

DH-SDT5X425-4Z4-QA-2812

4MP Starlight IR WizMind Network Dual-PTZ Camera



Wiz Mind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, 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

Dahua PTZ WizMind network camera adopts advanced CNN deep learning algorithms to support face recognition with high accuracy. The Dual 4MP Starlight Smart Capture Camera consists of panorama camera and PTZ camera. Panorama camera captures panoramas, and then PTZ camera takes detailed snapshots of objects and keeps tracking objects after rule violations occur. This camera possesses wide monitor range and PFA algorithm that can always present a clear, focused image while zooming.

Functions

Dual-PTZ System

Panorama camera and Detail camera of the Dual-PTZ system can be adjusted horizontally and vertically.

Face Recognition

Once facial attributes are extracted from captured faces, they are stored in a database where they can be easily searched 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 facial images, helping the camera achieve real-time face capturing and comparison.

Starlight+ Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.001 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

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



PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Metadata

Metadata is attribute information extracted from a target which 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. Facial information includes gender, age, glasses, masks, beards, etc. Human body information includes hat, top, top color, bottom, bottom color, bag, etc. Motor vehicle information includes plate color, type, vehicle color, sunshield, ornament, calling, seatbelt, smoking, annual inspection sticker, etc. Non-motor vehicle information includes type, color, top type, top color, people number, etc.

Smart tracking

Human, motor vehicle, and non-motor vehicle, or their combinations can be set as objects. Once the objects selected trigger detection rules (like tripwire and intrusion), the speed dome will track them automatically.

Perimeter Protection

Automatically filters false alarms caused by animals, rustling leaves, bright lights, etc, and enables system to act secondary recognition for the targets, which improve alarm accuracy.

Interoperability

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

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@F1.3 B/W: 0.0001 lux@F1.3 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: 2.8 mm–12 mm Detail: 5.4 mm–135 mm			
Max. Aperture	Panorama: F1.3–F2.0 Detail: F1.6–F4.0			
Field of View	Panorama: H: 99.2°–45.8°; V: 59.7°–27.0°; D: 110.4°–51.7° 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: 1 m–2.5 m (3.28 ft–8.20 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: 129 m (423.23 ft) Detail: 1,724 m (5,656.17 ft)	Panorama: 51.3 m (168.31 ft) Detail: 690 m (2,263.78 ft)	Panorama: 25.4 m (83.33 ft) Detail: 345 m (1,131.89 ft)	Panorama: 12.2 m (40.03 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
Presets Speed	Panorama: Pan: 100°/s; Tilt: 50°/s Detail: Pan: 360°/s; Tilt: 200°/s

Presets	300
Tour	8 (up to 32 presets per tour)
Scan	5
Power-off Memory	Yes
Idle Motion	Presets; 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.264H; H.264B; Smart H.265+; H.265; MJPEG(Sub Stream); Smart H.264+; H.264M
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	G.711a; G.711mu; G.726; MPEG2-Layer2; G.722.1; G.729; G723
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-QA-2812	4MP 25 Ordinary IR NETWORK PTZ CAMERA
Accessories	36 VDC/2.23A	Power Adapter
	PFB306W-S	Wall Mount Bracket
	PFA150	Pole Mount Bracket
	PFB300C-S	Ceiling Mount Bracket

Accessories

Included:



PFB306W-S
Wall Mount Bracket

Optional:



PFA150
Pole Mount Bracket



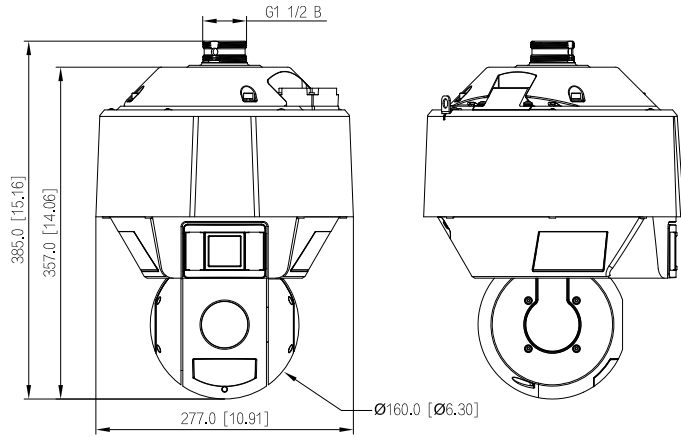
PFB300C-S
Ceiling Mount Bracket



36 VDC/2.23A
Power Adapter

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])



Big Dipper