DH-PSDW83242M-A360-D845L

8×4MP Multi-Sensor Panoramic & PTZ WizMind Network Camera

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.

- Panoramic network camera: Eight 1/1.8" 4Megapixel progressive CMOS
  PTZ camera: One 1/1.8" 8Megapixel progressive CMOS
- 360-degree panoramic view
- Smart H265+/H264+ encoding
- Day/Night (ICR); 3D NR; AWB; AGC; BLC
- Illumination distance up to 500 m
- 45x optical zoom
- Optical image stabilization
- Smart tracking
- Tripwire; Intrusion
- Crowd map
- Vehicle Density

| 32Mp | Panoramic Splicing | Smart Tracking | Crowd Density | Perimeter Protection | Vehicle Density |

Series Overview

The Panoramic Network Camera + PTZ Camera can splice up to a 360° horizontal view to give you a wider view. Working with high-speed PTZ, the camera can display the details. With advanced video analysis algorithm, the camera supports linkage between panorama and details, and situation analysis.

Functions

Panoramic Splicing

With advanced splicing algorithm, Dahua Panoramic Splicing technology deletes overlapped area and splices multiple images to be a complete panorama. The field of view of the spliced image can be up to 360°, which largely improves surveillance efficiency and user experience. Generally, after splicing, the field of view of eight-sensor camera can be 360°.

Smart Tracking

With advanced algorithm, Dahua network camera can detect targets, track targets with speed dome, and view details.

Crowd Density

With deep learning algorithm, Dahua Crowd Density technology can detect the crowd density on the image, and display it on heat map; it can detect people quantity and density in selected area and set threshold. When the number or density is larger or smaller than the threshold, it triggers linkage.

Vehicle Density

With deep learning algorithm, Dahua Vehicle Density technology analyses the vehicle situation in the image, such as vehicle number in selected area. You can set threshold, and when the number is larger or smaller than the threshold, it triggers linkage.

Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire and intrusion) are largely reduced.

ROI

Dahua Regions Of Interest (ROI) technology allows you to select the monitoring area of interest to improve image effect in the selected area.

AR Panorama

Dahua AR panorama technology generates wide-field of view through panoramic merging and splicing. The software overlaps the cameras as tags in the image. Click the tag to display the corresponding camera video, which makes monitoring visual and convenient, and improves command efficiency.

Cyber Security

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device. With UL CAP Certification, TÜV Rheinland Protected Privacy IoT Product Certification, and ETSI EN 303645 Certification, Dahua network camera better meets the demands of cyber security and privacy protection.

Technical Specification

Camera

Image Sensor	1/1.8"4Megapixel progressive CMOS
Max. Resolution	2 × 5520 (H) × 2700 (V)
Effective Pixels	Panoramic network camera 1: 16MP Panoramic network camera 2: 16MP PTZ camera: 8MP
ROM	Panoramic network camera: 4 GB PTZ camera: 8 GB
RAM	Panoramic network camera: 8 GB PTZ camera: 4 GB
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Scanning Mode	Progressive
Minimum Illumination	Panoramic network camera: 0.001 Lux@F1.6 (Color,30IRE); 0.0001 Lux@F1.6 (B/W,30IRE) PTZ camera: 0.001 Lux@F1.5 (Color,30IRE); 0.0001 Lux @F1.5(B/W,30IRE); 0 Lux (Illuminator on)
Illumination Distance	PTZ camera: ≥ 500 m (1640.42 ft) (Laser)
IR On/Off Control	Auto; manual; zoomprio
IR LED Number	7 (Laser); 2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0° to 360° Tilt: −12° to 90°

Lens

Lens Type	Panoramic network camera 1: Fixed-focal Panoramic network camera 2: Fixed-focal PTZ camera: Vari-focal
Lens Mount	Panoramic network camera 1: M12 Panoramic network camera 2: M12 PTZ camera: Module
Focal Length	Panoramic network camera 1: 2.8 mm Panoramic network camera 2: 2.8 mm PTZ camera: 5.5 mm–248 mm
Max. Aperture	Panoramic network camera 1: F1.6 Panoramic network camera 2: F1.6 PTZ camera: F1.5–F5.3
Field of View	Panoramic network camera 1: Horizontal: 180° Vertical: 111° Panoramic network camera 2: Horizontal: 180° Vertical: 111° PTZ camera: Horizontal: 64.4°–2.02° Vertical: 38.37°–1.14° Diagonal: 69.6°–2.29°
Close Focus Distance	Panoramic network camera: 1.4 m (4.6 ft) PTZ camera: 0.1 m–5 m (0.33 ft–16.40 ft) (T to W)
Iris Control	Panoramic network camera: Fixed PTZ camera: Auto

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	Panoramic network camera	57.9 m (190.0 ft)	23.2 m (76.1 ft)	11.6 m (38.1 ft)	5.8 m (19.0 ft)
	PTZ camera	4420 m (14501.31 ft)	1768 m (5800.52 ft)	884 m (2900.26 ft)	442 m (1450.13 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: −12° to 90°, auto flip 180
Manual Control Speed	Pan: 240°/s Tilt: 100°/s
Preset Speed	Pan: 240°/s Tilt: 100°/s
Presets	300
Tour	8 (up to 32 preset per tour)
Pattern Number	5
Scanning Number	5
Power-off Memory	Yes
Idle Motion	Preset; tour; pattern; scanning

Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion
Crowd Distribution Map	Crowd map, global crowd density; crowd density in area; people counting in area; smart track for crowd density exception
Vehicle Density	Parking upper limit; traffic congestion alarm
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.264+ Smart H.265+
Video Frame Rate	Panoramic network camera 1: Main stream: 5520 × 2700@1–25/30 fps Sub stream 1: 1920 × 940@1–25/30 fps Sub stream 2: 2560 × 1252@1–25/30 fps Panoramic network camera 2: Main stream: 5520 × 2700@1–25/30 fps Sub stream 1: 1920 × 940@1–25/30 fps Sub stream 2: 2560 × 1252@1–25/30 fps PTZ camera: Main stream: 3840 × 2160@1–25/30 fps Sub stream 1: 704 × 576@1–25/30 fps Sub stream 2: 1280 × 720@1–25/30 fps
Stream Capability	3 streams
Resolution	Panoramic network camera 1: Main stream: 5520 × 2700; 4600 × 2252; 3840 × 1880; 2880 × 1408 Sub stream 1: 1920 × 940; 1280 × 620; 1024 × 496 Sub stream 2: 2560 × 1252; 1366 × 668 Panoramic network camera 2: Main stream: 5520 × 2700; 4600 × 2252; 3840 × 1880; 2880 × 1408 Sub stream 1:1920 × 940; 1280 × 620; 1024 × 496 Sub stream 2: 2560 × 1252; 1366 × 668 PTZ camera: Main stream: 3840 × 2160; 2560 × 1440; 1920 × 1080; 1280 × 960; 1280 × 720 Sub stream 1: 704 × 576/704 × 480; 352 × 288/352 × 240 Sub stream 2: 1920 × 1080; 1280 × 960; 1280 × 720
Bit Rate Control	CBR/VBR

Video Bit Rate	Panoramic network camera 1: H.264: 96 kbps–42797 kbps H.265: 38 kbps–25889 kbps Panoramic network camera 2: H.264: 96 kbps–42797 kbps H.265: 38 kbps–25889 kbps PTZ camera: H.264: 32 kbps–27740 kbps H.265: 12 kbps–16572 kbp
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	Panoramic network camera 1: DWDR Panoramic network camera 2: DWDR PTZ camera: 120 dB
Scene Self-adaptation	Yes
White Balance	Auto; Natural; Street lamp; Outdoor; Manual; Regional Custom
Gain Control	Auto; Manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Panoramic network camera 1: Yes (4 areas) Panoramic network camera 2: Yes (4 areas) PTZ camera: Yes (4 areas)
Image Stabilization (OIS)	Panoramic network camera 1: No Panoramic network camera 2: No PTZ camera: Optical Image Stabilization (OIS)
Defog	Panoramic network camera 1: No Panoramic network camera 2: No PTZ camera: Optical defog
Flip	Panoramic network camera 1: No Panoramic network camera 2: No PTZ camera: Yes
Privacy Masking	Panoramic network camera 1: 4 areas Panoramic network camera 2: 4 areas PTZ camera: 24 areas (8 for each preset)

Audio

Audio Compression	PCM; G.711A; G.711Mu; G.726; G.723; G.722.1; G.729; MPEG2-Layer2

Alarm

Alarm Event	No SD card; SD card full; SD card error; SD card service life warning; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; intensity change; voltage detection; external alarm; safety exception; crowd congestion; vehicle congestion; parking upper limit
Audio Sampling	8 KHz; 16 KHz; 32 KHz; 48 KHz; 64 KHz

Network

Network	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
User/Host	20 (Total bandwidth: 1000 M)
Storage	Micro SD card (support max. 256 G); FTP; SFTP; NFS; SMB
Browser	IE: IE9; IE10; IE11 Chrome: 42 and earlier Firefox: 52 and earlier

Management Software	NVR5X-I; EVS50&70; EVS71; NVD0905; M70; DSS Pro; DSS-T9160; DSS-C9100; DSS-C9160
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B

Port

RS-485	1 (baud rate range: 1200 bps–115200 bps); reserved
Audio Input	2 channels (terminal)
Audio Output	2 channels (terminal)
Alarm Input	7 channels in: 5mA 3V–5V DC
Analog Output	1 channel (CVBS outputs, NBC port)
Optical Module Specification	SFP optical module, single mode, single fiber 20KmTX-1310nm/RX-1550nm
Optical Fiber	FC
Optical Fiber Module Type	Gigabit SFP optical module, single mode, single fiber TX-1550nm/RX-1310nm
Alarm Output	3 channels out: 1,000mA 30V DC/500mA 50V AC
SDI	Yes

Power

Power Supply	36V DC
Operating Voltage	36V DC (±50%)
Power Consumption	Basic: 33.7W (36 V DC) Max. (Basic power consumption + WDR + intelligent functions enabled + IR on + PTZ operation): 71.9 W (36 V DC) Heating: Panoramic network camera: 6 W (36V DC); PTZ: 5.4 W

Environment

Operating Conditions	−40°C to +70°C (−40°F to +158°F)
Storage Temperature	5°C to 40°C (41°F to 104°F)(The temperature difference of each day is within 15°C/59°F)
Protection Grade	IP66; IK10 (optional)

Structure

Casing	Metal + Plastic
Dimensions	Φ383 mm × 389.8 (Φ15.1" × 15.3")
Box Dimensions	500 mm × 500 mm × 658 mm (19.7" × 19.7" × 25.9") (L × W × H)
Net Weight	14.7 kg (32.4 lb)
Gross Weight	19.8 kg (43.7 lb)
Installation	Wall mount; ceiling mount; pole mount
Power Adapter	Standard
Lens	Standard
Power Output	12V DC power output, max. current 165 mA

Ordering Information

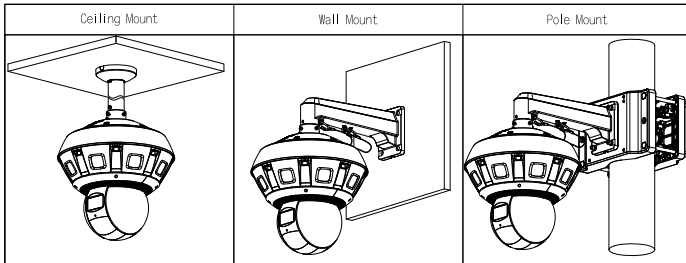| Type	Model	Description
32MP Camera	DH-PSDW83242M-A360-D845L	8×4MP Multi-Sensor Panoramic & PTZ WizMind Network Camera
Accessories	PBW059-00	Mount Adapter
	PFB710C-SG	Ceiling Mount Bracket
	PFB710W-SG	Wall Mount Bracket
	PFA153-SG	Polo Mount Bracket

Accessories

Included:

PBW059-00
Mount Adapter

Optional:

PFB710C-SG
Ceiling Mount Bracket

PFB710W-SG
Wall Mount Bracket

PFA153-SG
Polo Mount Bracket

Ceiling Mount	Wall Mount	Pole Mount

Dimensions (mm[inch])

64.0 [2.52]

G1 1/2

69.0 [2.72]

462.0 [18.19]

390.0 [15.35]

346.5 [13.64]

156.0 [6.14]

R106.0 [R4.17]

⌀383.0 [⌀15.08]

FRONT

OPEN