

# DH-SD60432DB-HNY-SL

4MP 32x Starlight Anti-corrosion WizSense PTZ Camera

**WizSense**

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

With its powerful optical zoom, and accurate pan and tilt capabilities, the PTZ camera provides an all-in-one solution for large-scale monitoring. It harnesses the latest starlight technology, allowing it to produce highly detailed images even in low light conditions. The camera offers smooth control and high-grade protection that enable it to meet the requirements of video surveillance in small and medium-sized scenes.

## Functions

### 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.

### 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.
- 32x optical zoom.
- Starlight technology.
- Max. 25/30fps@4MP.
- Perimeter protection.
- Face detection.
- SMD 3.0.
- IP67.
- IK10.



### Protection (IP67, TVS 6000 V)

IP67, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

### SMD 3.0

Empowered by deep-learning algorithms, Dahua SMD filters out motion detection alarms triggered by targets that are not a concern. It quickly recognizes humans and vehicles, triggering alarms when an intrusion occurs.

### 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%.

### 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.

## Technical Specification

### Camera

|                          |                                                                  |
|--------------------------|------------------------------------------------------------------|
| Image Sensor             | 1/2.8" CMOS                                                      |
| Pixel                    | 4 MP                                                             |
| Max. Resolution          | 2560 (H) × 1440 (V)                                              |
| ROM                      | 128 MB                                                           |
| RAM                      | 512 MB                                                           |
| Electronic Shutter Speed | 1 s–1/30,000 s                                                   |
| Scanning System          | Progressive                                                      |
| Min. Illumination        | 0.005 lux@F1.6 (Color, 30 IRE);<br>0.0005 lux@F1.6 (B/W, 30 IRE) |

### Lens

|                      |                                             |                          |                       |                       |
|----------------------|---------------------------------------------|--------------------------|-----------------------|-----------------------|
| Focal Length         | 4.8 mm–154 mm                               |                          |                       |                       |
| Max. Aperture        | F1.6–F4.0                                   |                          |                       |                       |
| Field of View        | H: 55.8°–2.3°; V: 31.9°–1.3°; D: 63.7°–2.7° |                          |                       |                       |
| Optical Zoom         | 32 ×                                        |                          |                       |                       |
| Focus Control        | Auto; semi-auto; manual                     |                          |                       |                       |
| Close Focus Distance | 0.1m-1.5 m (0.33 ft-4.92 ft)                |                          |                       |                       |
| Iris Control         | Auto; manual                                |                          |                       |                       |
| DORI Distance        | Detect                                      | Observe                  | Recognize             | Identify              |
|                      | 3080.0 m<br>(10104.99 ft)                   | 1216.6 m<br>(3991.47 ft) | 616 m<br>(2021.00 ft) | 308 m<br>(1010.50 ft) |

### PTZ

|                      |                                                                |
|----------------------|----------------------------------------------------------------|
| Pan/Tilt Range       | Pan: 0° to 360° endless;<br>Tilt: –20° to +90°, auto flip 180° |
| Manual Control Speed | Pan: 0.1°–300° /s;<br>Tilt: 0.1°–150° /s                       |
| Preset Speed         | Pan: 0.1°–600° /s;<br>Tilt: 0.1°–500° /s                       |
| Preset               | 300                                                            |
| Tour                 | 8 (up to 32 presets per tour)                                  |
| Pattern              | 5                                                              |
| Scan                 | 5                                                              |
| Power-off Memory     | Yes                                                            |
| Idle Motion          | Pattern; Preset; Scan; Tour                                    |
| PTZ Protocol         | DH-SD<br>Pelco-P/D (Auto recognition)                          |

### Intelligence

|                            |                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IVS (Perimeter Protection) | Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering                                 |
| Face Detection             | Supports face detection, snapshot, and face enhancement;<br>Supports face cutout: Face, one-inch photo;<br>Capturing strategies include real-time capturing and quality first. |
| SMD                        | SMD3.0                                                                                                                                                                         |

### Video

|                          |                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Video Compression        | H.264H; H.264B; Smart H.265+; H.264; H.265; MJPEG (Sub Stream); Smart H.264+                                                             |
| Streaming Capability     | 3 streams                                                                                                                                |
| Resolution               | 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480) |
| Video Frame Rate         | Main stream: 4M/1080p/1.3M/720p@(1–25/30 fps)<br>Sub stream 1: D1/VGA/CIF@(1–25/30 fps)<br>Sub stream 2: 720p@(1–25/30 fps)              |
| Bit Rate Control         | CBR/VBR                                                                                                                                  |
| Video Bit Rate           | H.264: 96 Kbps–14,848 Kbps<br>H.265: 38 Kbps–8,960 Kbps                                                                                  |
| Day/Night                | Auto (ICR); Color/B/W                                                                                                                    |
| BLC                      | Yes                                                                                                                                      |
| WDR                      | 120 dB                                                                                                                                   |
| HLC                      | Yes                                                                                                                                      |
| White Balance            | Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp                                                         |
| Gain Control             | Auto; manual                                                                                                                             |
| Noise Reduction          | 2D NR; 3D NR                                                                                                                             |
| Motion Detection         | Yes                                                                                                                                      |
| Region of Interest (RoI) | Yes                                                                                                                                      |
| Image Stabilization      | Electronic Image Stabilization (EIS)                                                                                                     |
| Defog                    | Electronic                                                                                                                               |
| Digital Zoom             | 16 ×                                                                                                                                     |
| Image Rotation           | 180°                                                                                                                                     |
| Privacy Masking          | Up to 24 areas can be set, with up to 8 areas in the same view;<br>8 colors available                                                    |
| S/N Ratio                | ≥ 55 dB                                                                                                                                  |

### Audio

|                   |                                                  |
|-------------------|--------------------------------------------------|
| Audio Compression | G.711a; G.711Mu; G.726; MPEG2-Layer; G722.1; PCM |
|-------------------|--------------------------------------------------|

### Network

|                     |                                                                                                                                      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Network Port        | RJ-45 (10/100 Base-T)                                                                                                                |
| Network Protocol    | UDP;TCP;FTP;IGMP;IPv6;IPv4;DNS;RTCP;HTTP;PPPoE ;NTP;DHCP;RTP;SMTP;802.1x;SNMPv1/v2c/v3(MIB-2);QoS;HTTPS;SNMP;RTSP;DDNS;UPnP;iCMP;ARP |
| Interoperability    | SDK; ONVIF                                                                                                                           |
| Streaming Method    | Unicast/Multicast                                                                                                                    |
| User/Host           | 20 (total bandwidth: 64 M)                                                                                                           |
| Storage             | FTP; Micro SD card (up to 512 GB); NAS                                                                                               |
| Browser             | IE 7 and later versions;<br>Chrome 45 and later versions;<br>Firefox 52ESR and earlier versions;<br>All Safari versions              |
| Management Software | Cloud Connection; NVR; Smart PSS; IVSS                                                                                               |

|                       |                                                                                                                                                          |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile Client         | iOS; Android                                                                                                                                             |
| Certification         |                                                                                                                                                          |
| Certifications        | CE: EN55032/EN55024/EN50130-4<br>FCC: Part15 subpartB,ANSI C63.4- 2014<br>UL: UL60950-1+CAN/CSA C22.2,No.60950-1                                         |
| Port                  |                                                                                                                                                          |
| Analog Output         | 1 channel (CVBS output, BNC)                                                                                                                             |
| RS-485                | 1 (baud rate: 1200 bps–9600 bps)                                                                                                                         |
| Audio Input           | 1 channel (LINE IN, bare wire)                                                                                                                           |
| Audio Output          | 1 channel (LINE OUT, bare wire)                                                                                                                          |
| Alarm Input           | 7 (on-off value input: 0–5 VDC)                                                                                                                          |
| Alarm Output          | 2 channels                                                                                                                                               |
| Alarm Linkage         | Capture; preset; tour; pattern; recording; alarm digital output; send email;                                                                             |
| Alarm Event           | Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection |
| Alarm I/O             | 7/2                                                                                                                                                      |
| Audio I/O             | 1/1                                                                                                                                                      |
| Power                 |                                                                                                                                                          |
| Power Supply          | 24 VDC, 2.5 A ± 25% (included)<br>PoE+ (802.3at)                                                                                                         |
| Power Consumption     | Basic: 13 W;<br>Max: 18 W (PTZ)                                                                                                                          |
| Environment           |                                                                                                                                                          |
| Operating Temperature | –40 °C to +70 °C (–40 °F to +158 °F)                                                                                                                     |
| Operating Humidity    | ≤ 95%                                                                                                                                                    |
| Protection            | IK10;TVS 6000 V lightning proof; IP67; msurge protection                                                                                                 |
| Structure             |                                                                                                                                                          |
| Casing Material       | SUS316L                                                                                                                                                  |
| Product Dimensions    | 292.0 mm × Φ222.0 mm (11.50" × Φ8.74")                                                                                                                   |
| Net Weight            | 7.2 kg (15.87 lb)                                                                                                                                        |
| Gross Weight          | 10.2 kg (22.49 lb)                                                                                                                                       |

\*When the vertical field of view is between –20° and 5°, the image might present different degrees of ghosting.

## Ordering Information

| Type                          | Model               | Description                                          |
|-------------------------------|---------------------|------------------------------------------------------|
| 4MP<br>WizSense<br>PTZ Camera | DH-SD60432DB-HNY-SL | 4MP 32x Starlight Anti-corrosion WizSense PTZ Camera |
|                               | SD60432DB-HNY-SL    | 4MP 32x Starlight Anti-corrosion WizSense PTZ Camera |
| Accessories                   | DC 24 V/2.5 A       | Power Adapter                                        |
|                               | PFB303W-SL          | Wall Mount Bracket                                   |
|                               | PFA111A             | Mount Adapter                                        |
|                               | PFA126A             | Wall Mount Bracket                                   |
|                               | PFB300CA            | Ceiling Mount Bracket                                |

## Accessories

### Included:



DC24V/2.5A  
Power Adapter



PFB303W-SL  
Wall Mount Bracket



PFA111  
Mount Adapter

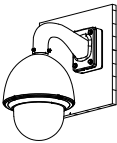
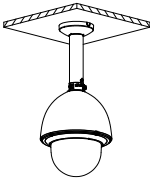
### Optional:



PFA126A  
Wall Mount Bracket



PFB300CA  
Ceiling Mount Bracket

| Wall Mount                                                                        | Ceiling Mount                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| PFB303W-SL+PFA126A                                                                | PFA111A+PFB300CA                                                                  |
|  |  |

Dimensions (mm[inch])

