DH-SDT4E425-4F-GB-A-PV1-S2

4+4MP 25x Smart Dual Illumination Active Deterrence X-Spans Network PTZ Camera



Xinghan X-Spans

- Overview channel: 1/2.8" 4Megapixel F1.0 CMOS
- Detail channel: 1/2.8"4Megapixel STARVIS™ CMOS
- 25× optical zoom
- Max. 25/30 fps@4M
- IR distance up to 100m
- Xinghan Large-Scale AI Models
- Auto tracking 3.0
- Smart tracking
- Perimeter protection
- Active deterrence
- Smart dual light +
- Built-in dual mics and a speaker for two-way talk



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

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.

AI-ISP

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

AcuPick

This industry-leading search technology effectively utilizes both front-end and back-end intelligence to help with searching through massive video data to quickly and conveniently locate targets with greater precision.

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.

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.

SMD

Empowered by deep-learning algorithms, Dahua SMD filters out motion detection alarms triggered by targets that are not a concern. It quickly recognizes humans and vehicles, triggering alarms when an intrusion occurs.

Protection (IP66, TVS 6000 V)

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

Technical Specification

Camera

Image Sensor	Overview channel: 1/2.8" CMOS; Detail channel: 1/2.8" CMOS
Pixel	Overview channel: 4 MP; Detail channel: 4 MP
Max. Resolution	Overview channel: 2560 (H) × 1440 (V); Detail channel: 2560 (H) × 1440 (V)
ROM	Overview channel: 4 GB; Detail channel: 4 GB
RAM	Overview channel: 2 GB; Detail channel: 1 GB
Electronic Shutter Speed	Overview channel: 1/3s-1/100000s Detail channel: 1s-1/30000s
Scanning System	Progressive
Min. Illumination	Overview channel: 0.001 lux@F1.0 (Color, 30 IRE) 0.0005 lux@F1.0 (B/W, 30 IRE) 0 lux (illuminator on) Detail channel: 0.005 lux@F1.6 (Color, 30 IRE) 0.0005 lux@F1.6 (B/W, 30 IRE) 0 lux (illuminator on)
Illumination Distance	Overview channel: 30 m (98.43 ft) (IR); 30 m (98.43 ft) (warm light) Detail channel: 100 m (328.08 ft) (IR) ; 50 m (164.04 ft) (warm light)
Illuminator On/Off Control	Overview channel: Auto; Manual; Off; Detail channel: Zoom Prio; Auto; Manual; Off
Illuminator Number	Overview channel: 2 (IR); 2 (warm light); Detail channel: 2 (IR); 2 (dual light Fusion)

Lens

Focal Length	Overview channel: 2.8 mm; Detail channel: 5 mm–125 mm
Max. Aperture	Overview channel: F1.0; Detail channel: F1.6–F3.6
Field of View	Overview channel: H: 101°; V: 53°; D: 120° Detail channel: H: 51.9°–3.0°; V: 39.7°–2.2°; D: 63.1°–3.7°
Optical Zoom	Overview channel: NA Detail channel: 25×
Focus Control	Auto; manual; semi-auto
Close Focus Distance	Overview channel: 0.2 m (0.66 ft) Detail channel: 0.1 m–0.5 m (0.33 ft–1.64 ft)
Iris Control	Overview channel: NA Detail channel: Auto; manual; iris prio

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	Overview channel: 2.8 mm	56.0 m (183.72 ft)	22.4 m (73.49 ft)	11.2 m (36.74 ft)	5.6 m (18.37 ft)
	Detail channel: W	100.0 m (328.08 ft)	40.0 m (131.23 ft)	20.0 m (65.62 ft)	10.0 m (32.81 ft)
	T	2500.0 m (8202.00 ft)	1000.0 m (3280.80 ft)	500.0 m (1640.40 ft)	250.0 m (820.20 ft)

DORI Distance	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

PTZ

Pan/Tilt Range	Overview channel: Pan: 0°; Tilt: +12° to +24° (manual) Detail channel: 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
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
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.
Smart Tracking	Auto Tracking 3.0;Linkage Tracking
SMD	SMD 4.0
AcuPick	Uses deep learning algorithms and works with backend devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets
Auto Patrol	After an IVS event occurs, the PTZ camera immediately initiates automated patrol of predefined key points to quickly cover potential risk areas and detect unknown threats in real time.

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	Overview channel: 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 channel: 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: 4M/3M/1080p/1.3M/720p@(1–25/30 fps) Sub stream 1: D1/CIF/VGA@(1–25/30 fps) Sub stream 2: 1080p/1.3M/720p@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 96 kbps–16,384 kbps H265: 38 kbps–10,240 kbps
Day/Night	Overview channel: Auto; Color; B/W; Electronic Detail channel: Auto; Color; B/W; Electronic
BLC	Yes
WDR	Overview channel: DWDR Detail channel: 120 dB
HLC	Yes
White Balance	Overview channel: Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp Detail channel: Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Overview channel: Auto; manual; gain prio Detail channel: Auto; manual; gain prio
Noise Reduction	Overview channel: 2D NR; 3D NR Detail channel: Auto: 2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Overview channel: NA Detail channel: Electronic Image Stabilization (EIS)
Defog	Overview channel: Electronic Detail channel: Electronic
Digital Zoom	Overview channel: NA Detail channel: 16×
Image Rotation	Overview channel: NA Detail channel: 180°
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view Multple colors and mosaic available
S/N Ratio	Overview channel: ≥55 dB Detail channel: ≥55 dB

Audio

Audio Compression	PCM, G.711A, G.711Mu, G.726, MPEG2-Layer2, G.722.1, G.729
Built-in MIC	Yes
Built-in Speaker	Yes

Network

Network Port	1 × 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;IGMP;ARP;RTCP;RTP;PPPoE;RTMP;Bonjour;SMB;NFS
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 iOS 10 and later versions
Management Software	DMSS;DSS Pro
Mobile Client	iOS;Android

Certification

Certifications	CE: EN 50130-4 EN 55032 EN 55035 EN 61000-3-3 EN IEC 61000-3-2 EN 62368-1

Port

Audio Input	1 channel (LINE IN, bare wire,built-in mic (mutually exclusive))
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; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Alarm I/O	2/1
Audio I/O	1/1

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)
Power Adapter	Optional

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

Casing Material	ADC12
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
Network PTZ Camera	DH-SDT4E425-4F-GB-A-PV1-S2	4+4MP 25x Smart Dual Illumination Active Deterrence X-Spans Network PTZ Camera
Accessories	PFB305W	Wall Mount Bracket
	DH-PFB301S-E	Plane Mount Bracket
	PFA114	Mount Adapter
	DH-PFB300C	Ceiling Mount Bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFA151	Corner Mount Bracket
	DH-PFB303S	Parapet Mount Bracket
	DH-PFA126	Water-proof Junction Box

Accessories

Included:



PFB305W
Wall Mount Bracket

Optional:



DH-PFA126
Water-proof Junction Box



DH-PFA150
Pole Mount Bracket



DH-PFA151
Corner Mount Bracket



DH-PFB300C
Ceiling Mount Bracket



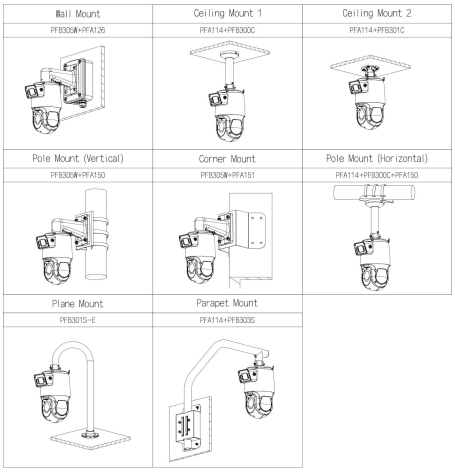
DH-PFB301S-E
Plane Mount Bracket



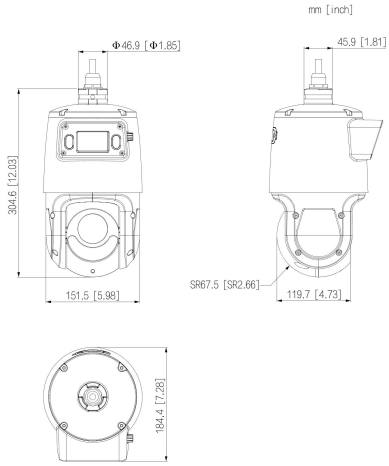
DH-PFB303S
Parapet Mount Bracket



PFA114
Mount Adapter



Dimensions (mm[inch])



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