# DH-PSDW81642ML-A360-D237

8x2MP Multi-Sensor Panoramic  + PTZ WizMind Network Camera

· Panoramic: Eight 1/1.8'' 2 Megapixel progressive scan CMOS
· PTZ: One 1/1.8'' 2 Megapixel progressive scan CMOS
· Support 360-degree panoramic view
· Starlight+ technology
· support Smart H265+/H264+ encoding
· Day/Night (ICR); 3D NR; AWB; AGC; BLC
· IR distance up to 220 m
· Smart tracking
· Tripwire
· Intrusion

**WizMind**

| 360° Panoramic | 16Mp | Starlight | H.265 | ICR D/N | TRACKING Smart Tracking | Tripwire | Intrusion |

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.

## Series Overview

Starlight panoramic HD network camera, with all-in-one design, provides a 360°panorama and region of interest details at the same time. The panoramic network combines 8 sensors working in tandem to realize 360°panoramic surveillance; all-in-one module and high-speed PTZ camera provides the function of quick position details. In addition, with video analytic algorithm and multi-target track algorithm, the camera can automatically or manually detect tripwire and intrusion of mutiple targets in detection area, output alarm signal, and then link PTZ for smart tracking. With these excellent features, the camera can meet higher security requirements.

## Functions

### True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

### Starlight Technology

Featured with Dahua Starlight Technology, the camera is ideal for applications with challenging light conditions. Its low light performance delivers usable video with minimal ambient light. Even in extreme low light conditions, Starlight Technology is capable of delivering color images in nearly complete darkness.

### Smart tracking

1. Panoramic channel supports manual position, frame selection zoom position.
2. Manual track.
3. Auto track after tripwire and intrusion are triggered.

### Tripwire detection and intrusion detection

With advanced CNN algorithm, the detection distance,and the accuracy rate and timely rate of linkage track are much improved.

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | Panoramic network camera: 1/1.8"CMOS<br>PTZ camera: 1/1.8"CMOS |
| Max. resolution | Panoramic network camera: 8192×1800<br>PTZ camera: 1920× 1080 |
| Scanning System | Progressive |
| Electronic Shutter Speed | Panoramic network camera: 1/3 s-1/100000 s, manual or auto adjust<br>PTZ Camera: 1/1 s-1/300000 s, manual or auto adjust |
| Min. Illumination | Panoramic network camera:<br>0.001Lux(colour);0.0001Lux(black);<br>PTZ camera:<br>0.001Lux(colour);0.0001Lux(black);0Lux(IR on) |
| S/N Ratio | Panoramic network camera:51db<br>PTZ camera:51.5db |
| IR Distance | Panoramic network camera: —<br>PTZ camera: ≥ 220 m (721.78t) (IR on) |
| IR On/Off Control | Auto/Manual |
| IR LEDs Number | Panoramic network camera: —<br>PTZ camera: 7 |

### Lens

| | |
|---|---|
| Lens Type | Panoramic network camera:Fixed-focal<br>PTZ camera:Motorized vari-focal |
| Mount Type | Panoramic network camera:M16<br>PTZ camera: Core interface |
| Focal Length | Panoramic network camera 2.8 mm<br>PTZ camera: 5.62mm~208mm, 37x optical zoom |
| Max. Aperture | Panoramic network camera: F1.6<br>PTZ camera: F1.4 |
| Field of View | Panoramic network camera:Horizontal: 360° Vertical: 80°~85°<br>PTZ camera:Horizontal:<br>Horizontal: 2.61°~59.61°<br>Vertical: 1.48°~34.92°<br>Diagonal: 3°~66.96° |
| Iris Type | Panoramic network camera: Fixed aperture<br>PTZ camera: Auto |
| Close Focus Distance | Panoramic network camera: 0.2m(0.66ft)<br>PTZ camera:0.1m~1m(0.33ft~3.28ft) |

| DORI Distance | | Detect | Observe | Reconize | Identify |
|---|---|---|---|---|---|
| | Panoramic network camera | 29.0m (95.14ft) | 11.6m (38.05ft) | 5.8m (19.02ft) | 2.9m (9.51ft) |
| | PTZ camera | 1930.7m (6334.31ft) | 772.27m (2533.69ft) | 386.1m (1266.73) | 193.1m (633.53ft) |

### Smart Event

| | |
|---|---|
| IVS | Intrusion, tripwire |

### Video

| | |
|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG |
| Smart Codec | Smart H.264+<br>Smart H.265+ |
| Video Frame Rate | Panoramic network camera:Main stream(8192×1800@1~30fps),Sub Stream(2048×452@1~30fps),Third Stream(3840×832@1~30fps)<br>PTZ camera:<br>Main stream(1920×1080@1~30fps),Sub Stream(704×480@1~30fps),Third Stream(1280×720@1~30fps) |

| | |
|---|---|
| Stream Capability | 3 Streams |
| Resolution | Panoramic network camera:<br>8192×1800;7680×1680;5760×1264;4096×900;3840×832;2560×560;2048×452<br>PTZ camera:<br>1920 × 1080; 1280 × 960; 1280 × 720; 704 × 576; 704 × 480; 352 × 288; 352 × 240 |
| Bit Rate Control | Panoramic network camera: CBR/VBR<br>PTZ camera:CBR/VBR |
| Video Bit Rate | Panoramic network camera:<br>H.264:112kbps ~37227Kb/S<br>H.265:44kbps ~22546Kb/S<br>PTZ camera:<br>H.264:24kbps ~10752Kb/S<br>H.265:9kbps ~6400Kb/S |
| Day/Night | Auto (ICR)/Color/B/W |
| BLC | Yes |
| HLC | Yes |
| WDR | Panoramic network camera:DWDR<br>PTZ camera: WDR (120 dB ) |
| White Balance | Panoramic network camera:Auto/Natural/street lamp/outdoor/manual/regional Custom<br>PTZ camera: Auto/indoor/outdoor/tracking/manual/sodium lamp/natural/street lamp |
| Gain Control | Auto/Manual |
| Noise Reduction | 3D NR |
| Motion Detection | Disable/Enable |
| Region of Interest (RoI) | Yes (4 areas) |
| Electronic Image stabilization(EIS) | Panoramic network camera: —<br>PTZ camera: Yes |
| Smart IR | Panoramic network camera: —<br>PTZ camera: Yes (Adjusted by user.) |
| Defog | Panoramic network camera: —<br>PTZ camera: Yes |
| Image Rotation | 0°/180°(PTZ camera) |
| Privacy masking | 4 areas(Panoramic network camera);24 areas(PTZ camera) |

### Audio

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|---|---|
| Audio Compression | G.711Mu;G.711A;G.726 |

### Network

| | |
|---|---|
| Network | RJ-45 (10/100/1000 Base-T) |
| 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); CGI; Milestone;Genetec |
| User/Host | 20 (Total bandwidth: 1000 M) |
| Edge Storage | FTP;SFTP; Micro SD card (support max. 256 G); Dahua Cloud; NAS |
| Browser | Chrome 42<br>Firefox 52<br>IE7;IE8;IE9;IE11 |
| Management Software | EVS5XX,EVS7XX,NVR5X-I,NVR4X-4KS2 ,M70,IVSS7X ,DSS Pro&DSS express |

## Certification

| | |
|---|---|
| Certification | CE-LVD: EN60950-1<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B<br>UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07 |

## PTZ Dome

| | |
|---|---|
| Pan Range | Pan: 0° to 360° endless<br>Tilt: −12° to 90°, auto flip 180 |
| Manual Control Speed | Pan: 240°/s<br>Tilt: 120°/s |
| Remote Lens Reset | Yes |
| Preset | 300 |
| Tour | 8 Tour (up to 32 preset per tour) |
| Pattern | 5 patterns |
| Scan | 5 |
| Power-off Memory | Yes |
| Idle Motion | Preset/Pattern/Tour/Scan |
| Time Task | Yes |
| Three-dimensional Positioning | Yes |
| PTZ Limit | Yes |
| Position Display | Yes |
| Information Display | Yes |
| Time Display | Yes |

## Port

| | |
|---|---|
| Optical Fiber | FC,single mode, single fiber |
| FC,single mode, single fiber | 2 channels (terminal) |
| Audio Output | 2 channels (terminal) |
| Alarm Input | 7 channels in: 5mA 3V–5V DC |
| Alarm Output | 3 channels out: 1,000mA 30V DC/500mA 50V DC |

## Power

| | |
|---|---|
| Power Supply | DC36V |
| Power Consumption | MAX:74W |

## Environment

| | |
|---|---|
| Operating Temperature | -40°C to +70°C(-104°F to +158°F) |
| Operating Humidity | ≤95% |
| Storage Temperature | -40°C to +70°C (-104°F to +158°F)/Less than 95% RH |
| Ingress Protection | IP66;IK10(optional) |

## Structure

| | |
|---|---|
| Enclosure | Metal + Plastic |
| Dimensions | Φ383 mm × 389.8 mm (Φ1256.56 ft × 1279.8 ft) |
| Net Weight | 14.7 kg (32.40 lb) |
| Gross Weight | 19.8 kg (43.65 lb) |

## Ordering Information

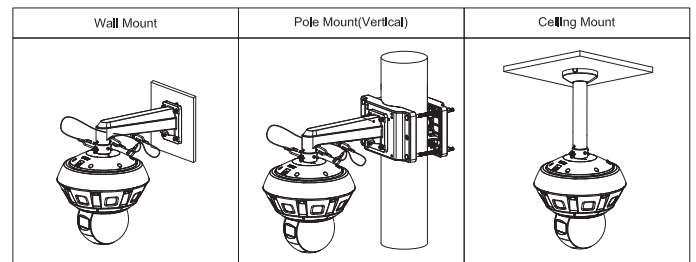| Type | Part Number | Description |
|---|---|---|
| Panoramic + PTZ camera | DH-PSDW81642ML-A360-D237 | 8 × 2MP  Multi-Sensor Panoramic +  PTZ WizMind Network Camera |
| | DH-PSDW8842ML-A180-D237 | 4 × 2MP  Multi-Sensor Panoramic +  PTZ WizMind Network Camera |
| Accessories | PFB710C-SG | Hang-mounted bracket |
| | PFB710W-SG | Wall-mounted bracket |
| | DH-PFA153-SG | Pole-mounted bracket |

## Accessories

**Optional:**



DH-PFA153-SG
Pole-mounted bracket

PFB710C-SG
Hang-mounted bracket

PFB710W-SG
Wall-mounted bracket



| Wall Mount | Pole Mount(Vertical) | Ceiling Mount |
|---|---|---|

## Dimensions (mm[inch])