DH-SD6C3432GB-HNR-AGQ-PV1-EAU

4MP 32x Starlight TiOC WizSense Network 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

The Three-in-One Camera (TiOC) solution combines 24/7 monitoring, active deterrence and real-time alarms with artificial intelligence into one smart, innovative solution. TiOC PTZ cameras adopt auto-tracking 3.0 technology, greatly improving the monitoring scope of key targets. For distributors and installers, it not only saves time, but also reduces cost.
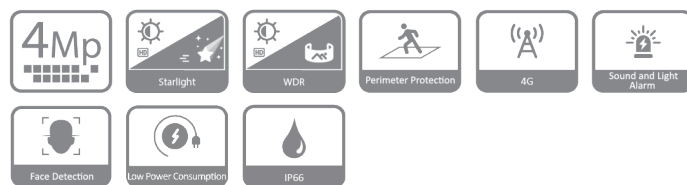
Functions

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.

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.

· 1/2.8" 4Megapixel STARVIS™ CMOS.

· 32x optical zoom.

· Starlight technology.

· Max. 25/30fps@4MP.

· IR distance up to 150 m.

· Auto-tracking 3.0.

· Perimeter protection.

· Face detection.

· 4G

· SMD 4.0.

· Smart Dual Light.

· IP66.

| 4Mp | Starlight | WDR | Perimeter Protection | 4G | Sound and Light Alarm |
| Face Detection | Low Power Consumption | IP66 | | | |

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.

Protection (−10% to +25%, 6 kV)

Designed with −10% to +25% input voltage tolerance, the camera is suitable for even the most unstable outdoor conditions. Its 6 kV lightning rating ensures protection against lightning for both the camera and its structure.

Siren and Light Active Deterrence

The camera supports the red-blue light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in the alarm voice, and supports customized voice importing.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	4 GB
RAM	1 GB
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); 0 lux (illuminator on)
Illumination Distance	150 m (492.13 ft) (IR); 50 m (164.04 ft) (white light)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	2 (IR light); 2 (dual light fusion)

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	0.1 m–1.5 m (0.33 ft–4.92 ft)			
Iris Control	Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	3,080 m (10104.99 ft)	1,216.6 m (3991.47 ft)	616 m (2021.00 ft)	308 m (1010.50 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless; Tilt: −20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–160°/s; Tilt: 0.1°/s–120°/s
Preset Speed	Pan: 240°/s; Tilt: 150°/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

Intelligence

Video Metadata	Detects motor and non-motor vehicles, faces and human bodies. It also performs tracking, takes snapshots, uploads high-quality face images and optimizes images. It extracts attributes from motor vehicles, detecting up to 10 attributes for them.
IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; human alarm classification; linkage tracking
Face Detection	Supports face detection, optimization, capturing pictures, uploading high-quality face snapshots and enhancing face images. Attribute Extraction is also supported, where 6 attributes and 8 expressions can be detected. 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, quality first, and selecting a preferred image among a group of snapshots.
Construction Detection	Detects 6 helmet colors: Red, orange, yellow, blue, white, and black. An alarm will be triggered when a person is not wearing a helmet or when the color of the helmet that they are wearing does not match the configured color. It also supports compliance detection for work uniforms. Up to 5 work uniform sample libraries can be uploaded, which together can contain up to 1,000 images (the images must be 1080p and in the JPG format). An alarm will be triggered when the similarity between the detected work uniform and the samples in the library is below the set threshold (that is, below the minimum compliance standard for work uniforms). The system supports detecting the attributes of work uniforms such as the color of the uniform, and whether or not the person is wearing a mask and wearing shoe covers. An alarm will be triggered when the target is detected as not meeting the set requirements. It also detects and triggers alarms when only one person is in the construction site, and when no one is present in the detection area such as when a worker leaves their post or an area is left unmanned.
Auto Tracking	Auto tracking 3.0
SMD	SMD4.0
Acupick	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets.
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.

Active Deterrence

Light Warning	Red-Blue light warning; Flash duration: 5 s–30 s; Flash frequency: High, medium, low
Sound Warning	Sound warning alarm: Customizable; Volume: Volume: 0-100; Alarm duration: 5 s–30 s

Video

Video Compression	H.264H; H.264B; Smart H.265+; H.264; H.265; Smart H.264+; MJPEG (Sub Stream 1)
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); 1.3M (1280 × 960); D1 (704 × 576/704 × 480); VGA (640×480); CIF(352×288/352×240)
Video Frame Rate	Main stream: 4M/3M/2304 × 1296/1080p/1.3M/720p @(1–25/30 fps); Sub stream 1: D1/VGA/CIF@ (1–25/30 fps); Sub stream 2: 1080p/1.3M/720p/CIF @(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; Multiple colors available
S/N Ratio	≥55 dB

Audio

Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723

Network

Network Port	RJ-45 (10/100 Base-T)
Wireless Carrier Frequency Band	LTE-FDD: Seven-Band B1/3/5/7/8/20/28 LTE-TDD: Tri-Band 38/40/41 WCDMA: Tri-Band 1/5/8 GSM: Band3/5/8
Power Transmission	CE: 4G: Power class3: 23 dBm ±2.7 dB 3G: Power class3: 24 dBm +1/-3 dB 2G: Power class0: 30 dBm ±2 dB (GSM1800/1900) Power class5: 33 dBm ±2 dB (GSM850/900)
Network Protocol	FTP;RTMP;IPv6;Bonjour;IPv4;DNS;RTCP;PPPoE;NTP;RTP;802.1x;QoS;HTTPS;SNMP;TCP/IP;DDNS;UPnP;NFS;ICMP;UDP;IGMP;HTTP;SSL;DHCP;SMTP;RTSP;ARP
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI; SDK
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	IE 9 and later versions; Chrome 41 and later versions; Firefox 50 and later versions; Safari 10 and later versions
Management Software	DMSS; DSS Pro
Mobile Client	iOS; Android

Port

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; built-in speaker (mutually exclusive)
Alarm Input	2 (on-off value input: 0–5 VDC)
Alarm Output	1 channel
Alarm Linkage	Capture; recording; send email; preset; tour; pattern; alarm digital output; audio; warning light
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection

Power

Power Supply	12 VDC, 4 A (−10% to +25%)
Power Consumption	Deep sleep: 0.12 W Light sleep: 2.64W Basic: 7 W (not pulling stream in 4G); 8 W (pulling stream in 4G); Basic: 11 W (illuminator + not pulling stream in 4G), 12 W (illuminator + pulling stream in 4G) Max: 18 W (illuminator + red and blue alarm lights + speaker + 4G + PTZ)

Environment

Operating Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IP66; TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	325.0 mm × Φ211.0 mm (12.80" × Φ8.31")
Net Weight	4.2 kg (9.26 lb)
Gross Weight	6.7 kg (14.77 lb)

Ordering Information

Type	Model	Description
PTZ Camera	DH-SD6C3432GB-HNR-AGQ-PV1-EAU	4MP 32x Startlight TiOC WizSense Network PTZ Camera
	SD6C3432GB-HNR-AGQ-PV1-EAU	4MP 32x Startlight TiOC WizSense Network PTZ Camera
Accessories	PFB305W	Wall Mount Bracket
	DC12V/4A	Power Adapter
	PFA111	Mount Adapter
	PFB301C	Ceiling Mount Bracket
	PFB300C	Ceiling Mount Bracket
	PFA126	Junction Box
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFB301S-E	Plane Mount Bracket
	PFB303S	Parapet Mount Bracket

Accessories

Included:

PFB305W
Wall Mount Bracket

DC12V/4A
Power Adapter

Optional:

PFA111
Mount Adapter

PFB301C
Ceiling Mount
Bracket

PFB300C
Ceiling Mount
Bracket

PFA126
Junction Box

PFA150
Pole Mount
Bracket

PFA151
Corner Mount
Bracket

PFB301S-E
Plane Mount
Bracket

PFB303S
Parapet Mount
Bracket

Wall Mount	Ceiling Mount	Ceiling Mount
PFB305W+PFA126	PFA111+PFB300C	PFA111+PFB301C
Pole Mount(Vertical)	Corner Mount	Pole Mount(Horizontal)
PFB305W+PFA150	PFB305W+PFA151	PFA111+PFB300C+PFA150
Plane Mount	Parapet Mount	
PFB301S-E	PFA111+PFB303S	

Dimensions (mm[inch])

Φ46.80[Φ1.84]

325.00[12.80]

Φ211.00[Φ8.31]

SR85.00[SR3.35]

Φ202.00[Φ7.95]