DH-SDT8C842-8P-FA-APV-0280

8MP 42x Starlight Dual Light Network Panoramic PTZ Camera

WizMind

· Panorama: 2 × 4 MP 1/1.8" CMOS image sensor;
  Detail: 8MP 1/1.8" CMOS image sensor.
· 42 x optical zoom.
· Max. 25/30fps@4K.
· IR distance up to 300 m.
· Auto tracking.
· Perimeter protection.
· Face detection.
· Wiper.
· IP67.
· Sound and light alarm.
· PoE++(802.3bt).

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.

8Mp	Face Detection	Perimeter Protection	Video Metadata	WDR

System Overview

The multi-sensor series pushes the bar on PTZ cameras with its enhanced monitoring capabilities captured in its unique lens design. Fitted with an extra lens, it quickly tracks targets while keeping an eye on the monitored area. They also harness the strength of their embedded AI intelligent chip to perform a wide variety of intelligent functions, making them ideal for use in many scenarios.

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.

Functions

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

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.

Siren and Light Active Deterrence
Dahua siren and light active deterrence network camera supports the white light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in one voice, and supports customized voice importing.

Wide Dynamic Range
The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

Technical Specification

Camera

Image Sensor	Panorama: 1/1.8" CMOS Detail: 1/1.8" CMOS
Pixel	Panorama: 8 MP Detail: 8 MP
Max. Resolution	Panorama: 5376 (H) × 1520 (V) Detail: 3840 (H) × 2160 (V)
ROM	Detail: 8 GB; Panorama: 8 GB
RAM	Detail: 4 GB; Panorama: 8 GB
Electronic Shutter Speed	Panorama: 1s–1/30000s Detail: 1s–1/30000s
Scanning System	Progressive
Min. Illumination	Panorama: Color: 0.001 lux@F1.0 B/W: 0.0001 lux@F1.0 0 lux (IR light on) Detail: Color: 0.005 lux@F1.4 B/W: 0.0005 lux@F1.4 0 lux (IR light on)
Illumination Distance	Panorama: 30 m (white light) Detail: 300 m (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off
Illuminator Number	Panorama: 4 (white light) Detail: 6 (IR), 2 (white light)
Wiper	Wiper

Lens

Focal Length	Panorama: 2.8 mm Detail: 5.5 mm–231 mm
Max. Aperture	Panorama: F1.0 Detail: F1.4-F4.5
Field of View	Panorama: H: 200°; V: 50° Detail: H: 61.8°–2.2°; V: 36.3°–1.3°; D: 69.2°–2.4
Optical Zoom	Detail: 42 ×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.2 m (0.66 ft)
Iris Control	Detail: Auto; manual

DORI Distance	Detect	Observe	Recognize	Identify
	4620 m (15157.48 ft)	1824.9 m (5987.20 ft)	924 m (3031.50 ft)	462 m (1515.75 ft)

PTZ

Pan/Tilt Range	Panorama: Tilt: 5°–17° Detail: Pan: 0°–360° endless Tilt: -30° to +90°
Manual Control Speed	Detail: Pan: 0.1°/s–240°/s Tilt: 0.1°/s–100°/s
Preset Speed	Detail: Pan: 240°/s Tilt: 100°/s
Preset	300
Tour	8 (up to 32 presets per tour)

Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern; 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; motor vehicle attributes; non-motor vehicle attributes; human body attributes; face attributes
IVS (Perimeter Protection)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking
Face Recognition	Supports face detection, face bounding box, optimization, capturing snapshots, uploading high-quality face snapshots, enhancing face images and face exposure. 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

Active Deterrence

Light Warning	White light warning Flash duration: 5 s–30 s Flash frequency: high, medium, low
Sound Warning	Offers 22 sound alarms and supports importing custom sound alarms.

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: 8M (5376 × 1520); 2688 × 752; 1344 × 368; 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) Detail: 8M (3840 × 2160); 4M (2560 × 1440); 3M (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: (5376 × 1520) @(1–25/30 fps) Sub stream 1: (1344 × 368)/D1/VGA/CIF @(1–25/30 fps) Sub stream 2: (2688 × 752)/1080p/1.3M/720p @ (1–25/30 fps) Detail: Main stream: 8M (3840 × 2160)/4M(2560 × 1440)/3M(2304 × 1296)/1080 P/1.3M/720p @ (1–25/30 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	Panorama: H264: 8 Kbps–16384 Kbps H265: 3 Kbps–13568 Kbps Detail: H264: 8 Kbps–16384 Kbps H265: 3 Kbps–13568 Kbps
Day/Night	Panorama: Color; B/W Detail: Auto (ICR)
BLC	Yes
WDR	Panorama: DWDR Detail: 120 dB
HLC	Yes
White Balance	Panorama and Detail: Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Panorama: Auto; manual Detail: Auto; manual
Noise Reduction	Panorama: 2D NR; 3D NR Detail: 2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Detail: EIS
Defog	Panorama: Electronic Detail: Optical
Digital Zoom	16x
Image Rotation	180°
Privacy Masking	Yes
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 (100/1000 Base-T)
Network Protocol	FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	CGI; GA/T 1400; GB/T28181; SDK; ONVIF (Profile S&G&T)
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB); NAS
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	C9100; 5 Series NVR; ICC-B8900; SmartPSS Plus; IVSS
Mobile Client	IOS; Android

Certification

Certifications	CE: EN55032 EN55035 EN61000-3-2 EN61000-3- 3;EN50130-4 FCC: FCC part15B

Port

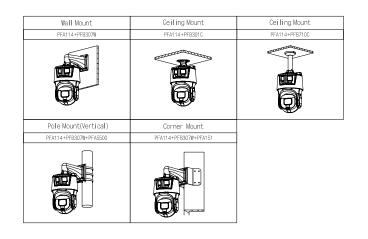|	
RS-485	1 (baud rate: 1200 bps–9600 bps)
Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT, bare wire)
Alarm Input	7 (on-off value input: 0–5 VDC)
Alarm Output	2
Alarm Linkage	Capture; recording; send email; preset; tour; pattern; alarm digital input
Alarm Event	Motion; tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection
Alarm I/O	7/2
Audio I/O	1/1

Power

Power Supply	36 VDC, 2.25 A ± 25% PoE++(802.3bt)
Power Consumption	Basic: 32 W Max: 58 W (panoramic camera illuminator, detail camera IR illuminator, light warning, speaker, heated glass, intelligence and PTZ)

Environment

Operating Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IP67

Structure

Product Dimensions	318.2 mm × 262.0 mm × 415.0 mm (12.53" × 10.31" × 16.34") (L × W × H)
Net Weight	8.8 kg (19.40 ft)
Gross Weight	11.12 kg (24.52 ft)

Ordering Information

Type	Model	Description
8MP WizMind PTZ Camera	DH-SDT8C842-8P-FA-APV-0280	8MP 42x Starlight Dual Light Network Panoramic PTZ Camera
	SDT8C842-8P-FA-APV-0280	8MP 42x Starlight Dual Light Network Panoramic PTZ Camera
Accessories	PFB307W	Wall Mount Bracket
	DC 36 V/2.23 A	Power Adapter
	PFA114	Mount Adapter
	PFB301C	Ceiling Mount Bracket
	PFB710C	Ceiling Mount Bracket
	PFA5500	Pole Mount Bracket
	PFA151	Corner Mount Bracket

Wall Mount	Ceiling Mount	Ceiling Mount
PFA114+PFB307W	PFA114+PFB301C	PFA114+PFB710C

Pole Mount(Vertical)	Corner Mount
PFA114+PFB307W+PFA5500	PFA114+PFB307W+PFA151

Dimensions (mm[inch])

Accessories

Included:

PFB307W
Wall Mount Bracket
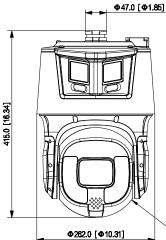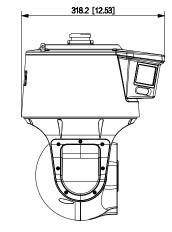
DC 36 V/2.23 A
Power Adapter

PFA114
Mount Adapter

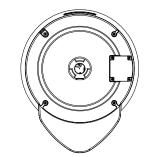### Optional:

PFB301C
Ceiling Mount Bracket

PFB710C
Ceiling Mount Bracket

PFA5500
Pole Mount Bracket

PFA151
Corner Mount Bracket