

# DH-SDT8C442-4P-GA-APV-0280

## 4MP 42x Starlight Dual Light Network Panoramic PTZ Camera




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 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.

### 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.

- Panorama: 2x2 MP 1/1.8" CMOS image sensor;
- Detail: 4MP 1/1.8" CMOS image sensor.
- 42x optical zoom.
- Max. 25/30fps@4M.
- IR distance up to 300 m.
- Auto-tracking 3.0.
- Perimeter protection.
- Face detection.
- wiper.
- IP67.
- PoE++ (802.3bt).



### 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.

### 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**

<b>Camera</b>					
Image Sensor	Panorama: 1/1.8" CMOS; Detail: 1/1.8" CMOS				
Pixel	Panorama: 4 MP; Detail: 4 MP				
Max. Resolution	Panorama: 3840 (H) x 1080 (V); Detail: 2560 (H) x 1440 (V)				
ROM	Detail: 4 GB; Panorama: 4 GB				
RAM	Detail: 1 GB; Panorama: 1 GB				
Electronic Shutter Speed	Panorama: 1s–1/30000s; Detail: 1s–1/30000s				
Scanning System	Progressive				
Min. Illumination	Panorama: 0.001 lux@F1.0 (Color, 30 IRE); 0.0001 lux@F1.0 (B/W, 30 IRE); 0 lux (IR light on) Detail: 0.001 lux@F1.6 (Color, 30 IRE); 0.0001 lux@F1.6 (B/W, 30 IRE); 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				
<b>Lens</b>					
Focal Length	Panorama: 2.8 mm; Detail: 5.5 mm–231 mm				
Max. Aperture	Panorama: F1.0; Detail: F1.6-F5.0				
Field of View	Panorama: H: 200°; V: 55°; Detail: H: 61.8°–2.2°; V: 36.3°–1.3°; D: 69.2°–2.4				
Optical Zoom	Detail: 42 x				
Focus Control	Auto; semi-auto; manual				
Close Focus Distance	Panorama: 4 m (13.12 ft); Detail: 1 m-8 m (3.28 ft-26.25 ft)				
Iris Control	Detail: Auto; manual				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	Panorama	45 m (147.64 ft)	18 m (59.06 ft)	9 m (29.53 ft)	4.5 m (14.76 ft)
	Detail	4620 m (15157.48 ft)	1824.9 m (5987.20 ft)	924 m (3031.50 ft)	462 m (1515.75 ft)
<b>PTZ</b>					
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)

<b>Intelligence</b>	
Video Metadata	Supports detection of motor vehicles, non-motor vehicles, faces and human bodies, optimization, capturing pictures, and uploading high-quality face snapshots. It extracts attributes from motor vehicles and non-motors, detecting up to 10 attributes for motor vehicles and 6 for non-motor vehicles. It also extracts attributes from human faces and bodies, detecting up to 6 attributes for faces, and 8 for bodies.
IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; human alarm classification; linkage tracking
Face Detection	Supports face detection, optimization, capturing pictures, uploading high-quality face snapshots and enhancing face images. 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. The supported methods for capturing snapshots are real-time capturing, quality first, and selecting a preferred image among a group of snapshots.

<b>Active Deterrence</b>	
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.

<b>Video</b>	
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 (3840 x 1080); 1080p (1920 x 1080); 1.3M (1280 x 960); 720p (1280 x 720); D1 (704 x 576/704 x 480); VGA (640 x 480); CIF (352 x 288/352 x 240); Detail: 4M (2560 x 1440); (2048 x 1536); 1080p (1920 x 1080); 1.3M (1280 x 960); 720p (1280 x 720); D1 (704 x 576/704 x 480); VGA (640x 480); CIF (352 x 288/352 x 240)
Video Frame Rate	Panorama: Main stream: (3840 x 1080) @(1–25/30 fps) Sub stream 1: (960 x 268)/D1/VGA/CIF @(1–25/30 fps) Sub stream 2: (1920 x 540)/1080p/1.3M/720p @ (1–25/30 fps) Detail: Main stream: 4M(2560 x 1440)/(2048 x 1536)/1080 P/1.3M/720p @(1–25/30 fps) Sub stream 1: D1/VGA/CIF @(1-25/30 fps) Sub stream 2: 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: Electronic
Digital Zoom	16 ×
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
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### Network

Network Port	RJ-45 (10/100 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	ONVIF (Profile S & Profile G & Profile T);GA/T1400;CGI;GB/T28181;SDK
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: EN 62368-1
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### Port

RS-485	1 (baud rate: 1200 bps–9600 bps)
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; TVS 8000 V lightning proof; surge protection; voltage transient protection

### 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
4MP WizMind PTZ Camera	DH-SDT8C442-4P-GA-APV-0280	4MP 42x Starlight Dual Light Network Panoramic PTZ Camera
	SDT8C442-4P-GA-APV-0280	4MP 42x Starlight Dual Light Network Panoramic PTZ Camera
Accessories (Optional)	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

**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

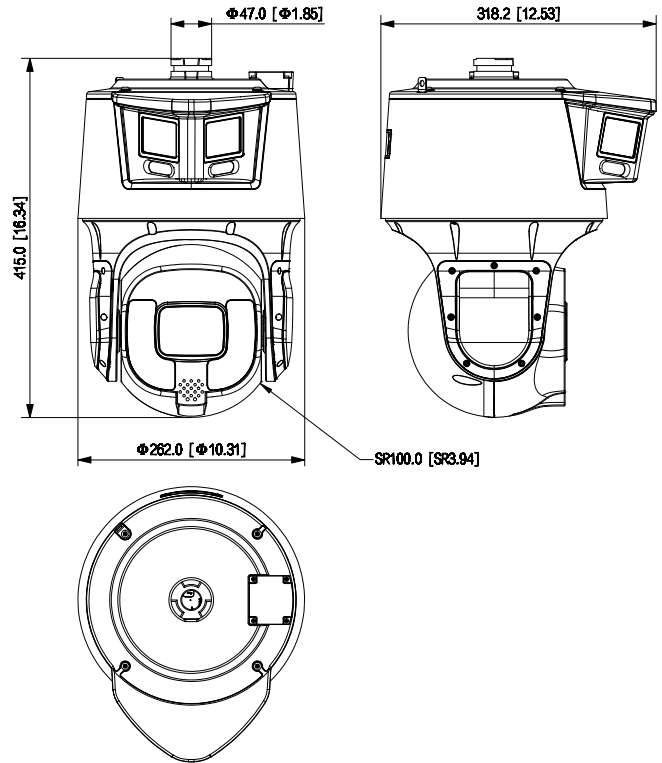


PFA5500  
Pole Mount Bracket



PFA151  
Corner Mount Bracket

**Dimensions (mm[inch])**



Wall Mount	Ceiling Mount	Ceiling Mount
PFA114+PFB307W	PFA114+PFB301C	PFA114+PFB710C
Pole Mount(Vertical)	Corner Mount	
PFA114+PFB307W+PFA5500	PFA114+PFB307W+PFA151	