

BOSD49425DB-HNY-GQ-E 4MP 25x Starlight IR 4G Network PTZ Camera



- 1/2.8" 4Megapixel STARVIS™ CMOS.
- 25x optical zoom.
- Starlight technology.
- Max. 25/30fps@4M.
- IR distance up to 100 m.
- Perimeter protection.
- Face detection.
- SMD 3.0.
- IP66.
- 4G

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.

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.

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

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.

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.

4G Transmission

The camera supports 4G signal transmission and the following network types: LTE/WCDMA/GSM. And it supports the following frequency band respectively:

LTE-TDD: Dual-band Band 38/40

LTE-FDD: Hepta -band Band 1/3/5/7/8/20/28

WCDMA: Tri-band Band 1/5/8

GSM: Tri-band Band 850/900/1800.

SMD

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.

Technical Specification

Camera

Image Sensor

1/2.8" CMOS

Pixel

4 MP

Max. Resolution

2560 (H) × 1440 (V)

ROM

256 MB

RAM

512 MB

Electronic Shutter Speed

1/1 s–1/30,000 s

Scanning System

Progressive

Min. Illumination

Color: 0.005 lux@F1.6

B/W: 0.0005 lux@F1.6

0 lux (illuminator on)

Illumination Distance

100 m (328.08 ft) (IR)

Illuminator On/Off Control

Zoom Prio; Manual; Auto; Off

Illuminator Number

3 (IR)

Lens

Focal Length

5 mm–125 mm

Max. Aperture

F1.6–F3.6

Field of View

H: 51.9°–3.0°;

V: 39.7°–2.2°;

D: 63.1°–3.7°

Optical Zoom

25×

Focus Control

Auto; semi-auto; manual

Close Focus Distance

0.1 m–0.5 m (0.33 ft–1.64 ft)

Iris Control

Auto; manual

DORI Distance

Detect 2500 m (8208.10 ft)

Observe 987.5 m (3239.83 ft)

Recognize 500 m (1640.42 ft)

Identify 250 m (820.21 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: –15° to +90°, auto flip 180°

Manual Control Speed

Pan: 0.1°/s–80°/s

Tilt: 0.1°/s–80°/s

Preset Speed

Pan: 80°/s; Tilt: 80°/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, capturing snapshots, and enhancing face images. Face cutout is also offered, where you can cutout one face at a time and customize the size to be a one-inch photo. The supported methods for capturing snapshots are real-time capturing and quality first.

SMD

SMD 3.0

Auto Patrol

It triggers the IVS rule when a target is detected and makes the camera link with the PTZ to rotate to the position of the target and patrol based on its presets

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); CIF (352 × 288)

Video Frame Rate

Main stream: 4M/3M/1080p/1.3M/720p @(1–25/30 fps)

Sub stream 1: D1/CIF/VGA@ (1–25/30 fps)

Sub stream 2: 720p@(1–25/30 fps)

Bit Rate Control

CBR/VBR

Video Bit Rate

H.264: 2816 kbps–13056 kbps

H.265: 1024 kbps–7936 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 (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; multiple colors available

S/N Ratio

≥55 dB

Audio

Audio Compression

G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; PCM

| DH-SD49425DB-HNY-GQ-EAU

Network

Network Port

RJ-45 (10/100 Base-T)

Carrier Network System

4G; 3G; 2G

Wireless Carrier Frequency Band

LTE-TDD: Dual-band Band 38/40

LTE-FDD: Hepta -band Band 1/3/5/7/8/20/28

WCDMA: Tri-band Band 1/5/8

GSM: Tri-band Band 850/900/1800

Max. Transmission Power

4G: Power class3: 23dBm \pm 2dB

3G: Power class3: 24dBm +1/-3dB

2G: Power class0: 30dBm \pm 2dB (GSM1800)

Power class5: 33dBm \pm 2dB (GSM850/900)

Network Protocol

FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x;
HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; HTTP; SSL;
DHCP; SMTP; Qos; RTSP; ARP

Interoperability

CGI; SDK; ONVIF (Profile S&G&T)

Streaming Method

Unicast/Multicast

User/Host

20 (total bandwidth: 64 M)

Storage

FTP; Micro SD card (512 GB); 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; DMSS; NVR; Smart PSS; IVSS

Mobile Client

iOS; Android

Certification

Certifications

CE: EN55032/EN55024/EN50130-4

FCC: Part15 subpartB, ANSI C63.4-2014

Port

RS-485

1 (baud rate: 1200 bps-9600 bps)

Audio Input

1 channel

Audio Output

1 channel

Alarm Linkage

Capture; recording; send email; preset; pattern; tour; alarm digital input

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% to +25%)

Power Consumption

Deep sleep: 0.05 W

light sleep: 2.5 W

Basic: 3.75 W (not pulling stream in 4G); 4.54 W (pulling stream in 4G);

7.98 W (illuminator+not pulling stream in 4G); 8.77 W

(illuminator+pulling stream in 4G)

Max: 15.49 W (illuminator+PTZ+pulling stream in 4G)

Environment

Operating Temperature

-40 °C to +65 °C (-40 °F to +149 °F)

Operating Humidity

\leq 95%

Protection

IP66, TVS 6000 V lightning proof; surge protection; voltage transient
protection

Structure

Product Dimensions

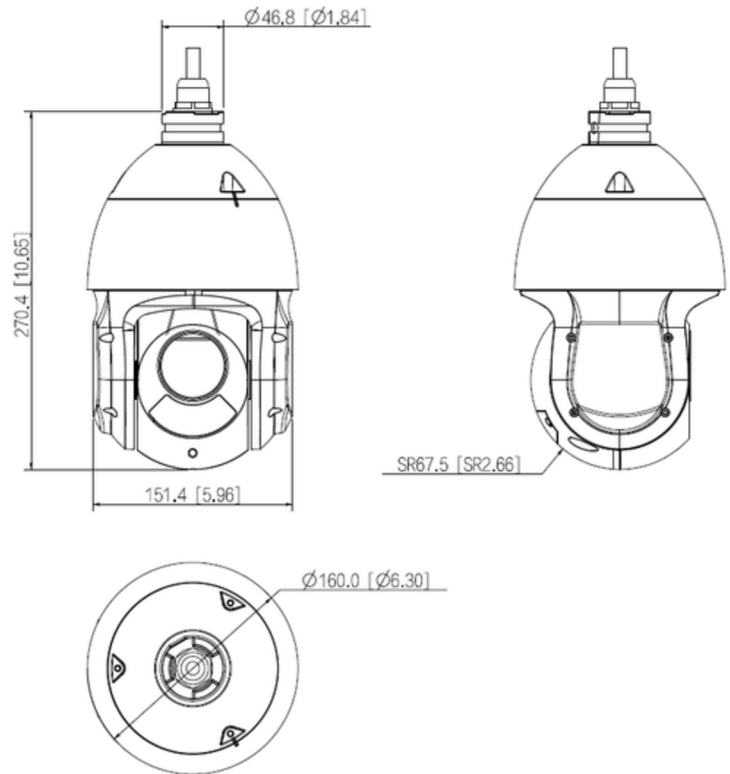
270.4 mm \times Φ 160 mm (10.65" \times Φ 6.30")

Net Weight

2.6 kg (5.73 lb)

Gross Weight

4.2 kg (9.26 lb)



Innovative Full Modular Protection Tower