

# DH-SDT7C424-4F-ZBZJ-APV-0400

4MP 24x Starlight IR WizMind Network Panoramic + PTZ Camera



Wiz Mind

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

With its industry-leading deep learning algorithm, the camera has advanced monitoring functions and strong detection capabilities. It is equipped with GPU chip and Smart Codec (H.265), making it highly efficient at encoding for improved video quality with reduced bandwidth and storage requirements. The camera supports smart tracking, seeing both the panorama (complete) and detail (clear) with one product. It also supports monitoring and detection of multiple perimeters, and can perform large-scale detection through its 4 mm fixed focal. Detection is combined with sound and light alarm, broadcasting multiple warning recordings, which can be applied to different scenarios.

## Functions

### 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.

### 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.

- Panoramic: 1/1.8" 4Megapixel F1.0 STARVIS™ CMOS
- Detail: 1/2.8" 4Megapixel STARVIS™ CMOS
- 24x optical zoom, 16x digital zoom
- Starlight+ technology
- Max. 25/30 fps@4 MP
- IR distance up to 150 m
- Auto-tracking
- Perimeter protection
- Sound and light alarm



### 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 tripewire and intrusion) are triggered.

### Smart Illumination

With its advanced algorithm, the camera balances and evens out the effect of its built-in IR illuminator, matching the zoom rate to the power of the IR illuminator. Also, the IR illuminator is strong, delivering illumination up to 150 m away, allowing the camera to capture finer details of a scene in the dark.

### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, a flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality videos without straining the network. Smart H.265+ technology outranks standard H.265 video compression, reducing bit rate and storage requirements by up to 70%.

## Scenes

The camera can be widely used in complex security monitoring scenes such as the periphery of residential areas, entrances and exits, subway entrances, sidewalks, pedestrian zones, roads, lookout post, parks, scenic areas, streets, stations, and perimeters.

**Technical Specification**

**Camera**

Image Sensor	Panoramic: 1/1.8" CMOS Detail: 1/2.8" CMOS
Pixel	Panoramic: 4 MP Detail: 4 MP
Max. Resolution	Panoramic: 2560 (H) × 1440 (V) Detail: 2560 (H) × 1440 (V)
ROM	Panoramic: 4 GB Detail: 256 MB
RAM	Panoramic: 1 GB Detail: 1 GB
Electronic Shutter Speed	Panoramic: 1/1 s–1/30,000 s Detail: 1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Panoramic: Color: 0.001 lux@F1.0 B/W: 0.0001 lux@F1.0 0 lux (white light on) Detail: Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)
Illumination Distance	30 m (98.44 ft) (white light) 150 m (49.13 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	Panoramic: 4x white light Detail: 2x white light; 4x IR

**Lens**

Focal Length	Panoramic: 4 mm Detail: 4.8 mm–115 mm								
Max. Aperture	Panoramic: F1.0 Detail: F1.6–F3.6								
Field of View	Panoramic: H: 95°; V: 52.5°; D: 116° Detail: H: 53.1°–3.4°; V: 30.4°–1.95°; D: 59.3°–3.9°								
Optical Zoom	24x								
Focus Control	Auto; semi-auto; manual								
Close Focus Distance	Panoramic: 0.2 m (0.66 ft) Detail: 0.5 m–5 m (1.64 ft–16.4 ft)								
Iris Control	Panoramic: Fixed Detail: Auto; manual; fixed								
DORI Distance	<table border="1"> <thead> <tr> <th>Detect</th> <th>Observe</th> <th>Recognize</th> <th>Identify</th> </tr> </thead> <tbody> <tr> <td>Panorama: 102 m (334.66 ft) Detail: 1,928 m (6,325.46 ft)</td> <td>Panorama: 40.8 m (133.86 ft) Detail: 771.2 m (2,530.18 ft)</td> <td>Panorama: 20.4 m (66.9 ft) Detail: 385.6 m (1,265.09 ft)</td> <td>Panorama: 10.2 m (33.46 ft) Detail: 192.8 m (632.55 ft)</td> </tr> </tbody> </table>	Detect	Observe	Recognize	Identify	Panorama: 102 m (334.66 ft) Detail: 1,928 m (6,325.46 ft)	Panorama: 40.8 m (133.86 ft) Detail: 771.2 m (2,530.18 ft)	Panorama: 20.4 m (66.9 ft) Detail: 385.6 m (1,265.09 ft)	Panorama: 10.2 m (33.46 ft) Detail: 192.8 m (632.55 ft)
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**PTZ**

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–160°/s Tilt: 0.1°/s–120°/s
Preset Speed	Pan: 240°/s; Tilt: 200°/s
Preset	300

Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Preset; Tour; Scan; Track
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.
Face Detection	Yes
Auto Tracking	Yes

**Video**

Video Compression	H.265; H.264B; H.264M; H.264H; MJPEG; Smart H.265; Smart H.264
Streaming Capability	3 streams
Resolution	Panoramic: 4M (2560 X 1440) , 1080p (1920 × 1080) , 1.3M (1280 × 960) , 720p (1280 × 720) , D1 (704 × 576/704 × 480) , CIF (352 × 288/352 × 240) Detail: 4M (2560 X 1440) , 1080p (1920×1080) , 1.3M (1280 × 960) , 720p (1280 × 720) , D1 (704 × 576/704 × 480) , CIF (352 × 288/352 × 240)
Default Bit Rate with Default Resolution	3072 kbps (2560 × 1440, H.265)
Video Frame Rate	Panoramic: Main stream: 4M/1080p/1.3M/720p (1–25/30 fps) sub stream 1: D1/CIF (1–25/30 fps) sub stream 2: 720p/CIF (1–25/30 fps) Detail: Main stream: 4M/1080p/1.3M/720p (1–25/30 fps) sub stream 1: D1/CIF (1–25/30 fps) sub stream 2: 720p/CIF (1–25/30 fps)
Bit Rate Control	CBR; VBR
Video Bit Rate	H.265: 1024 kbps–7936 kbps
Day/Night	Panoramic: Color; B/W Detail: Auto (ICR); Color; B/W
BLC	Panoramic: Yes Detail: Yes
WDR	Yes
HLC	Panoramic: Yes Detail: 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	Panoramic: Auto; manual Detail: Auto; manual
Noise Reduction	Panoramic: 2D NR; 3D NR Detail: 2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes

Defog	Panoramic: Electronic defog Detail: Electronic defog
Image Rotation	180°
S/N Ratio	≥55 dB

### Audio

Audio Compression	G.711a; G.711Mu; G.726; MPEG2–Layer2; G722.1
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### Network

Network 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; TCP
Interoperability	ONVIF (Profile S&G&T); CGI; Dahua SDK
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (128 GB)
Browser	IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari
Management Software	Smart PSS; DSS; NVR
Mobile Client	iOS; Android; iPhone; iPad; Windows Phone

### Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: 47 CFR FCC Part15, Subpart B Class A ANSI C63.4-2014
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### Port

Alarm I/O	2/1
Audio I/O	1/1
Two-way Audio	Yes
Alarm Linkage	Capture; preset; tour; pattern; recording; triggering on-off value output; audio; sending email
Alarm Event	Motion; tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection

### Power

Power Supply	36 VDC, 2.23 A (± 25%) (included)
Power Consumption	Basic: 20 W Max.: 45 W (illuminator + heater + PTZ working + sound and light alarm)

### Environment

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Operating Humidity	≤95%
Protection	IP66; TVS 6000 V lightning proof; surge protection; voltage transient protection

### Structure

Casing	Plastic + aluminum alloy
Product Dimensions	358 mm × Φ202 mm (14.09" × 7.95")
Packaging Dimensions	510.0 mm × 312.0 mm × 312.0 mm (21.42" × 7.70" × 6.75") (L × W × H)

Net Weight	5.6 kg (12.35 lb)
Gross Weight	7.15 kg (15.77 lb)

### Ordering Information

Type	Part Number	Description
Network PTZ Camera	DH-SDT7C424-4F-ZBZJ-APV-0400	4MP 24x Starlight White Light PTZ AI Network Camera
Accessories	DC36V/2.23A	Power Adapter
	PFB303W	Wall Mount
	PFA114	Mount Adapter
	PFB300C+PFA150	Pole Mount
	PFA150	Pole Mount
	PFA151	Corner Mount
	PFB300C	Ceiling Mount
	PFB301C	Ceiling Mount
	PFB301S-E	Plane Mount
	PFB303S	Parapet Mount

### Accessories

#### Included:



DC36V/2.23A  
Power Adapter



PFB303W  
Wall Mount



PFA114  
Mount Adapter

#### Optional:



PFB300C+PFA150  
Pole Mount



PFA150  
Pole Mount



PFA151  
Corner Mount



PFB300C  
Ceiling Mount



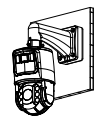
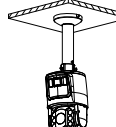
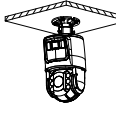
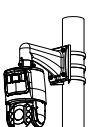
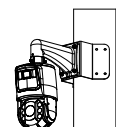
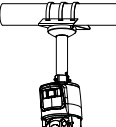
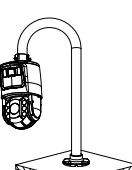
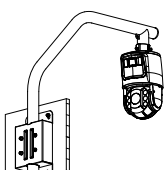
PFB301C  
Ceiling Mount



PFB301S-E  
Plane Mount



PFB303S  
Parapet Mount

Wall Mount	Ceiling Mount	Ceiling Mount
PFA114+PFB303W+PFA120	PFA114+PFB300C	PFA114+PFB301C
		
Pole Mount(Vertical)	Corner Mount	Pole Mount(Horizontal)
PFA114+PFB303W+PFA150	PFA114+PFB303W+PFA151	PFA114+PFB300C+PFA150
		
Plane Mount	Parapet Mount	
PFA114+PFB301S-E	PFA114+PFB303S	
		

**Dimensions (mm[inch])**

