DH-SDT5X405-4F-FA-0600

4MP 5 Starlight IR NETWORK 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

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

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.

- 1/1.8" 4Megapixel STARVIS™ CMOS.
- 5x optical zoom.
- Starlight technology.
- Max. 50/60fps@4M.
- IR distance up to 100 m.
- Auto-tracking.
- Perimeter protection.
- Face recognition.
- Metadata.
- IP67.

| IP67 | Face Recognition | Perimeter Protection | Video Metadata |

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.

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.

Scene
It is ideal for scenes that require highly detailed images to clearly view targets, and can be used to monitor wide areas with poor lighting conditions, such as community perimeter, subway entrances and exits, sidewalks, pedestrian streets, highways, posts, parks, tourist attractions, streets, transit stations, and inside and outside the industrial parks.

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@F1.0 B/W: 0.0001 lux@F1.0 Detail: Color: 0.001 lux@F1.3 B/W: 0.0001 lux@F1.3 0 lux (IR light on)
Illumination Distance	Panorama: 30 m (98.43 ft) (white light) Detail: 100 m (328.08 ft) (IR)
Illuminator On/Off Control	Panorama: Zoom Prio; Auto; Manual; Off Detail: Zoom Prio; Auto; Manual; Off
Illuminator Number	Panorama: 4 (white light) Detail: 4 (IR)

Lens

Focal Length	Panorama: 6 mm Detail: 10 mm–50 mm			
Max. Aperture	Panorama: F1.0 Detail: F1.3–F1.5			
Field of View	Panorama: H: 57°; V: 31°; D: 66° Detail: H: 45°–10°; V: 26°–5.7°; D: 51°–11.5°			
Optical Zoom	Panorama: NA Detail: 5×			
Focus Control	Auto; semi-auto; manual			
Close Focus Distance	Panorama: 0.2 m (0.66 ft) Detail: 0.5 m–2 m (1.64 ft–6.56 ft)			
Iris Control	Panorama: Fixed Detail: Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	115.9 m (380.25 ft)	46.3 m (151.90 ft)	23.2 m (76.12 ft)	11.6 m (38.06 ft)
	642.8 m (2108.92 ft)	257.1 m (843.50 ft)	128.6 m (421.92 ft)	64.3 m (210.96 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–120°/s Tilt: 0.1°/s–50°/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	Motor vehicle, non-motor vehicle, face, and human body detection; tracking; optimization; capturing pictures; uploading high-quality face snapshots Extracts 10 attributes from motor vehicles, 6 attributes from non-motor vehicles, 8 attributes from human bodies and 6 attributes from human faces.
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 camera to track targets
Face Recognition	Supports face detection, face bounding box, capturing snapshots, uploading face snapshots, enhancing face images, and selecting a preferred image among a group of snapshots. 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. Supports up to 5 face databases; registers person one by one or in batches; sets face similarity; compares faces with 10,000 faces.
Auto Tracking	Yes

Video

Video Compression	H.264H; H.264B; Smart H.265+; H.265; Smart H.264+; MJPEG(Sub Stream); H.264M
Streaming Capability	3 streams
Resolution	Panorama: 2688 × 1520; 2560 × 1440; 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: 2688 × 1520; 2560 × 1440; 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	Panorama: Main stream: 4M/3M/1080p/1.3M/720p@(1–50/60 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps) Sub stream 2: 1080p/1.3M/720p@(1–25/30 fps) Detail: Main stream: 4M/3M/1080p/1.3M/720p@(1–50/60 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	H264: 2816 kbps–13056 kbps H265: 1024 kbps–7936 kbps
Day/Night	Panorama: Color/B/W Detail: Auto (ICR)/Color/B/W
BLC	Yes
WDR	Panorama: 140 dB Detail: 140 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
Image Stabilization	Panorama: Electronic (EIS) Detail: Electronic (EIS)
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; 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;SNMPv1/v2c/v3(MIB-2);Qos;RTSP;ARP
Interoperability	CGI;ONVIF
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB)
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	DSS7016D-I;Cloud Connection;5 Series NVR;ICC-B8900;SmartPSS Plus;DSS-C9100;IVSS

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
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; unauthorized access detection
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	36 VDC/2.23 A (±25%)
Power Consumption	Basic: 23.5 W Max.: 45 W (illuminator + intelligence + PTZ)

Environment

Operating Temperature	−40 °C to +65 °C (−40 °F to +149 °F)
Operating Humidity	≤95%
Protection	IP67, TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	280.2 mm × 277.0 mm × 385.0 mm (11.03" × 10.91" × 15.16")
Net Weight	9 kg (19.84 lb)
Gross Weight	12.7 kg (27.99 lb)

Ordering Information

Type	Model	Description
SDT5X Series	DH-SDT5X405-4F-FA-0600	4MP 5 Starlight IR NETWORK PTZ CAMERA
	SDT5X405-4F-FA-0600	4MP 5 Starlight IR NETWORK PTZ CAMERA
Accessories	DC36V/2.23A	Power Adapter
	PFB306W-S	Wall Mount Bracket
	PFB300C	Ceiling Mount Bracket
	PFA151	Corner Mount Bracket
	PFA150	Pole 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

Accessories

Included:

DC36V/2.23A
Power Adapter

PFB306W-S
Wall Mount Bracket

Optional:

PFB300C
Ceiling Mount
Bracket

PFA151
Corner Mount
Bracket

PFA150
Pole Mount
Bracket

Dimensions (mm [inch])

G1 1/2 B

385.0 [15.16]
357.0 [14.06]

Ø160.0 [Ø6.30]

277.0 [10.91]

280.2 [11.03]