

DH-SDT5X2425-4Z4-FA

4MP 25 Starlight+ White light & IR light Network PTZ Camera



System Overview

The multi-sensor series blends the functions of panoramic and detail cameras into its powerful design. Both the panoramic and detail cameras of this model can freely rotate on their domes to track multiple targets in a scene from different angles while keeping an eye on the monitored area. The panoramic camera is used in intelligent detection, and the detail camera is for auto-tracking. They also harness the strength of their embedded AI chips to perform a wide variety of intelligent functions, making them ideal for use in many scenarios.

Functions

Video Metadata

Metadata is information on the attributes of targets that is extracted during monitoring. It can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ WizMind cameras: Human face, human body, motor vehicle and non-motor vehicle. Face information includes gender, age, glasses, masks, beards, and more. Human body information includes hat, top, top color, bottom, bottom color, bag, and more. Motor vehicle information includes plate color, type, vehicle color, sun visor, ornament, calling, seatbelt, smoking, annual inspection sticker, and more. Non-motor vehicle information includes type, color, top type, top color, people number, and more.

Face Recognition

Face attributes are extracted from captured faces, and stored in a database where they can be conveniently searched for and compared against other images. Once a successful match is found, the system outputs the result. The Dahua Face Recognition camera supports a built-in database that stores up to 10,000 face images, allowing the camera to capture and compare face images in real time.

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.

- Dual PTZ system, dual vari-focal lens.
- 1/1.8" 4Megapixel CMOS.
- 25× optical zoom, reaching full zoom range in just 0.5 sec.
- Starlight technology.
- Max. 25/30 fps@4M.
- For video metadata, the overview channel links with the detail channel to take snapshots and recognize the attributes of people and non-motor vehicles.
- For perimeter protection, the overview channel links with the detail channel to track, take snapshots, and recognize the attributes of targets.
- AI ISP.
- Acupick.
- IP67, IK10(excluding glass window).



Dual-PTZ System

Both the panorama camera and detail camera of the Dual-PTZ system can be moved horizontally and vertically.

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.

Protection (IP67, TVS 8000 V)

IP67, TVS 8000 V lightning proof, surge protection, and voltage transient protection.

Lightning Focus

Lightning Focus delivers precise zoom and focus at lightning speed. By combining a multi-stage acceleration motorized lens with predictive focus, the camera can zoom in on a target within one second while maintaining perfect clarity. It allows the camera to capture striking details almost instantly, significantly enhancing the efficiency of intelligent monitoring.

Technical Specification

Camera

Image Sensor	Overview channel: 1/1.8" CMOS; Detail channel: 1/1.8" CMOS
Pixel	Overview channel: 4 MP; Detail channel: 4 MP
Max. Resolution	Overview channel: 2688 (H) × 1520 (V); Detail channel: 2688 (H) × 1520 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	Overview channel: 1 s–1/100,000 s Detail channel: 1 s–1/100,000 s
Min. Illumination	Overview channel: Color: 0.001 lux@F1.6 B/W: 0.0001 lux@F1.6 Detail channel: Color: 0.0005 lux@F1.2 B/W: 0.0001 lux@F1.2 0 lux (Illuminator of dual light fusion on)
Illumination Distance	Overview channel: 30 m (98.43 ft) (white light); Detail channel: 150 m (492.126 ft) (Illuminator of dual light fusion)
Illuminator On/Off Control	Overview channel: Zoom Prio; Auto; Manual; Off; Detail channel: Zoom Prio; Manual; Auto; Off
Illuminator Number	Overview channel: 4 (Warm light); Detail channel: 6 (Illuminator of dual light fusion)
Wiper	Wiper

Lens

Focal Length	2812:Overview channel: 2.8 mm–12 mm; Detail channel: 7 mm–175 mm; 0624:Overview channel: 6 mm–24 mm; Detail channel: 7 mm–175 mm
Max. Aperture	2812:Overview channel: F1.3; Detail channel: F1.2 0624:Overview channel: F1.6; Detail channel: F1.2
Field of View	2812:Overview channel: H: 97.5°–45.8°; V: 59.7°–27°; D: 110.4°–51.7°; Detail channel: H: 27°–3°; V: 15°–2°; D: 31°–4° 0624:Overview channel: H: 42°–15°; V: 23°–8°; D: 49°–17°; Detail channel: H: 27°–3°; V: 15°–2°; D: 31°–4°
Optical Zoom	Overview channel: 4x; Detail channel: 25x
Focus Control	Auto; Semi-Auto; Manual
Close Focus Distance	2812:Overview channel: 2.5 m–5.6 m (8.2 ft–18.368 ft) Detail channel: 0.5 m–3 m (1.64 ft–9.84 ft) 0624:Overview channel: 0.5 m–2 m (1.64 ft–6.56 ft) Detail channel: 0.5 m–3 m (1.64 ft–9.84 ft)

DORI Distance	2.8-12mm				
	Lens	Detect	Observe	Recognize	Identify
	Overview channel: W	59.3 m (194.59 ft)	23.4 m (76.86 ft)	11.9 m (38.92 ft)	5.9 m (19.46 ft)
	T	128.3 m (420.85 ft)	50.7 m (166.24 ft)	25.7 m (84.17 ft)	12.8 m (42.09 ft)
	Detail channel: W	220.7 m (724.05 ft)	87.2 m (286.00 ft)	44.1 m (144.81 ft)	22.1 m (72.40 ft)
	T	1655.2 m (5430.36 ft)	653.8 m (2144.99 ft)	331.0 m (1086.07 ft)	165.5 m (543.04 ft)

DORI Distance	6-24mm				
	Lens	Detect	Observe	Recognize	Identify
	Overview channel: W	110.3 m (362.02 ft)	43.6 m (143.00 ft)	22.1 m (72.40 ft)	11.0 m (36.20 ft)
	T	441.4 m (1448.09 ft)	174.3 m (572.00 ft)	88.3 m (289.62 ft)	44.1 m (144.81 ft)
	Detail channel: W	220.7 m (724.05 ft)	87.2 m (286.00 ft)	44.1 m (144.81 ft)	22.1 m (72.40 ft)
	T	1655.2 m (5430.36 ft)	653.8 m (2144.99 ft)	331.0 m (1086.07 ft)	165.5 m (543.04 ft)
*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.					

PTZ

Pan/Tilt Range	Overview channel: Pan: 0° to 360° endless; Tilt: 0° to +30°; Detail channel: Pan: 0° to 340°; Tilt: –10° to +180°
Manual Control Speed	Overview channel: Pan: 0.1°/s–100°/s; Tilt: 0.1°/s–50°/s Detail channel: Pan: 0.1°/s–360°/s; Tilt: 0.1°/s–200°/s
Preset Speed	Overview channel: Pan: 100°/s; Tilt: 50°/s Detail channel: Pan: 360°/s; Tilt: 200°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Scan	5
Power-off Memory	Yes
Idle Motion	Preset;Tour;Scan
PTZ Protocol	DH-SD Pelco-P/D (Auto recognition)

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 channel camera to track objects
Smart Tracking	Yes
SMD	SMD 4.0
Quick Pick	Yes

Intelligence

Video Metadata	Metadata is information on the attributes of targets that is extracted during monitoring. It can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ WizMind cameras: Human face, human body, motor vehicle and non-motor vehicle. Face information includes gender, age, glasses, masks, beards, and more. Human body information includes hat, top, top color, bottom, bottom color, bag, and more. Motor vehicle information includes plate color, type, vehicle color, sun visor, ornament, calling, seatbelt, smoking, annual inspection sticker, and more. Non-motor vehicle information includes type, color, top type, top color, people number, and more.
IVS (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.

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.
Face Recognition	Face attributes are extracted from captured faces, and stored in a database where they can be conveniently searched for and compared against other images. Once a successful match is found, the system outputs the result. The Dahua Face Recognition camera supports a built-in database that stores up to 10,000 face images, allowing the camera to capture and compare face images in real time.

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264;H.264B;H.264 H;MJPEG
Streaming Capability	3 streams
Resolution	Overview channel: 4M (2688 × 1520); 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 VGA (640 × 480); CIF (352 × 288/352 × 240) Detail channel: 4M (2688 × 1520); 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	Overview channel: 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) Detail channel: 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	H.264: 512 Kbps–13056 Kbps H.265: 204 Kbps–7936 Kbps
Day/Night	Overview channel: Auto; Color; B/W; Electronic Detail channel: Auto; Color; B/W; Electronic
WDR	Overview channel: 120 dB Detail channel: 120 dB
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	Auto/Manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Overview channel: Electronic Image Stabilization (EIS) 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°
S/N Ratio	Overview channel: ≥ 55 dB Detail channel: ≥ 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	HTTP;HTTPS;IPv4;RTSP;UDP;SMTP;NTP;DHCP;DNS;DDN S;IPv6;802.1x;QoS;FTP;UPnP;ICMP;SNMP;SNMPv1/v2c/v3(MIB-2);IGMP;ARP;RTP;PPPoE;RTMP;TCP
Interoperability	CGI;SDK;ONVIF (Profile S & Profile G & Profile T & Profile M)
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	IE9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Browser	IE9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	DMSS;IVSS;S Series NVR;DSS7016D-I;SmartPSS Plus;ICC-B8900;DSS-C9100
Mobile Client	iOS;Android

Certification

Certifications	CE-LVD:EN62368-1:2014+A11:2017 CE-EMC:EN 50130-4: 2011+A1:2014; EN 55032: 2015+A11:2020+A1:2020; EN 55035: 2017+A11:2020; EN 61000-3-3: 2013+A1:2019+A2:2021; EN IEC 61000-3-2: 2019+A1:2021+A2:2024 IP67:IEC60529:2013 IK10:IEC 60068-2-75:2014
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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 channel
Alarm Linkage	Capture; preset; tour; recordings on SD card; 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; illegal access

Power

Power Supply	36 VDC; 2.23 A (±25%)
Power Consumption	Basic: 29.7 W Max. (Illuminator on + Intelligence on + Wiper on + Heater on + PTZ operation): 51 W
Power Adapter	Included

Environment

Operating Temperature	–40 °C to +65 °C (–40 °F to +149 °F)
Operating Humidity	≤ 95% (RH)
Protection	IP67;IK10;TVS 8000 V lightning proof; surge protection; voltage transient protection
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.

Structure

Product Dimensions	294.5 mm × 277.0 mm × 421.6 mm (11.78" × 11.08" × 16.66") (L × W × H)
Net Weight	9 kg (19.84 lb)
Gross Weight	13.8 kg (30.36 lb)

Ordering Information

Type	Model	Description
Network PTZ Camera	DH-SDT5X2425-4Z4-FA	4MP 25 Starlight+ White light & IR light Network PTZ Camera
Accessories	PFB306W-S	Wall Mount Bracket
	DC36V/2.23A	Power Adapter
	DH-PFB711C-SG	Ceiling Mount Bracket
	DH-PFA5500-SG	Pole Mount Bracket

Accessories

Included:



PFB306W-S
Wall Mount Bracket



DC36V/2.23A
Power Adapter

Optional:

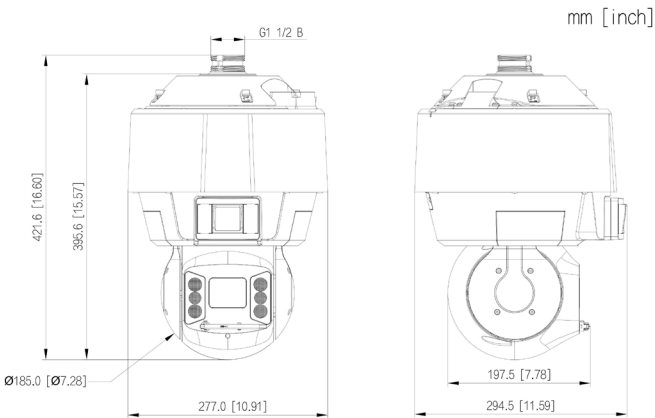


DH-PFB711C-SG
Ceiling Mount Bracket



DH-PFA5500-SG
Pole Mount Bracket

Dimensions (mm[inch])



Wall Mount	Pole Mount	Ceiling Mount
PFB306W-S	PFB306W-S+PFA5500	PFB711C-SG
Pole Mount(Horizontal)		
PFB711C-SG+PFA5500		