



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

8MP 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: 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).











#### 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    | 1  |  |   |   | Preset Speed               | Detail:<br>Pan: 240°/s  |
|----------------------------|--|--|---|---|----------------------------|---|
| Camera                     |  |  |   |   |                            | Tilt: 100°/s  |
| Image Sensor               | Panorama: 1/<br>Detail: 1/1.8"   |  |   |   | Preset                     | 300   |
| Pixel                      | Panorama: 8 l<br>Detail: 8 MP  | MP   |   |   | Tour                       | 8 (up to 32 presets per tour)   |
| Mary Developing            | Panorama: 53   | 376 (H) × 1520   | ) (V)   |   | Pattern                    | 5   |
| Max. Resolution            | Detail: 3840 (   | , , ,  |   |   | Scan                       | 5   |
| ROM                        | Detail: 8 GB; F  |  |   |   | Power-off Memory           | Yes   |
| RAM                        | Detail: 4 GB; F  |  | GB  |   | Idle Motion                | Pattern; Preset; Scan; Tour DH-SD   |
| Electronic Shutter Speed   | Panorama: 1s<br>Detail: 1s–1/3   |  |   |   | PTZ Protocol               | Pelco-P/D (Auto recognition)  |
| Scanning System            | Progressive  |  |   |   | Intelligence               |   |
| Min. Illumination          | Panorama:<br>Color: 0.001 l<br>B/W: 0.0001 l<br>0 lux (IR light<br>Detail:<br>Color: 0.005 l | lux@F1.0<br>on)  |   |   | 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   |
| Illumination Distance      | B/W: 0.0005 l<br>0 lux (IR light of<br>Panorama: 30<br>Detail: 300 m                         | on)<br>) m (white ligh   | ht)   |   | IVS (Perimeter Protection) | Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking   |
| Illuminator On/Off Control | Zoom Prio; M   | anual; Smart   | IR; Off   |   |                            | Supports face detection, face bounding box, optimization, capturing snapshots, uploading high-  |
| Illuminator Number         | Panorama: 4 (<br>Detail: 6 (IR),   |  | )   |   |                            | quality face snapshots, enhancing face images and face exposure. Attribute extraction is also supported,  |
| Wiper                      | Wiper  |  |   |   | Face Recognition           | 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  |
| Lens                       |  |  |   |   |                            | photo. Supports up to 5 face databases; registers person one  |
| Focal Length               | Panorama: 2.5<br>Detail: 5.5 mr  |  |   |   |                            | by one or in batches; sets face similarity; compares faces with 10,000 faces.   |
| Max. Aperture              | Panorama: F1<br>Detail: F1.4-F4  |  |   |   | Auto Tracking              | Yes   |
| Field of View              | Panorama: H:   |  | .3°–1.3°; D: 69.  | 2°=2 /  | Active Deterrence          |   |
| Optical Zoom               | Detail: 42 ×   | 5 Z.Z , V. 50.   | .5 1.5 , 0. 05.   | .2 2.4  | Light Warning              | White light warning Flash duration: 5 s – 30 s Flash frequency: high, medium, low   |
| Focus Control              | Auto; semi-au  | ıto; manual  |   |   | Sound Warning              | Offers 22 sound alarms and supports importing custom sound alarms.  |
| Close Focus Distance       | 0.2 m (0.66 ft   | )  |   |   | Video                      |   |
| Iris Control               | Detail: Auto; r  | manual   |   |   | Video Compression          | H.264H; H.264B; Smart H.265+; H.265; MJPEG (Sub   |
|                            | Detect   | Observe  | Recognize   | Identify  | ·                          | Stream); Smart H.264+; H.264M   |
|                            | 4620 m<br>(15157.48 ft)  | 1824.9 m<br>(5987.20 ft)   | 924 m<br>(3031.50 ft)   | 462 m<br>(1515.75 ft)   | Streaming Capability       | 3 streams   |
| DORI Distance              | standard syst<br>of a person vi<br>or objects wit<br>table do not r<br>intelligent fur       | em (EN-6267<br>ewing the vid<br>hin a covered<br>eflect intellig<br>action distand | ecognize, Iden<br>(6-4) for defini<br>deo to distingu<br>d area. The nui<br>gent function d<br>ces, refer to insoject design to | ng the ability<br>lish persons<br>mbers in this<br>distances. For<br>stallation and | Resolution                 | Panorama:<br>8M (5376 × 1520); 2688 × 752; 1344 × 368; 1080p<br>(1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720);<br>D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)<br>Detail:<br>8M (3840 × 2160); 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p |
| PTZ                        |  |  |   |   |                            | (1280 × 720); D1 (704 × 576/704 × 480); VGA (640× 480); CIF (352 × 288/352 × 240)   |
| Pan/Tilt Range             | Panorama: Til<br>Detail:<br>Pan: 0°–360°<br>Tilt: -30° to +9                                 | endless  |   |   |                            | .55,, 611 (53£ 11 £56) 53£ A £76)   |
| Manual Control Speed       | Detail: Pan: 0.<br>Tilt: 0.1°/s–10   |  |   |   |                            |   |

|                          | Panorama:<br>Main stream: (5376 × 1520) @(1–25/30 fps)<br>Sub stream 1: (1344 × 368)/D1/VGA/CIF @(1–25/30 fps)  | Browser               | IE 9 and later versions<br>Chrome 41 and later versions<br>Firefox 50 and later versions<br>Safari 10 and later versions  |
|--------------------------|---|-----------------------|---|
| Video Frame Rate         | Sub stream 2: (2688 × 752)/1080p/1.3M/720p @ (1–25/30 fps)  | Management Software   | C9100; 5 Series NVR; ICC-B8900; SmartPSS Plus; IVSS   |
|                          | Detail:<br>Main stream: 8M (3840 × 2160)/4M(2560 ×<br>1440)/3M(2304 × 1296)/1080 P/1.3M/720p @  | Mobile Client         | IOS; Android  |
|                          | (1–25/30 fps) Sub stream 1: D1/VGA/CIF @(1-25/30 fps)   | Certification         |   |
| Bit Rate Control         | Sub stream 2: 1080p/1.3M/720p@(1-25/30 fps) CBR; VBR  | Certifications        | CE: EN55032 EN55035 EN61000-3-2 EN61000-3-<br>3;EN50130-4<br>FCC: FCC part15B   |
|                          | Panorama:<br>H264: 8 Kbps—16384 Kbps  | Port                  |   |
| Video Bit Rate           | H265: 3 Kbps–13568 Kbps<br>Detail:  | RS-485                | 1 (baud rate: 1200 bps-9600 bps)  |
|                          | H264: 8 Kbps–16384 Kbps<br>H265: 3 Kbps–13568 Kbps  | Audio Input           | 1 channel (LINE IN, bare wire)  |
| Day/Night                | Panorama: Color; B/W<br>Detail: Auto (ICR)  | Audio Output          | 1 channel (LINE OUT, bare wire)   |
| BLC                      | Yes   | Alarm Input           | 7 (on-off value input: 0–5 VDC)   |
| WDR                      | Panorama: DWDR  | Alarm Output          | 2   |
| HLC                      | Detail: 120 dB<br>Yes   | Alarm Linkage         | Capture; recording; send email; preset; tour; pattern; alarm digital input  |
| White Balance            | Panorama and Detail:<br>Auto; indoor; outdoor; tracking; manual; sodium lamp;<br>natural light; street lamp   | Alarm Event           | Motion; tampering detection; audio detection;<br>network disconnection detection; IP conflict<br>detection; memory card state detection; memory<br>space detection; power exception detection |
| Gain Control             | Panorama: Auto; manual<br>Detail: Auto; manual  | Alarm I/O             | 7/2   |
| Noise Reduction          | Panorama: 2D NR; 3D NR<br>Detail: 2D NR; 3D NR  | Audio I/O             | 1/1   |
| Motion Detection         | Yes   | Power                 |   |
| Region of Interest (RoI) | Yes   | Power Supply          | 36 VDC, 2.25 A ± 25%<br>PoE++(802.3bt)  |
| Image Stabilization      | Detail: EIS   |                       | Basic: 32 W   |
| Defog                    | Panorama: Electronic<br>Detail: Optical   | Power Consumption     | Max: 58 W (panoramic camera illuminator, detail camera IR illuminator, light warning, speaker, heated glass, intelligence and PTZ)  |
| Digital Zoom             | 16x   | Environment           |   |
| Image Rotation           | 180°  | Operating Temperature | -40 °C to +70 °C (-40 °F to +158 °F)  |
| S/N Ratio                | Panorama: ≥ 55 dB<br>Detail: ≥ 55 dB  | Operating Humidity    | ≤95%  |
| Audio                    |   | Protection            | IP67  |
| Audio Compression        | PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723   | Structure             |   |
| Network                  |   | Product Dimensions    | 318.2 mm × 262.0 mm × 415.0 mm (12.53" × 10.31" × 16.34") (L × W × H)   |
| Network Port             | RJ-45 (100/1000 Base-T)   | Net Weight            | 8.8 kg (19.40 ft)   |
| Network Protocol         | FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE;<br>NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP;<br>NFS; ICMP; UDP; IGMP; HTTP; SSL; DHCP; SMTP; Qos;<br>RTSP; ARP | Gross Weight          | 11.12 kg (24.52 ft)   |
| 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  |                       |   |
|                          |   |                       |   |



| Ordering Information |                                |  |  |  |  |
|----------------------|--------------------------------|--|--|--|--|
| Туре                 | Model                          | Description  |  |  |  |
| 8MP<br>WizMind PT7   | DH-SDT8C842-8P-FA-<br>APV-0280 | 8MP 42x Starlight Dual Light Network<br>Panoramic PTZ Camera |  |  |  |
| Camera               | SDT8C842-8P-FA-<br>APV-0280    | 8MP 42x Starlight Dual Light Network<br>Panoramic PTZ Camera |  |  |  |
|                      | PFB307W                        | Wall Mount Bracket   |  |  |  |
|                      | DC 36 V/2.23 A                 | Power Adapter  |  |  |  |
| Accessories          | 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:



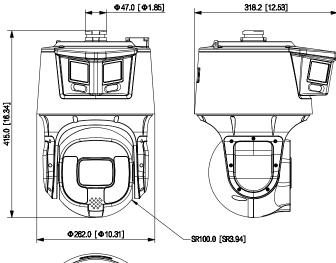
PFB301C Ceiling Mount Bracket



PFB710C Ceiling Mount Bracket



PFA5500 Pole Mount Bracket







PFA151 Corner Mount Bracket