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TECHNOLOGY

DH-SDT5X225-2F-QA-0600

2MP Starlight IR WizMind Network Dual-PTZ Camera

· Dual PTZ system

· 1/2.8" 2Megapixel CMOS

· Powerful 25x optical zoom

· Starlight technology

· Max. 50/60 fps@1080p

· Deep-learning-based auto tracking and perimeter protection

· Support Hi-PoE

· H.265 encoding

· 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

2MP Starlight IR WizMind Network Dual-PTZ Camera adopts advanced CNN deep learning algorithms to support face recognition with high accuracy. The Dual 1080p Starlight Smart Capture Camera consists of panoramic camera and PTZ camera. Panoramic 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

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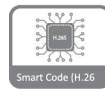
PFA Technology

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.

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 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.

Interoperability

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

SDT5X Series | DH-SDT5X225-2F-QA-0600

Technical Specification

Camera

Image Sensor	Panoramic: 1/2.8" STARVIS™ CMOS Detail: 1/2.8" STARVIS™ CMOS
Pixel	Panoramic: 2 MP Detail: 2 MP
Max. Resolution	Panoramic: 1920 (H) × 1080 (V) Detail: 1920 (H) × 1080 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	Panoramic: 1/1 s–1/30,000 s Detail: 1/1 s–1/30,000 s
Scanning Mode	Progressive
Min. Illumination Illumination	Panoramic: Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 Detail: Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)
Illumination Distance	Panoramic (white light): 30 m (98.43 ft) Detail (IR light): 100 m (328.08 ft)
Illuminator On/Off Control	Panorama: Manual; Auto; Off Detail: Zoom Prio; Manual; Auto; Off
Illuminator Number	Panoramic: 4 white lights Detail: 4 IR lights

Lens

Focal Length	Panoramic: 6 mm Detail: 4.8 mm–120 mm
Max. Aperture	Panoramic: F1.6 Detail: F1.6–F3.5
Field of View	Panoramic: H: 53.7; V: 28.7; D: 61.8 Detail: H: 59.6°–4.8°; V: 35.4°–2.7°; D: 66.5°–5.5°
Optical Zoom	25x
Focus Control	Auto; semi-auto; manual
Close Focus Distance	Panoramic: 0.2 m (0.66 ft) Detail: 0.1 m–1.5 m (0.33 ft–4.92 ft)
Iris Control	Panoramic: Fixed Detail: Auto

	Detect	Observe	Recognize	Identify
DORI Distance	Panoramic: 88.3 m (289.70 ft) Detail: 1,613.8 m (5,294.62 ft)	Panoramic: 35.3 m (115.81 ft) Detail: 645.5 m (2,117.78 ft)	Panoramic: 17.7 m (58.07 ft) Detail: 322.8 m (1,059.06 ft)	Panoramic: 8.8 m (28.87 ft) Detail: 161.4 m (529.53 ft)

PTZ

Pan/Tilt Range	Panoramic: Pan: 0° to 360° endless Tilt: 0° to 30° Detail: Pan: 0° to 305° Tilt: −10° to 90°
Manual Control Speed	Panoramic: 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	Panoramic: Pan: 240°/s; Tilt: 60°/s Detail: Pan: 430°/s; Tilt: 240°/s
Preset	300
Tour	8 (up to 32 preset per tour)
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
Smart Tracking	Yes

Video

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; H.264H; MJPEG (Sub Stream 1)
Streaming Capability	3 Streams
Resolution	Panoramic: 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) Detail: 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Panoramic: Main stream: 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: 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	H.264: 256 kbps–9472 kbps H.265: 144 kbps–5632 kbps
Day/Night	Auto (ICR); Color; B/W
BLC	Yes
WDR	Panoramic: 120 dB Detail: 120 dB
HLC	Yes
White Balance	Panoramic: 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	Yes
Digital Zoom	16x
Image Rotation	180°

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

Audio

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

Network

Ethernet Port	RJ-45 (10/100 Base-T)
Network Protocol	HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; RTMP; TCP
Interoperability	ONVIF (Profile S&G&T); CGI
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (256 GB)
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	Smart PSS; DSS; NVR

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Port

Audio Input	1 channel
Audio Output	1 channel
Alarm I/O	2/1
Audio I/O	1/1
Alarm Linkage	Capture; preset; tour; SD card record; trigger on-off value output; client electronic map; send email
Alarm Event	Video dynamic/occlusion detection; audio detection; network disconnection detection; IP conflict detection; encoder state detection; memory card state detection; memory space detection; abnormal power supply detection

Power

Power Supply	36 VDC, 2.23 A (−5% to +10%) HI-PoE
Power Consumption	Basic: 19 W Max.: 31 W (illuminator + PTZ working)

Environment

Operating Temperature	−40 °C to +65 °C (−40 °F to +149 °F)
Operating Humidity	≤95%
Protection	IP67; TVS 8000 V lightning proof; surge 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	DH-SDT5X225-2F-QA-0600	2MP Starlight IR WizMind Network Dual-PTZ Camera
Accessories	DC36V/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
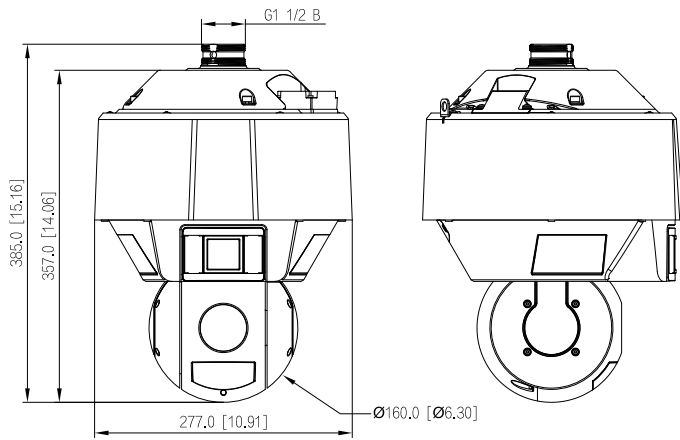
Optional:

PFA150
Pole Mount Bracket

PFB300C-S
Ceiling Mount Bracket

DC36V/2.23A
Power Adapter

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

Dimensions (mm[inch])