

DH-SDT4E425-4F-GB-A-PV1

X-Spans 4MP+4MP 25x 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

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 Tracking

The panoramic camera links with the detail camera to track targets. When the target enters the panoramic area, the detail camera starts to monitor them and tracks their movement by rotating, zooming and focusing the PTZ camera lens. This allows the camera to produce highly detailed images with the movement of targets for security personnel.

- Panorama: 1/2.8" 4Megapixel F1.0 CMOS.
- Detail: 1/2.8" 4Megapixel STARVIS™ CMOS.
- 25x optical zoom.
- Max. 25/30fps@4M.
- IR distance up to 100 m.
- Auto tracking 3.0.
- Smart tracking.
- Perimeter protection.
- Active deterrence.
- Smart dual light +.



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.

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 +

Both the panoramic camera and detail camera support smart dual light. In intelligent illumination mode, the channels of both cameras can switch together from one type of image to another. When a target enters the panoramic area, both channels switch from displaying black and white images to color images at the same time. After the target leaves, they both simultaneously switch back to black and white.

Technical Specification					Power-off Memory		Yes
Camera							
Image Sensor		Panorama: 1/2.8" CMOS; Detail: 1/2.8" CMOS					
Pixel		Panorama: 4 MP; Detail: 4 MP					
Max. Resolution		Panorama: 2560 (H) × 1440 (V); Detail: 2560 (H) × 1440 (V)					
ROM		Panorama: 4 GB; Detail: 4 GB					
RAM		Panorama: 1 GB; Detail: 1 GB					
Electronic Shutter Speed		Panorama: 1/3s-1/100000s; Detail: 1s-1/30000s					
Scanning System		Progressive					
Min. Illumination		Panorama: 0.001 lux@F1.0 (Color, 30 IRE); 0.0005 lux@F1.0 (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 (164.04 ft) (white light)					
Illuminator On/Off Control		Panorama: Auto; Manual; Off; Detail: Zoom Prio; Auto; Manual; Off					
Illuminator Number		Panorama: 2 (IR); 2 (white light); Detail: 2 (IR); 2 (dual light Fusion)					
Lens							
Focal Length		Panorama: 2.8 mm; Detail: 5 mm–125 mm					
Max. Aperture		Panorama: F1.0; Detail: F1.6–F3.6					
Field of View		Panorama: H: 101°; V: 53°; D: 120°; 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; semi-auto; manual					
Close Focus Distance		Panorama: 0.2 m (0.66 ft); Detail: 0.1 m–0.5 m (0.33 ft–1.64 ft)					
Iris Control		Auto; manual					
DORI Distance		Detect	Observe	Recognize	Identify		
		2500 m (8202.10 ft)	987.5 m (3239.83 ft)	500 m (1640.42 ft)	250 m (820.21 ft)		
PTZ							
Pan/Tilt Range		Panorama camera: Tilt: 13° to 23°; Detail camera: Pan: 0° to 360° endless; Tilt: –15° to 90°, auto flip 180°					
Manual Control Speed		Pan: 0.1°/s–200°/s; Tilt: 0.1°/s–120°/s					
Preset Speed		Pan: 240°/s; Tilt: 200°/s					
Preset		300					
Tour		8 (up to 32 presets per tour)					
Pattern		5					
Scan		5					

Idle Motion		Pattern; Preset; Scan; Tour
Intelligence		
IVS (Perimeter Protection)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linking the detail camera to track objects	
Auto Tracking	Yes	
SMD	SMD4.0	
Quick Pick	Yes	
Active Deterrence		
Light Warning	Red-blue light warning Flash duration: 5 s–30 s Flash frequency: high, medium, low	
Sound Warning	Offers 11 sound alarms and supports importing custom sound alarms.	
Video		
Video Compression	H.265; H.264B; H.264; H.264H; MJPEG(Sub Stream 1); smart H.265+; smart H.264+	
Streaming Capability	3 streams	
Resolution	Panorama: 4M (2560 × 1440); 3M (2048 × 1536); 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) Detail: 4M (2560 × 1440); 3M (2048 × 1536); 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	Main stream: 4 MP/3 MP/1080p/1.3 MP/720p@ (1–25/30 fps) Sub stream 1: D1/CIF/VGA@(1–25/30 fps) Sub stream 2: 1080p/1.3 MP/720p@(1–25/30 fps)	
Bit Rate Control	CBR/VBR	
Video Bit Rate	H264: 96 Kbps–14848 Kbps H265: 38 Kbps–8960 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 (Rol)	Yes	
Image Stabilization	EIS	
Defog	Electronic	
Digital Zoom	16×	

Image Rotation	180°
S/N Ratio	≥ 55 dB

Audio

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

Network Port	RJ-45 (10/100 Base-T)
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	ONVIF(Profile S&G&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

Certification

Certifications	CE: EN55032/EN55024/EN50130-4
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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
Alarm Linkage	Capture; recording; send email; preset; tour; pattern; alarm digital input; 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, 3 A ± 10%; PoE+ (802.3at)
Power Consumption	Basic: 12 W Max. (Basic power consumption + illuminator+sound and light warning +PTZ operation + Heater): 25 W (12 VDC)

Environment

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

Structure

Product Dimensions	160.0 mm × 184.4 mm × 304.6 mm (6.30" × 7.26" × 11.99")(L × W × H)
Net Weight	3.41 kg (7.52 lb)

Ordering Information

Type	Model	Description
4MP 25X TiOC WizSense Network PTZ Camera	DH-SDT4E425-4F-GB-A-PV1	X-Spans 4MP+4MP 25x TiOC WizSense Network PTZ Camera
	SDT4E425-4F-GB-A-PV1	X-Spans 4MP+4MP 25x TiOC WizSense Network PTZ Camera
Accessories	PFB305W	Wall Mount Bracket
	DC12V/3A	Power Adapter
	PFA126	Mount Adapter
	PFA111	Mount Adapter
	PFB300C	Ceiling Mount Bracket
	PFB301C	Ceiling Mount Bracket
	PFA151	Corner Mount Bracket
	PFA150	Pole Mount Bracket
	PFB303S	Parapet Mount Bracket
	PFB301S-E	Plane Mount Bracket

Accessories

Included:



PFB305W
Wall Mount
Bracket

Optional:



DC12V/3A
Power Adapter



PFA126
Mount Adapter



PFA111
Mount Adapter



PFB300C
Ceiling Mount
Bracket



PFB301C
Ceiling Mount Bracket



PFA151
Corner Mount Bracket



PFA150
Pole Mount Bracket



PFB303S
Parapet Mount Bracket



PFB301S-E
Plane Mount Bracket

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	

Dimensions (mm[inch])

