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DH-SDT5X425-4Z4-FA-0832

4MP Starlight IR WizMind Network Dual-PTZ Camera

WizMind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS,NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

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

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

Face Recogniton
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.

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 0.001 lux. The camera uses a set of optical features to balance light throughout the scene, producing clear images in dark environments.

- Dual PTZ system, dual vari-focal lens.
- 1/1.8" 4Megapixel CMOS.
- Powerful 25× optical zoom.
- Starlight technology.
- Max. 25/30 fps@4M.
- Deep-learning-based auto tracking and perimeter protection.
- Support Hi-PoE.
- H.265 Encoding.
- IP67.

Smart Code (H.265)	WDR	Day/Night	0.001Lux	IP67	Face Recognition	Video Metadata

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.

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.

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.

Perimeter Protecton
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.

Interoperability
The camera conforms to ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of the manufacturer.

Technical Specification

Camera

Image Sensor	Panorama: 1/1.8" CMOS Detail: 1/1.8" CMOS
Pixel	Panorama: 4 MP Detail: 4 MP
Max. Resolution	Panorama: 2688 (H) × 1520 (V) Detail: 2688 (H) × 1520 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	Panorama: 1 s–1/30,000 s Detail: 1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Panorama: Color: 0.001 lux@F1.6 B/W: 0.0001 lux@F1.6 Detail: Color: 0.001 lux@F1.6 B/W: 0.0001 lux@F1.6 0 lux (IR light on)
Illumination Distance	Panorama (white light): 30 m (98.43 ft) Detail (IR light): 100 m (328.08 ft)
Illuminator On/Off Control	Panorama: Zoom Prio; Manual; Auto; Off Detail: Zoom Prio; Manual; Auto; Off
Illuminator Number	Panorama: 4 white lights Detail: 4 IR lights

Lens

Focal Length	Panorama: 8 mm–32 mm Detail: 5.4 mm–135 mm
Max. Aperture	Panorama: F1.6 Detail: F1.6–F4.0
Field of View	Panorama: H: 42°–15°; V: 23°–8°; D: 49°–17° Detail: H: 58°–3.5°; V: 35°–2°; D: 64°–4°
Optical Zoom	Panorama: 4× Detail: 25×
Focus Control	Auto; Semi-Auto; Manual
Close Focus Distance	Panorama: 2.5 m–6 m (8.20 ft–19.69 ft) Detail: 0.5 m–7 m (1.64 ft–22.97 ft)
Iris Control	Panorama: Auto Detail: Auto

DORI Distance	Detect	Observe	Recognize	Identify
	Panorama: 400 m (1,312.34 ft) Detail: 1,724 m (5,656.17 ft)	Panorama: 159.9 m (524.61 ft) Detail: 690 m (2,263.78 ft)	Panorama: 79.9 m (262.14 ft) Detail: 345 m (1,131.89 ft)	Panorama: 39.8 m (130.58 ft) Detail: 172 m (564.30 ft)

PTZ

Pan/Tilt Range	Panorama: Pan: 0° to 360° endless Tilt: 0° to 30° Detail: Pan: 0° to 305° Tilt: −10° to 90°
Manual Control Speed	Panorama: Pan: 0.1°/s–100°/s; Tilt: 0.1°/s–25°/s Detail: Pan: 0.1°/s–400°/s; Tilt: 0.1°/s–200°/s
Preset Speed	Panorama: Pan: 100°/s; Tilt: 50°/s Detail: 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; Scan; Tour
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 and attributes extraction
IVS (Perimeter Protection)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification
Face Recognition	Yes

Video

Video Compression	H.265; H.264B; H.264; H.264H; MJPEG; smart H.265+; smart H.264+
Streaming Capability	3 streams
Resolution	Panorama: 4M (2688 × 1520); 4M (2560 × 1440); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288) Detail: 4M (2688 × 1520); 4M (2560 × 1440); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576); VGA (640× 480); CIF (352 × 288)
Video Frame Rate	Panoramic: Main stream: 4M/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/CIF (1–25/30 fps) Detail: Main stream: 4M/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/CIF (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	Panorama: Auto (ICR) Detail: Auto (ICR)
BLC	Yes
WDR	Panorama: 120 dB 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	Auto; Manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Defog	Electronic
Digital Zoom	16×
Image Rotation	180°

S/N Ratio	Panorama: ≥ 55 dB Detail: ≥ 55 dB

Audio

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

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	TCP; FTP; RTMP; IPv6; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; DDNS; UPnP; ICMP; UDP; IGMP; HTTP; DHCP; SMTP; SNMP v1/v2c/v3 (MIB-2); QoS; RTSP; ARP
Interoperability	CGI; ONVIF Profile S&G&T; GB/T28181
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB)
Browser	IE9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	DSS; NVR; Smart PSS
Mobile Client	iOS; Android

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Two-way Audio	Yes
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
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	36 VDC, 2.23 A (± 25%) Hi-PoE
Power Consumption	Basic: 21 W Max.: 40 W (PTZ, zoom, focus, IR light, white light, and smart plan enabled)

Environment

Operating Temperature	−40 °C to +65 °C (−40 °F to +149 °F)
Operating Humidity	≤ 95% (RH)
Protection	IP67; TVS 8000 V lightning protection; surge protection; voltage transient protection

Structure

Product Dimensions	385 mm × Φ277 mm (15.16" × Φ10.91")
Net Weight	9 kg (19.84 lb)
Gross Weight	13.8 kg (30.42 lb)

Ordering Information

Type	Model	Description
Dual-PTZ Camera	DH-SDT5X425-4Z4-FA-0832	4MP 25 Ordinary IR NETWORK PTZ CAMERA
Accessories	DC36V/2.23A	Power Adapter
	PFB306W-S	Wall Mount Bracket
	PFA150	Pole Mount Bracket
	PFB300C-S	Ceiling Mount Bracket

Accessories

Included:

DC36V/2.23A
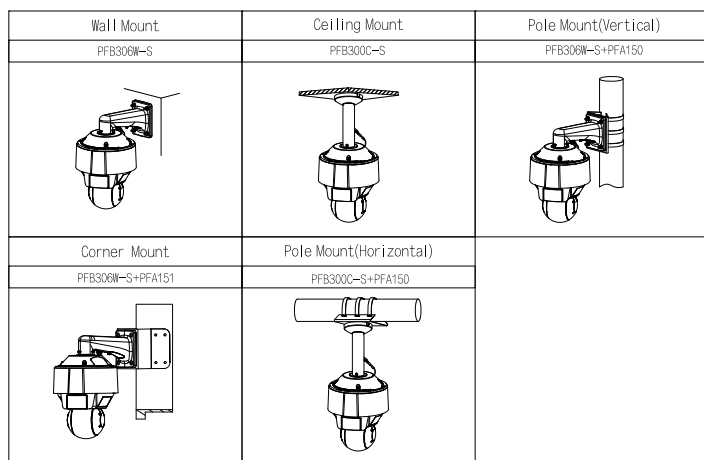Power Adapter

PFB306W-S
Wall Mount Bracket

Optional:

PFA150
Pole Mount Bracket

PFB300C-S
Ceiling Mount Bracket

Wall Mount	Ceiling Mount	Pole Mount(Vertical)
PFB306W-S	PFB300C-S	PFB306W-S+PFA150
Corner Mount	Pole Mount(Horizontal)	
PFB306W-S+PFA151	PFB300C-S+PFA150	

Dimensions (mm[inch])

G1 1/2 B

385.0 [15.16]

357.0 [14.06]

277.0 [10.91]

Ø160.0 [Ø6.30]