

# 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); 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 (10104.99 ft)	1216.6 m (3991.47 ft)	616 m (2021.00 ft)	308 m (1010.50 ft)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.			

### PTZ

Pan/Tilt Range	Pan: 0° to 360° endless; Tilt: –20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°–300° /s; Tilt: 0.1°–150° /s
Preset Speed	Pan: 0.1°–600° /s; 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 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; vehicle/human alarm classification
----------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### Face Detection

Supports face detection, snapshot, and face enhancement;  
Supports face cutout: Face, one-inch photo;  
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) Sub stream 1: D1/VGA/Clf@(1–25/30 fps) Sub stream 2: 720p@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 96 Kbps–14,848 Kbps 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; 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;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; Chrome 45 and later versions; Firefox 52ESR and earlier versions; All Safari versions
Management Software	Cloud Connection; NVR; 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

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 $\pm$ 25% (included) PoE+ (802.3at)
Power Consumption	Basic: 13 W; Max: 18 W (PTZ)

#### Environment

Operating Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Operating Humidity	$\leq$ 95%
Protection	IK10;TVS 6000 V lightning proof; IP67; msurge protection

#### Structure

Casing Material	SUS316L
Product Dimensions	292.0 mm $\times$ $\Phi$ 222.0 mm (11.50" $\times$ $\Phi$ 8.74")
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 WizSense 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
	PFA126A	Wall Mount Bracket
	PFB300CA	Ceiling Mount Bracket

#### Accessories

##### Included:



DC24V/2.5A  
Power Adapter

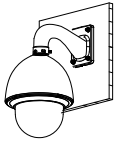
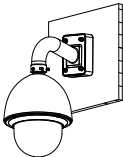


PFB303W-SL  
Wall Mount Bracket

##### Optional:



PFA120-SL  
Wall Mount Bracket

Wall Mount	Ceiling Mount
PFB303W-SL	PFB303W-SL+PFA120-SL
	

Dimensions (mm[inch])

