DH-SDT4E425-8P-GB-APV1
8MP+4MP 25x Starlight TiOC Network Panoramic & 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.

Series Overview

Designed with more lens than the conventional PTZ camera, the X-Spans series camera captures an expansive view, producing wide, vivid images. It has the combined power of the panoramic and detail camera in its structure and is highly cost-effective, greatly reducing the installation cost of security systems. It also leverages its two cameras to perform smart tracking, and has an independent mode that allows you to separately use each camera.

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.

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.

· Panorama：Outputs 180° wide angle splicing image
· Detail: 1/2.8"4Megapixel STARVIS™ CMOS
· 25x optical zoom
· Max. 25/30 fps@8M
· IR distance up to 100 m
· Auto tracking 3.0
· Smart tracking
· Perimeter protection
· Active deterrence
· Smart dual light +

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 (IP66, TVS 6000 V)
IP66, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

Smart Dual Light
Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

Smart Tracking
Automatically tracks moving targets, keeping them on the monitoring screen. With its flexible design, human, motor vehicle and non-motor vehicle targets can be set to be tracked. These parameters can also be combined. Targets are immediately tracked when detection rules (such as tripwire and intrusion) are triggered.

Siren and Light Active Deterrence
Dahua siren and light active deterrence network camera supports the white light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in one voice, and supports customized voice importing.

Technical Specification

Camera

Image Sensor	Panorama: 1/2.7" CMOS; Detail: 1/2.8" CMOS
Pixel	Panorama: 8 MP; Detail: 4 MP
Max. Resolution	Panorama: 4096 × 1860; Detail: 2560 × 1440
ROM	Panorama: 4 GB; Detail: 4 GB
RAM	Panorama: 2 GB; Detail: 1 GB
Electronic Shutter Speed	1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Panorama: 0.005 lux@F1.4 (Color, 30 IRE); 0.0005 lux@F1.4 (B/W, 30 IRE); 0 lux (illuminator on) Detail: 0.005 lux@F1.6 (Color, 30 IRE); 0.0005 lux@F1.6 (B/W, 30 IRE); 0 lux (illuminator on)
Illumination Distance	Panorama: 30 m (98.43 ft) (IR); 30 m (98.43 ft) (white light) Detail: 100 m (328.08 ft) (IR); 50 m (131.23 ft) (white light)
Illuminator On/Off Control	Panorama: Manual; Auto; Off Detail: Zoom Prio; Manual; Auto; Off
Illuminator Number	Panorama: 2 (IR light); 2 (White light); Detail: 2 (IR light); 2 (Warm light)

Lens

Focal Length	Panorama: 2.8 mm; Detail: 5 mm–125 mm
Max. Aperture	Panorama: F1.4; Detail: F1.6-F3.6
Field of View	Panorama: H: 180°; V: 86°; Detail: H: 51.9°–3.0°; V: 39.7°–2.2°; D: 63.1°–3.7°
Optical Zoom	Panorama: NA;Detail: 25 ×
Focus Control	Auto; manual; semi-auto
Close Focus Distance	Panorama: 0.6 m (1.97 ft); Detail: 0.1 m–0.5 m (0.33"–1.64")
Iris Control	Panorama: NA; Detail: Auto; manual; iris prio

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	Panorama: 2.8 mm; Detail: 5 mm–125 mm	2,500 m (8202.10 ft)	987.5 m (3239.83 ft)	500 m (1640.42 ft)	250 m (820.21 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: −15° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–180°/s; Tilt: 0.1°/s–90°/s
Preset Speed	Pan: 0.1°/s–180°/s;
	Tilt: 0.1°/s–90°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Preset;Pattern;Tour;Scan

Intelligence

IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; human alarm classification; linkage tracking
Auto Tracking	Auto tracking 3.0
SMD	SMD 4.0

Active Deterrence

Light Warning	Red-Blue light warning; Flash duration: 5 s–30 s; Flash frequency: high, medium, low
Sound Warning	Offers 11 sound alarm and 10 custom sound alarms can be imported. Sound can be set from 0%–100%. Play times can be set from 1-10.

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264B;H.264M;H.264H;MJPEG(Sub Stream 1)
Streaming Capability	3 streams
Resolution	Panorama: 8M (4096 × 1860); 2M (2048 × 928); 1080p (1920 × 1080); 720p (1280 × 720); 1024 × 448; D1 (704 × 576/704 × 480);VGA (640 × 480);CIF (352 × 288/352 × 240); Detail: 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480);VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Panorama: Main stream: 4096 × 1860 @(1–25/30 fps) Sub stream 1: 1024 × 448/D1/VGA/CIF@ (1–25/30 fps) Sub stream 2: 2048 × 928/1080p/1.3M/720p @(1–25/30 fps); Detail: Main stream: 4M/3M/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/ @(1–25/30 fps
Bit Rate Control	CBR/VBR
Video Bit Rate	Panorama: H264: 128 kbps–16,384 kbps H265: 51 kbps–13,312 kbps ; Detail: H264: 96 kbps–16,384 kbps H265: 38 kbps–10,240 kbps;
Day/Night	Panorama: Auto; Color; B/W; Electronic Detail: Auto; Color; B/W; Electronic
BLC	Yes
WDR	Panorama: DWDR; Detail: 120 dB

HLC	Yes
White Balance	Panorama: Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp Detail: Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Panorama: Auto; manual; gain prio Detail: Auto; manual; gain prio
Noise Reduction	Panorama: 2D NR; 3D NR Detail: Auto: 2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Panorama: NA Detail: Optical Image Stabilization (OIS)
Defog	Panorama: Electronic Detail: Electronic
Digital Zoom	Panorama: NA Detail: 16 ×
Image Rotation	Panorama: NA Detail: 180°
S/N Ratio	Panorama: ≥55 dB Detail: ≥55 dB

Audio

Audio Compression	PCM, G.711A, G.711Mu, G.726, MPEG2-Layer2, G.722.1, G.729

Network

Network Port	RJ-45 (100/1,000 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;IGMP;ARP;RTCP;RTP;PPPoE;RTMP;Bonjour;NFS
Interoperability	ONVIF (Profile S & Profile G & Profile T);CGI;SDK;P2P
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	web5.0: IE 9 and later versions; Chrome 41 and later versions; Firefox 52 and later versions; Safari 10 and later versions
Management Software	DMSS;DSS Pro
Mobile Client	iOS;Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
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; network disconnection detection; IP conflict detection; memory card state detection; memory space detection

Power

Power Supply	12 VDC, 3 A ± 10%;PoE (802.3at)
Power Consumption	Basic: 14 W; Max: 25 W (illuminator + heating glass + Siren and Light Active Deterrence + ICR + PTZ)

Environment

Operating Temperature	−40 °C to +65 °C (−40 °F to +149 °F)
Operating Humidity	≤95%
Protection	IP66;TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	194.2 mm × 160 mm × 311 mm (7.65" × 6.30" × 12.24") (L × W × H)
Net Weight	3.1 kg (6.83 lb)
Gross Weight	3.1 kg (6.83 lb)

Ordering Information

Type	Model	Description
Network PTZ Camera	DH-SDT4E425-8P-GB-APV1	8MP+4MP 25x Starlight TiOC Network Panoramic & PTZ Camera
Accessories (Optional)	DH-PFB301S-E	DH-PFB301S-E
	DH-PFB300C	Ceiling Mount Bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFA151	Corner mount bracket
	PFA111	Mount Adapter Component
	DH-PFB303S	DH-PFB303S
	DH-PFA126	Water-proof Junction Box

Accessories

Optional:

DH-PFB301S-E
DH-PFB301S-E

DH-PFB300C
Ceiling Mount Bracket

DH-PFA150
Pole Mount Bracket

DH-PFA151
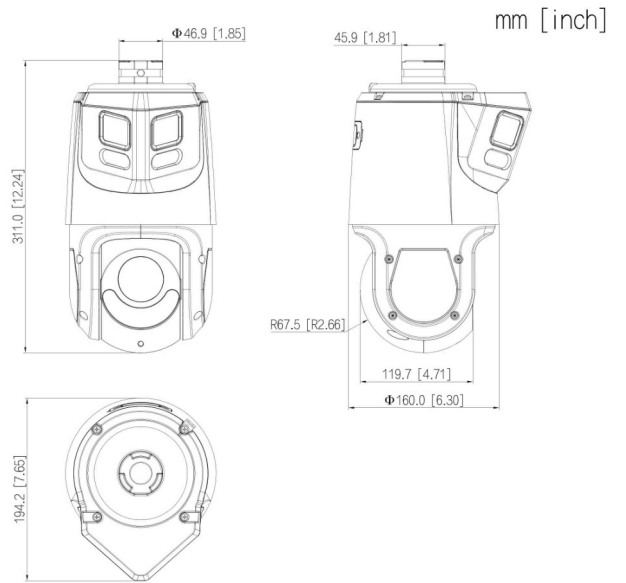Corner mount bracket

PFA111
Mount Adapter
Component

DH-PFB303S
DH-PFB303S

DH-PFA126
Water-proof Junction Box

Dimensions (mm[inch])

mm [inch]

Wall Mount	Ceiling Mount 1	Ceiling Mount 2
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	