

DH-SD5A432XB-HNR

4MP 32x Starlight IR WizSense Network PTZ Camera



· Face De

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 provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with infrared illumination and Starlight Technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day, and True WDR for applications with direct sunlight or glare.

Functions

Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets to improve alarm accuracy.

Starlight+ Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

- · 1/2.8" 4Megapixel STARVIS™ CMOS
 · Powerful 32x optical zoom
- · Max. 25/30 fps@4M
- · IR distance up to 150 m
- \cdot Deep-learning-based auto tracking and perimeter protection
- \cdot SMD PLUS
- · PoE+
- IP67, IK10
- · Face Detection



SMD PLUS

With Deep-Learning Algorithm, Dahua SMD PLUS filters the motion detection alarm triggered by non-concerned target and recognizes human and vehicle effectively, sending alarms when human and vehicles intrude.

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action 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.

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

Wiz Sense | DH-SD5A432XB-HNR

Tripwire and intrusion. Support alarm triggering by **Technical Specification** target types (human and vehicle). Support filtering **IVS (Perimeter Protection)** false alarms caused by animals, rustling leaves, bright Camera lights, etc. Image Sensor 1/2.8" CMOS **Face Detection** Yes 4 MP Pixel Auto Tracking Yes Max. Resolution 2560 (H) × 1440 (V) SMD PLUS Yes 4 GB ROM Video 1 GB Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; RAM Video Compression H.264H; MJPEG (Sub Stream) **Electronic Shutter Speed** 1/1 s-1/30,000 s Streaming Capability 3 streams Scanning System Progressive 4M (2560 × 1440); 3M (2048 × 1536); 1080p (1920 × Resolution 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); Color: 0.005 lux@F1.6 CIF (352 × 288/352 × 240) B/W: 0.0005 lux@F1.6 Min. Illumination 0 lux (IR light on) Main stream: 4M/3M/2M/1.3M/720p (1-25/30 fps) Video Frame Rate Sub stream 1: D1/CIF (1-25/30 fps) Illumination Distance 150 m (492.13 ft) (IR) Sub stream 2: 2M/1.3M/720p (1-25/30 fps) Illuminator On/Off Control Zoom Prio; Manual; SmartIR **Bit Rate Control** CBR; VBR 4 (IR) Illuminator Number H.264: 3 kbps-20480 kbps Video Bit Rate H.265: 3 kbps-20480 kbps Lens Auto (ICR); Color; B/W Day/Night 4.8 mm-154 mm Focal Length BLC Yes Max. Aperture F1.6-F4.0 WDR 120 dB H: 55.81°-2.37°; V: 31.92°-1.34°; D: 63.71°-2.71° Field of View HIC Yes **Optical Zoom** 32× Auto; indoor; outdoor; tracking; manual; sodium lamp; White Balance natural light; street lamp Focus Control Auto; Semi-auto; Manual Gain Control Auto; Manual **Close Focus Distance** 0.8 m-5.0 m (2.62 ft-16.40 ft) **Noise Reduction** 2D NR; 3D NR Iris Control Auto; Manual **Motion Detection** Yes Detect Observe Recognize Identify **DORI** Distance Region of Interest (Rol) Yes 2,124 m 839 m 425 m 212 m (6,968.50 ft) (2,752.62 ft) (1,394.36 ft) (695.54 ft) Image Stabilization EIS PTZ Electronic Defog Pan: 0° to 360° endless Pan/Tilt Range Tilt: -15° to +90°, auto flip 180° **Digital Zoom** 16× Pan: 0.1°-300°/s Manual Control Speed Image Rotation 180 Tilt: 0.1°-200°/s Up to 24 areas can be set, with up to 8 areas in the Preset Speed Pan: 400°/s; Tilt: 300°/s Privacy Masking same view Preset 300 S/N Ratio ≥ 55 dB Tour 8 (up to 32 presets per tour) Audio Pattern 5 G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; Audio Compression G729; G723 Scan 5 Network Power-off Memory Yes Network Port RJ-45 (10/100 Base-T) Idle Motion Preset: Pattern: Tour: Scan HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; DH-SD Network Protocol PTZ Protocol SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; Pelco-P/D (Auto recognition) PPPoE; RTMP; TCP Intelligence ONVIF Profile S&G&T; CGI Interoperability Support human, motor vehicle and non-motor vehicle Smart Capture Unicast: Multicast Streaming Method image capture.

Wiz Sense | DH-SD5A432XB-HNR

| User/Host | 20 (total bandwidth: 64 M) |
|-----------------------|---|
| Storage | FTP; Micro SD card (512 GB); NAS |
| Browser | IE: IE7 and later Chrome: 42 and earlier Firefox: 52 and earlier Safari |
| Management Software | Smart PSS; DSS; DMSS; Easy4ip; IVSS |
| Mobile Client | iOS; Android |
| Certification | |
| Certifications | CE-LVD: EN 62368-1 CE-EMC: EN55032:2015/EN61000-3-2; 2019/EN61000- 3-3: 2013+A1: 2019 /EN50130-4: 2011/A1: 2014/EN55024: 2010/A1: 2015/ EN55035: 2017 FCC: CFR 47 FCC Part15, Subpart B UL: UL60950-1+CAN/CSA C22.2, No.60950-1 |
| Port | |
| Two-way Audio | Yes |
| Alarm Linkage | Capture; preset; tour; pattern; recording; triggering on-off value output; audio; sending email |
| Alarm Event | Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception 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: 13 W Max.: 22 W (illuminator + PTZ working) |
| Environment | |
| Operating Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Operating Humidity | ≤ 95% |
| Protection | IP67; IK10; TVS 6000 V lightning proof; surge protection; voltage transient protection |
| Structure | |
| Product Dimensions | 331.9 mm × Φ190.4 mm (13.07" × Φ7.50") |
| Net Weight | 4.7 kg (10.36 lb) |
| Gross Weight | 8 kg (17.64 lb) |
| | |

| Ordering Information | | |
|---|------------------|---|
| Туре | Model | Description |
| 4M WizSense Network PTZ Camera | DH-SD5A432XB-HNR | 4MP 32x Starlight IR WizSense Network PTZ Camera |
| | SD5A432XB-HNR | 4MP 32x Starlight IR WizSense Network PTZ Camera |
| | PFB305W | Wall Mount Bracket |
| | DC24V/2.5A | 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:



Wall Mount Bracket



DC24V/2.5A Power Adapter

Optional:



PFA111

Mount Adapter



PFB300C Ceiling Mount Bracket



PFA150

Pole Mount Bracket



PFA151 Corner Mount Bracket



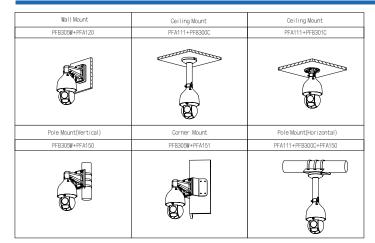
PFB303S Parapet Mount Bracket



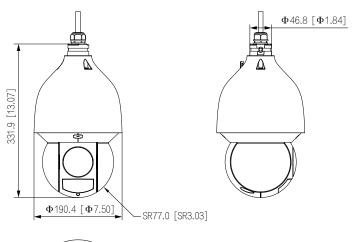




Wiz Sense | DH-SD5A432XB-HNR



Dimensions (mm[inch])





Rev 001.001 © 2021 Dahua. All rights reserved. Design and specifications are subject to change without notice Pictures in the document are for reference only, and the actual product shall prevail.