DH-SD6C3425XB-HNR-A-PV1

4MP 25x Starlight IR 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

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 can meet most of the requirements of video surveillance applications.

Functions

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.

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.

Smart Capture

Supports human, motor vehicle and non-motor vehicle image capture.

- 1/2.8" 4Megapixel STARVIS™ CMOS
- Powerful 25x optical zoom
- Starlight technology
- IR distance up to 150 m
- Perimeter protection
- Face detection
- Metadata
- Full-color illuminator; red and blue warning light
- IP66
- Smart dual illuminators (recommended to use within 50 m)

4Mp	Starlight	Perimeter Protection	Video Metadata	Face Detection	IP66

Face Detection

Supports 6 attributes and 8 expressions: Gender, age, glasses, mask, beard and expressions (anger, sadness, disgust, fear, surprise, calm, happiness, and confusion). It also supports face cutout settings: Face, and single inch photo. Three snapshot methods are also featured: Real-time snapshot, priority snapshot, and quality priority.

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.

Siren and Light Active Deterrence

The camera supports the red and 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)
Electronic Shutter Speed	1/1 s–1/30,000 s
ROM	4 GB
RAM	1 GB
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)
Illumination Distance	150 m (492.13 ft) (IR) 50 m (164.04 ft) (white light)
Illuminator Number	2 (IR light) 2 (dual light fusion)

Lens

Focal Length	4.8 mm–120 mm
Max. Aperture	F1.6–F3.5
Field of View	H: 55.8°–2.9°; V: 31.6°–1.6° ; D: 63.7°–3.3°
Optical Zoom	25×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.8 m–5.0 m (2.62 ft–16.40 ft)
Iris Control	Auto; manual

DORI Distance	Detect	Observe	Recognize	Identify
	1,655 m (5,429.79 ft)	653 m (2,142.39 ft)	331 m (1,085.96 ft)	165 m (541.34 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–60°/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	Preset; Tour; Pattern; Scanning
PTZ Protocol	DH-SD Pelco-P/D (auto recognition)

Intelligence

Video Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture.
IVS (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.

Face Detection	Yes
SMD	Yes
Auto Tracking	Yes

Active Deterrence

Light Warning	Red and blue warning light Flash duration: 5 s–30 s Flash frequency: High, medium, low
Sound Warning	Sound warning alarm: Customizable

Video

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264B; H.264H; MJPEG
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2048 × 1536); 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 (1–25/30 fps) Sub stream 2: 1080p/1.3M/720p (1–25/30 fps)
Bit Rate Control	CBR; VBR
Video Bit Rate	Default resolution of the main stream: H264: 2816 kbps–8192 kbps H265: 1024 kbps–7936 kbps
Day/Night	Auto (ICR); Color; B/W
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; manual; tracking; indoor; outdoor; outdoor auto; sodium lamp; sodium lamp auto
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	EIS
Defog	Electric
Digital Zoom	16×
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view; supports multiple colors and mosaic blocks
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; G.722.1; G.729; MPEG2-Layer2; G723; PCM

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; SSL; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; IP Filter; RTMP; Bonjour; TCP; SMB; NFS
User/Host	20 (total bandwidth: 64 M)
Interoperability	ONVIF (Profile S&G&T)

Storage	FTP; Micro SD card (256 GB); NAS
Browser	IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari
Management Software	Smart PSS; DSS; DMSS; Easy4ip; IVSS; player; configtool; NVR; Smart Player
Mobile Client	iOS; Android; iPhone; iPad; Windows Phone

Certification

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

Port

Audio Input	1 (LINE IN; bare wire)
Audio Output	1 channel (LINE OUT, bare wire; built-in speaker (mutually exclusive))
Alarm Input	2-ch, digital input (0–5 VDC)
Alarm Output	1-ch
Alarm Linkage	Capture; preset; tour; pattern; recording; alarm digital input; send email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection

Power

Power Supply	24 VDC, 2.5 A (± 25%) (included) PoE+ (802.3at)
Power Consumption	Basic: 13 W Max.: 23 W (illuminator + red and blue warning light+speaker + PTZ working)

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

Casing	ADC12
Product Dimensions	325.3 mm × Φ202.0 mm (12.81" × Φ7.95") (H × D)
Net Weight	4.6 kg (10.14 lb)
Gross Weight	9.1 kg (20.06 lb)

Ordering Information

Type	Part Number	Description
4M WizSense PTZ Camera	DH-SD6C3425XB-HNR-A-PV1	4MP 25x Starlight IR PTZ AI Network Camera
	SD6C3425XB-HNR-A-PV1	4MP 25x Starlight IR PTZ AI Network Camera
Accessories	DC24V/2.5A	Power Adapter
	PFB305W	Wall Mount Bracket
	PFA111	Mount Adapter
	PFB300C	Ceiling Mount Bracket
	PFB301C	Ceiling Mount Bracket
	PFB303S	Parapet Mount Bracket
	PFB301S-E	Plane Mount Bracket
	PFA151	Corner Mount Bracket
	PFA150	Pole Mount Bracket

Accessories

Included:

DC24V/2.5A
Power Adapter

PFB305W
Wall Mount
Bracket

Optional:

PFA111
Mount
Adapter

PFB300C
Ceiling Mount
Bracket

PFB301C
Ceiling Mount
Bracket

PFB303S
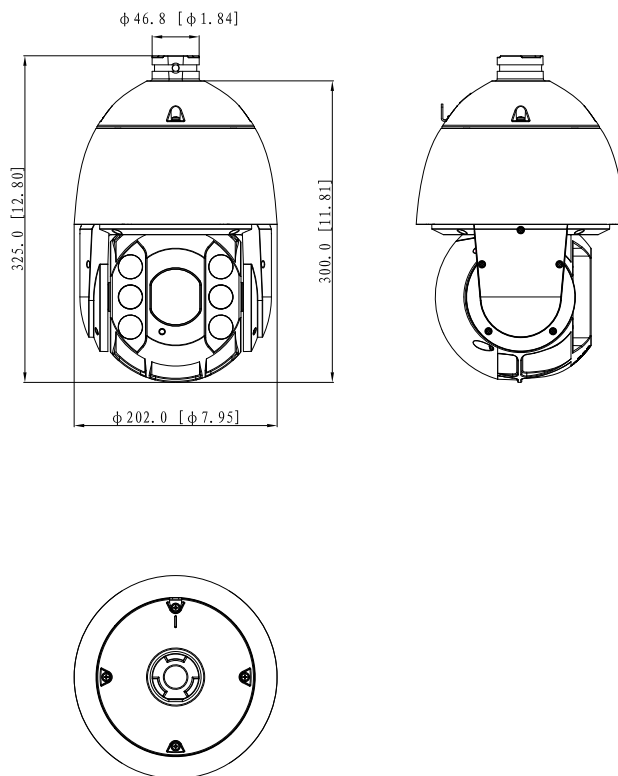Parapet Mount
Bracket

PFB301S-E
Plane Mount
Bracket

PFA151
Corner Mount
Bracket

PFA150
Pole Mount
Bracket

Wall Mount	Ceiling Mount	Ceiling Mount
PFB305W	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])

φ46.8 [φ1.84]

325.0 [12.80]

300.0 [11.81]

φ202.0 [φ7.95]