 42 and earlier versions<br>Firefox 52 and earlier versions<br>Safari |
| Management Software | Smart PSS; DSS; DMSS; Easy4ip; IVSS; player; configtool;<br>NVR; Smart Player                          |
| Mobile Client       | iOS; Android; iPhone; iPad; Windows Phone  |

**Certification**

|                |  |
|----------------|--|
| Certifications | CE: EN55032/EN55024/EN50130-4<br>FCC: Part15 subpartB, ANSI C63.4-2014 |
|----------------|--|

**Port**

|               |  |
|---------------|--|
| Audio Input   | 1 (LINE IN; bare wire)   |
| Audio Output  | 1 channel (LINE OUT, bare wire; built-in speaker (mutually exclusive))   |
| Alarm Input   | 2-ch, digital input (0-5 VDC)  |
| Alarm Output  | 1-ch   |
| Alarm Linkage | Capture; preset; tour; pattern; recording; alarm digital input; send email   |
| Alarm Event   | Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection |

**Power**

|                   |  |
|-------------------|--|
| Power Supply      | 24 VDC, 2.5 A (± 25%) (included)<br>PoE+ (802.3at)   |
| Power Consumption | Basic: 13 W<br>Max.: 23 W (illuminator + red and blue warning light+speaker + PTZ working) |

**Environment**

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

**Structure**

|                    |  |
|--------------------|--|
| Casing             | ADC12  |
| Product Dimensions | 325.3 mm × Φ202.0 mm (12.81" × Φ7.95") (H × D) |
| Net Weight         | 4.6 kg (10.14 lb)                              |
| Gross Weight       | 9.1 kg (20.06 lb)                              |

**Ordering Information**

| Type                   | Part Number             | Description                                |
|------------------------|-------------------------|--|
| 4M WizSense PTZ Camera | DH-SD6C3425XB-HNR-A-PV1 | 4MP 25x Starlight IR PTZ AI Network Camera |
|                        | SD6C3425XB-HNR-A-PV1    | 4MP 25x Starlight IR PTZ AI Network Camera |
| Accessories            | DC24V/2.5A              | Power Adapter                              |
|                        | PFB305W                 | Wall Mount Bracket                         |
|                        | PFA111                  | Mount Adapter                              |
|                        | PFB300C                 | Ceiling Mount Bracket                      |
|                        | PFB301C                 | Ceiling Mount Bracket                      |
|                        | PFB303S                 | Parapet Mount Bracket                      |
|                        | PFB301S-E               | Plane Mount Bracket                        |
|                        | PFA151                  | Corner Mount Bracket                       |
| PFA150                 | Pole Mount Bracket      |  |

**Accessories**

Included:



DC24V/2.5A Power Adapter



PFB305W Wall Mount Bracket

Optional:



PFA111 Mount Adapter



PFB300C Ceiling Mount Bracket



PFB301C Ceiling Mount Bracket



PFB303S Parapet Mount Bracket



PFB301S-E Plane Mount Bracket

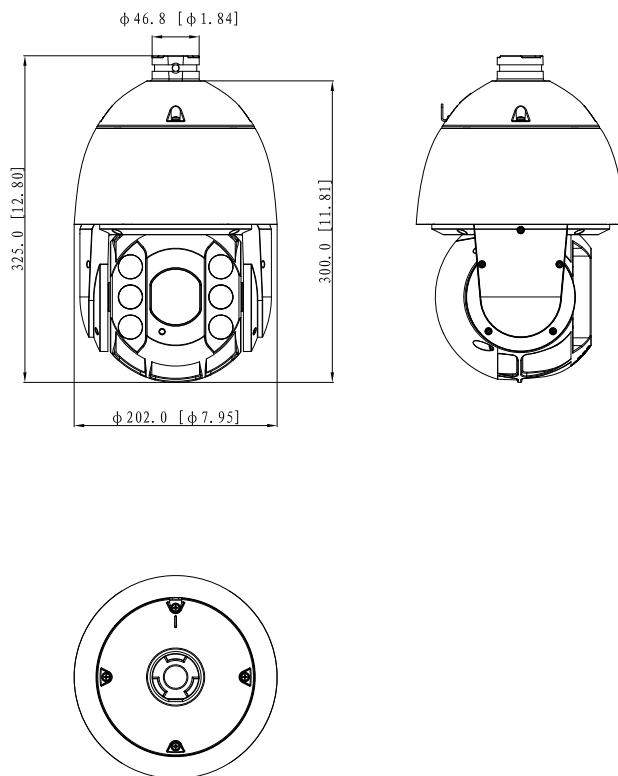


PFA151 Corner Mount Bracket



PFA150  
Pole Mount  
Bracket

**Dimensions (mm[inch])**



|  |                                 |   |
|--|---------------------------------|---|
| Wall Mount<br>PFB305W                  | Ceiling Mount<br>PFA111+PFB300C | Ceiling Mount<br>PFA111+PFB301C                 |
|  |                                 |   |
| Pole Mount(Vertical)<br>PFB305W+PFA150 | Corner Mount<br>PFB305W+PFA151  | Pole Mount(Horizontal)<br>PFA111+PFB300C+PFA150 |
|  |                                 |   |
| Plane Mount<br>PFB301S-E               | Parapet Mount<br>PFA111+PFB303S |   |
|  |                                 |   |