DH-SDZ4032-HNR-ZB

4MP 32x Starlight Zoom Network Camera

WizSense

- 32x optical zoom
- Starlight technology
- H.265 encoding
- Perimeter protection
- Face detection
- Smart capture
- Supports PoE

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 meet most of the requirements of video surveillance applications.

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. Improves 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.

Metadata

Metadata is attribute information extracted from a target which can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ WizMind camera: Human face, human body, motor vehicle and non-motor vehicle. Facial information includes gender, age, glasses, etc. Human body information includes hat, top, top color, bottom, bottom color, bag, etc. Motor vehicle information includes plate color, type, vehicle color, sunshield, ornament, calling, seatbelt, smoking, annual inspection sticker, etc. Non-motor vehicle information includes type, color, top type, top color, people number, etc.

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.

Face Detection

6 attributes and 4 expressions: Gender, age, glasses, expressions (surprise, calm, happy and confused); Support face cutout: Face, one-inch photo.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	4MP
Max. Resolution	2560 (H) x 1440 (V)
ROM	256 MB
RAM	1 GB
Electronic Shutter Speed	1/3 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 Lux@F1.35 B/W: 0.0005 Lux@F1.35 0 Lux (IR light/laser on)

Lens

Focal Length	4.8 mm–135 mm
Max. Aperture	F1.5–F4.0
Field of View	H: 55.8°–2.3°; V: 31.9°–1.3°; D: 63.7°–2.7°
Optical Zoom	32x
Focus Control	Auto; Semi-Auto; Manual
Close Focus Distance	0.1 m–1.5 m (0.33 ft–4.92 ft)
Iris Control	Auto; Semi-Auto; Manual

DORI Distance	Detect	Observe	Recognize	Identify
	2700 m (8858.27 ft)	1066 m (3497.38 ft)	540 m (1771.65 ft)	270 m (885.83 ft)

PTZ

Preset	300
Power-off Memory	Yes
Idle Motion	Preset; Tour; Pattern; Scan

Artificial Intelligence

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.
Smart Capture	Support human, motor vehicle and non-motor vehicle image capture.
Face Detection	Yes

Video

Compression	H.265; Smart H.265+; Smart H.264+; H.264; MJPEG (Sub Stream)
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Frame Rate	Main stream: 4M/1080p/720p (1-25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 720p (1–25/30 fps)
Bit Rate Control	Variable; Constant

Bit Rate	H.264: 2816 kbps–8192 kbps H.265: 1024 kbps –7936 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	Yes
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural; street lamp
Gain Control	Auto; Manual
Noise Reduction	2D; 3D
Motion Detection	Yes
Region of Interest (RoI)	Yes
Defog	Digital
Flip	180°
S/N Ratio	≥ 55 dB

Audio

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

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; QoS; FTP; SMTP; UPnP; SNMP; DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; SNMP v1/v2c/v3 (MIB-2); RTCP; RTMP
Interoperability	ONVIF (Profile S&G&T); CGI
Streaming Method	Unicast; multicast
User/Host	20 (total bandwidth: 64 MB)
Storage	Imou cloud; FTP; Micro SD card (max. 512 GB); NAS
Browser	IE7 and later Chrome Firefox Safari
Management Software	Smart PSS; DSS; IVSS; NVR; ConfigTool; Smart Player; Imou
Mobile Phone	iOS; Android

Certification

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

Port

Audio I/O	1/1
Two-way Audio	Yes
Alarm I/O	2/1
Alarm Linkage	Capture; preset; tour; pattern; SD card recording; triggering on-off value output; sending email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection

Power

Power Supply	12 V DC, 1.5A ± 10% PoE (802.3af)
Power Consumption	6W

Environment

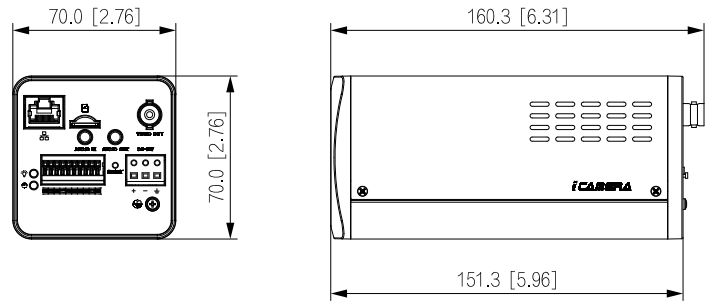| Operating Temperature	−25 °C to +60 °C (−13 °F to +140 °F)
Operating Humidity	≤ 95%RH
Protection	TVS 6000V lightning proof; surge protection; voltage transient protection

Certification

Certification	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Structure

Dimensions	160.3 mm × 70.0 mm × 78.0 mm (6.31" × 2.76" × 3.07") (L × W × H)
Net Weight	0.8 kg (1.76 lb)

Dimensions (mm[inch])

70.0 [2.76] 70.0 [2.76] 160.3 [6.31] 151.3 [5.96]

Ordering Information

Type	Model	Description
4M Camera	DH-SDZ4032-HNR-ZB	4MP 32x Starlight Zoom Network Camera, PAL
	DH-SDZ4032N-HNR-ZB	4MP 32x Starlight Zoom Network Camera, NTSC
	SDZ4032-HNR-ZB	4MP 32x Starlight Zoom Network Camera, PAL
	SDZ4032N-HNR-ZB	4MP 32x Starlight Zoom Network Camera, NTSC
Accessories	Mount Adapter	Mount Adapter[Included]

Installation