

DH-PSDW8842M-A180

4 × 2MP WizMind Multi-Sensor Panoramic & PTZ Network 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.

Series Overview

Starlight panoramic HD network camera, with all-in-one design, provides a 180° panorama and region of interest details at the same time. The panoramic network combines 4 sensors working in tandem to realize 180° 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.

- \cdot Panoramic camera: Four 1/1.8" 2 Megapixel progressive scan CMOS
- \cdot PTZ camera: One 1/1.8" 4 Megapixel progressive scan CMOS
- \cdot Support 180-degree panoramic view
- Starlight technology
- \cdot Support Smart H265+/H264+ encoding
- \cdot Day/Night (ICR); 3D NR; AWB; AGC; BLC
- \cdot IR distance up to 400 m
- \cdot Smart tracking
- \cdot Tripwire
- · Intrusion
- · Crowd map



Crowd map

With deep learning algorithm, Dahua Crowd Map 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.

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.

Smart tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

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.

Wiz Mind | DH-PSDW8842M-A180

Technical Specification

lechnical Specification					
Camera					
Image Sensor		Panoramic camera: 1/1.8"2Megapixel progressive CMOS PTZ camera: 1/1.8"4Megapixel progressive CMOS			
Max. Resolution		Panoramic camera: 4096 (H) × 1800 (V) PTZ camera: 2560 (H) × 1440 (V)			
ROM		Panoramic camera: 4 GB PTZ camera: 32 GB			
RAM		Panoramic camera: 8 GB PTZ camera: 4 GB			
Scanning System		Progressive			
Electronic Shutter Speed		Panoramic camera: Auto/Manual 1/3 s–1/100,000 s PTZ camera: Auto/Manual 1/1 s-1/300,000 s			
Min. Illumination		Panoramic network camera: 0.001 Lux (Color); 0.0002 Lux (B/W) PTZ camera: 0.001 Lux (Color); 0.0001 Lux (B/W); 0 Lux (IR on)			
S/N Ratio		Panoramic camera: 56 dB PTZ camera: 53.6 dB			
Illumination Distance		PTZ camera: ≥ 400 m (1312.3 ft) (IR LED)			
Illuminator O	Illuminator On/Off Control		Auto/Manual		
Illuminator Number		PTZ camera: 7 (IR LED)			
Lens					
Lens Type		Panoramic camera: Fixed-focal PTZ camera: Motorized vari-focal			
Mount Type		Panoramic camera: M12 PTZ camera: Module			
Focal Length		Panoramic camera: 5 mm PTZ camera: 5.6 mm-223 mm, 40x optical zoom			
Max. Aperture		Panoramic camera: F2.0 PTZ camera: F1.3			
Field of View		Panoramic camera: Horizontal: 180° Vertical: 84° PTZ camera: Horizontal: 2.27°–61.40° Vertical: 1.30°–35.99° Diagonal: 2.62°–68.18°			
Iris Type		Panoramic camera: Fixed PTZ camera: Auto			
Close Focus Distance		Panoramic camera: 1.2 m (3.9 ft) PTZ camera: 0.5 m (1.6 ft)			
DORI distance		Detect	Observe	Recognize	Identify
	Panoramic camera	53.3 m (174.9 ft)	21.3 m (69.9 ft)	10.7 m (35.1 ft)	5.3 m (17.4 ft)
	PTZ camera	2873.1 m (9426.2 ft)	1149.2 m (3770.3 ft)	574.6 m (1885.2 ft)	287.3 m (942.6 ft)
Smart event					
IVS	IVS		Intrusion, tripwire		

115	ind doion, dipwire			
Professional, Intelligent				
Crowd Distribution Map	Crowd distribution map; global people counting; people counting in area; crowd density abnormality snapshot			
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to ever videos.			

Vide

Video				
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by sub stream)			
Smart Codec	Smart H.265+/ Smart H.264+			
Video Frame Rate	Panoramic camera: Main stream: 4096 × 1800 @1–25/30 fps; sub stream 1: 1920 × 832 @1–25/30 fps; sub stream 2: 4800 × 1920 @1–25/30 fps PTZ camera: Main stream: 2560 × 1440 @1–25/30 fps; sub stream 1: 704 × 480 @1–25/30 fps; sub stream 2: 1920 × 1080 @1–25/30 fps			
Stream Capability	3 streams			
Resolution	Panoramic camera: 4096 × 1800; 4800 × 1920; 3840 × 1680; 3200 × 1280; 2880 × 1264; 2048 × 900; 1920 × 832; 1600 × 640; 1280 × 560; 1024 × 452 PTZ camera: 2560 × 1440; 2048 × 1536; 1920 × 1080; 1280 × 960; 1280 × 720; 704 × 576; 704 × 480; 352 × 288; 352 × 240			
Bit Rate Control	Panoramic camera: CBR/VBR PTZ camera: CBR/VBR			
Video Bit Rate	Panoramic camera: H.264: 256Kbps–25599Kbps H.265: 196Kbps–15494Kbps PTZ camera: H.264: 184 kbps–15104 kbps H.265: 110 kbps–9216 Kbps			
Day/Night	Auto (ICR)/Color/B/W			
BLC	Yes			
HLC	Yes			
WDR	Panoramic camera: True WDR:120 dB PTZ camera: WDR (120 dB)			
Scene Self-adaptation (SSA)	Yes			
White Balance	Panoramic camera: Auto/Natural/Street lamp/Outdoor/Manual/Regional custom PTZ camera: Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/ Natural/Street lamp			
Gain Control	Auto/Manual			
Noise Reduction	3D NR			
Motion Detection	OFF/ON (4 areas)			
Region of Interest (RoI)	Panoramic camera: Yes (4 areas) PTZ camera: Yes (4 areas)			
Electronic Image Stabilization (EIS)	PTZ camera: Yes			
Smart Illumination	PTZ camera: Yes			
Defog	PTZ camera: Yes			
Privacy Masking	Panoramic camera: 4 areas PTZ camera: 8 areas			
Audio				
Audio Compression	G.711A; G.711Mu; G.726			
Alarm	Alarm Event No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection and external alarm.			

Wiz Mind | DH-PSDW8842M-A180

Network SDK and API Yes Network RJ-45 (10/100/1000 Base-T) HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE;IPv4/v6; SNMP; QoS; UPnP; Protocol NTP Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security Cyber Security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade Interoperability ONVIF (Profile G/T/S); CGI 20 (Total bandwidth: 600 M) User/Host Storage FTP; SFTP; Micro SD card (support max. 512 G);NAS IE: IE7 and earlier Chrome: 42 and earlier Browser Firefox: 52 and earlier Safari: 11 and earlier Management Software EVS; NVR; M70; DSS; Milestone; Genetec Mobile Phone IOS; Android PTZ Dome Pan: 0° to 360° endless Pan Range Tilt: -12° to 90°, auto flip 180 Pan: 0.1°/s-240°/s Manual Control Speed Tilt: 0.1°/s–100°/s Remote Lens Reset Yes Remote PTZ Reset Yes Preset 300 Tour 8 (up to 32 presets per tour) Pattern 5 patterns Scan 5 auto scans Power-off Memory Yes Idle Motion Preset/Pattern/Tour/Scan Time Task Yes **3D** Positioning Yes PTZ Limit Yes Position Display Yes Information Display Yes Time Display Yes Others Auto-calibration Certifications CE-LVD:EN62368-1 CE-EMC:Electromagnetic Compatibility Directive Certification 2014/30/EU FCC:47 CFR FCC Part 15, Subpart B UL/CUL:UL60950-1 CAN/CSA C22.2 No.60950-1-07 Port Audio Input 2 channels (terminal) Audio Output 2 channels (terminal) Alarm Input 7 channels in: 5mA 3V–5V DC

3 channels out: 300mA 12V DC

Alarm Output

Power

Power					
Power Supply		36V DC			
Power Consumption		Basic power consumption: 50.7WWW Max. power consumption (WDR + H.265 + IR LED intensity): 77.7W			
Environme	nt				
Operating Conditions		-40°C to +70°C (-40°F to 158°F)			
Operating Humidity		≤95%			
Strorage Conditions		$5^\circ C$ –40°C $$ (41°F–104°F) (The temperature difference of each day is within 15°C /59°F.)			
Protection Grade		IP66			
Structure					
Casing		Metal + plastic			
Dimensions		Φ383 mm × 389.8 mm (Φ15.1" × 15.3")			
Net Weight		14.30 kg (31.5lb)			
Gross Weight		19.50 kg (43.0lb)			
Ordering Information					
Туре	Part Numbe	r	Description		
Panoramic + PTZ camera	DH- PSDW81642N	Л-А360	8 × 2MP WizMind Multi-Sensor Panoramic & PTZ Network Camera		
	DH- PSDW8842M-A180		4 × 2MP WizMind Multi-Sensor Panoramic & PTZ Network Camera		

PTZ camera	DH- PSDW8842M-A180	4 × 2MP WizMind Multi-Sensor Panoramic & PTZ Network Camera	
Accessories	PFB710C-SG	Ceiling Mounted	
	PFB710W-SG	Wall Mounted	
	PFA153-SG	Pole Mounted	
	PBW059-00	Mount Adapter	

Accessories

Included:



PBW059-00 Mount Adapter

Optional:





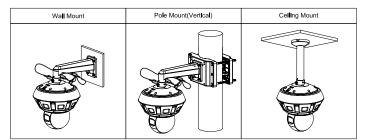




DH-PFA153-SG Pole-mounted bracket

PFB710C-SG Hang-mounted bracket

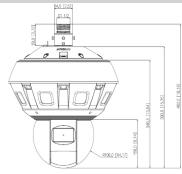
PFB710W-SG Wall-mounted bracket

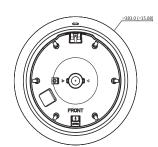


www.dahuasecurity.com

Wiz Mind | DH-PSDW8842M-A180

Dimensions (mm[inch])







Rev 001.001 © 2020 Dahua. All rights reserved. Design and specifications are subject to change without notice. Pictures in the document are for reference only, and the actual product shall prevail.