DH-SDT5X425-4Z4-WAJG-0832

4MP Starlight IR WizMind Network Dual-PTZ Traffic Camera

- 1/1.8" 4MP CMOS
- Panorama camera: 4x optical zoom; detail camera: 25x optical zoom and 16 digital zoom
- Starlight+ technology
- Max. 50/60 fps@4M
- IR distance up to 100 m
- Illegal parking capture
- H.265 codec
- Dual PTZ system; dual vari-focal lens
- IP67

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

Equipped with GPU chip, the device integrates multiple deep learning algorithms designed for complex scenes. It can capture vehicles illegally parked, and analyze data of multiple scenes.

The device has a dual-PTZ control system. Both panorama and detail cameras can rotate horizontally and vertically. Linkage and combination modes are supported. Multiple presets can be configured to increase coverage and perform intelligent tours. The device has 2 alarm inputs and 1 alarm outputs, and can be connected to a speaker to provide voice prompt.

Functions

Illegal Parking Capture

The device can capture vehicles illegally parked. Panorama camera can link detail camera to capture and recognize plate number and perform multi-scenario tour. When panorama camera is capturing images, detail camera can perform illegal parking capture and multi-scenario tour independently. In plate blocking capture, evidence can be collected even when the plate number is blocked.

Dual-PTZ System

The panorama camera and detail camera of the dual PTZ system can be adjusted horizontally and vertically.

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.

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.

Technical Specification

Camera

Image Sensor	Panorama: 1/1.8"" CMOS Detail: 1/1.8"" CMOS
Pixel	Panorama: 4MP Detail: 4MP
Max. Resolution	2688 (H) x 1520 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	Panorama: 1/3 s–1/100000 s Detail: 1/1 s–1/100000 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	Detail (IR light): 100 m (328.08 ft)
Illuminator On/Off Control	Panorama: SmartIR; Manual; Off Detail: Zoom Prio; Manual; SmartIR; Off
Illuminator Number	4 IR lights; 4 white 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 (1312.34 ft) Detail: 1688 m (5538.06 ft)	Panorama: 160 m (524.93 ft) Detail: 675 m (2214.57 ft)	Panorama: 80 m (262.47 ft) Detail: 337 m (1105.64 ft)	Panorama: 40 m (131.23 ft) Detail: 168 m (551.18 ft)

PTZ

Pan/Tilt Range	Panorama: Pan: 0°–360° endless; Tilt: 0°–30° Detail: Pan: 0°–305° (the angle between two cameras: -125° to +180°); Tilt: -3°–180°
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)
Pattern	5
Scan	5
Speed Adjustment	Yes
Power-off Memory	Yes
Idle Motion	Preset; Tour; Pattern; Scanning
Protocol	DH-SD Pelco-P/D (auto recognition)

Artificial Intelligence

Illegal Parking Capture	Capture range radius: 15 m–80 m (49.21 ft–262.47 ft) (panorama linkage mode), 120 m (393.70 ft) (detail camera); supports self-adaptive multi-scenario tour detection; 2–6 snapshots can be set, and the capture interval can be set between each capturing; snapshot type includes long-distance, medium-distance, close-distance, and plate feature; supports vehicle type, color, logo, series, license plate, plate color and other attribute recognition; supports panorama-detail linkage capture, and multi-scenario tour; supports panoramic fixed capture, while detail camera capturing illegal parking, and independent multi-scenario tour; plate blocking capture mode: Evidence chain is carried out when the plate of illegally parked vehicle is blocked. Panoramic camera needs to be fixed. Currently, the panoramic detection range supports 10 m–50 m (32.81 ft–164.04 ft).
Intelligence Note	Supports adaptively loading corresponding license plate recognition algorithm according to the area selected; integrates overseas general recognition algorithms to support license plate recognition containing letters and numbers; integrates special license plate recognition algorithm in EU; integrates Singapore and Malaysia special license plate recognition algorithms; integrates special license plate recognition algorithms for UAE, Saudi Arabia, Morocco, Oman, Egypt, Iraq, and Jordan.

Video

Compression	H.265; H.264 Baseline Profile; H.264 Main Profile; H.264 High Profile; M-JPEG; 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 × 576/704 × 480); CIF (352 × 288/352 × 240) Detail: 4M (2688 × 1520); 4M (2560 × 1440); 1080p (1920 × 1080); 960P (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Frame Rate	Main stream: 4M/1080p/1.3M/720p (1–50/60 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 1080p/1.3M/720p/CIF (1–25/30 fps)
Bit Rate Control	Variable/Constant
Bit Rate	H.264: 2816 Kbps–13056 Kbps H.265: 1024 Kbps–7936 Kbps
Day/Night	Panorama: Auto (ICR) Detail: Auto (ICR)
BLC	Yes
WDR	Yes
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; 3D
Motion Detection	Yes

Region of Interest (RoI)	Yes
Image Stabilization	Electronic (EIS)
Defog	Electronic
Digital Zoom	16×
Flip	0°; 180°
Privacy Masking	Up to 24 areas, and up to 8 areas in the same view
S/N Ratio	Panorama: ≥ 55 dB Detail: ≥ 55 dB

Audio

Compression	G.711a; G.711mu; G.726; MPEG2-Layer2; G.722.1; G.729

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; QoS; FTP; SMTP; UPnP; SNMP; DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; SNMP v1/v2c/v3 (MIB-2); RTCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth 64 MB)
Storage	Imou Cloud; FTP; Micro SD card (256 GB)
Browser	IE7 and later versions Chrome 45 and earlier versions Firefox 52 and earlier versions Safari 12 and earlier versions
Management Software	SmartPSS; DSS; NVR
Mobile Phone	IOS; Android; Windows Phone

Certification

Certifications	FCC: 47 CFR FCC Part15, Subpart B, Class A LVD: EN 62368-1:2014+A11: 2017 EMC: EN 55032:2015, Class A EN 61000-3-2: 2014 EN 61000-3-3: 2013 EN 55024:2010+A1: 2015 EN 55035: 2017 EN 50130-4: 2011+A1: 2014

Port

Audio Input	1 (LINE IN; bare wire)
Audio Output	1 (LINE OUT; bare wire)
Two-way Audio	Yes
Alarm I/O	2/1 Digital input: 0–5V DC
Alarm Linkage	Capture; preset; tour; pattern; SD card recording; triggering digital output; sending email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; vandalization detection; illegal access detection
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Optical Fiber	Support

Power

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

Environment

Operating Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IP67; TVS 8000V lightning protection; surge protection; voltage transient protection

Structure

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	Part Number	Description
WizMind Series	DH-SDT5X425-4Z4-WAJG-0832	4MP Starlight IR WizMind Network Dual-PTZ Traffic Camera
Accessories	36 V DC/2.23 A	Power Adapter
	PFB306W-S	Wall Mount Bracket
	PFA150	Pole Mount Bracket
	PFB300C-S	Ceiling Mount Bracket

Accessories

Included:

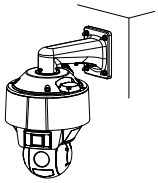
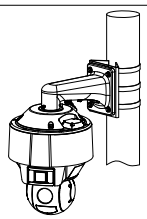
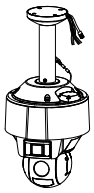
36 V DC/2.23 A
Power Adapter

PFB306W-S
Wall Mount Bracket

Optional:

PFA150
Pole Mount Bracket

PFB300C-S
Ceiling Mount Bracket

Wall Mount	Pole Mount	Ceiling Mount
PFB306W-S	PFA150+PFB306W-S	PFB300C-S
		

Dimensions (mm[inch])