

# DH-IPC-PFW5849-A180-E2-ASTE

2x4MP Full-color Duo Splicing 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.

## Series Overview

With starlight solution and deep learning algorithm, Dahua WizMind 5 Series network camera has various intelligent functions, including face capture, perimeter protection and people counting, which greatly improve the accuracy of video analysis.

## Functions

### EPTZ

With advanced target detection and tracking algorithms, Dahua EPTZ technology can simultaneously zoom in and track multiple humans and vehicles that trigger alarms. It provides rich details and a panoramic view at the same time.

### 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, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

### People Counting

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs yearly/monthly/daily reports to meet your requirements.

- Outputs 180° wide angle splicing image.
- Outputs max. 8 MP (4096 × 1800)@25 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light, and the max. illumination distance is 40 m.
- ROI, SMART H.264 +/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 512 G Micro SD card, built-in Mic and speaker, support two-way talk.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- Intelligent monitoring: Intrusion, tripwire, heat map, and people counting.
- EPTZ: Enlarge and track the targets of intelligent alarms.
- SMD3.0.



### ePoE

Dahua's innovative ePoE technology offers a new solution to transmit power and data over long distances between cameras and network switch, allowing more flexible design of surveillance system, improving reliability, reducing installation time and saving money. ePoE technology encompasses pure network systems where a single CAT6 cable can carry signals up to 300 m (984 ft) at 100 Mbps, 800 m (2625 ft) at 10 Mbps.

### Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

### Protection (IP67, wide voltage)

**IP67:** The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

**Wide voltage:** The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

### Technical Specification

#### Camera

Image Sensor	Dual 1/1.8" CMOS
Max. Resolution	4096 (H) × 1800 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.0005 lux@F1.0 (Color, 30 IRE) 0.0002 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	40 m (131.23 ft)
Illuminator On/Off Control	Auto
Illuminator Number	4 (Warm light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

#### Lens

Lens Type	Fixed-focal										
Lens Mount	M16										
Focal Length	3.6 mm										
Field of View	H: 180°±10° V: 48°										
Max. Aperture	F1.0										
Iris Control	Fixed										
Close Focus Distance	3.6 m (11.81 ft)										
DORI Distance	<table border="1"> <thead> <tr> <th>Lens</th> <th>Detect</th> <th>Observe</th> <th>Recognize</th> <th>Identify</th> </tr> </thead> <tbody> <tr> <td>3.6 mm</td> <td>70.3 m (230.64 ft)</td> <td>28.1 m (92.19 ft)</td> <td>14.1 m (46.26 ft)</td> <td>7.0 m (22.97 ft)</td> </tr> </tbody> </table>	Lens	Detect	Observe	Recognize	Identify	3.6 mm	70.3 m (230.64 ft)	28.1 m (92.19 ft)	14.1 m (46.26 ft)	7.0 m (22.97 ft)
	Lens	Detect	Observe	Recognize	Identify						
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<p>*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.</p>											

#### Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection
Heat Map	Yes
Smart Object Detection	Smart abandoned object; smart missing object
People Counting	Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/monthly/daily reports. Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm. Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm

#### Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	WDR Off: Main stream: 4096 × 1800 @ (1–25 fps) sub stream: 1024 × 452 @ (1–25 fps) third stream: 1920 × 832 @ (1–25 fps) WDR On: Main stream: 4096 × 1800 @ (1–20 fps) sub stream: 1024 × 452 @ (1–20 fps) third stream: 1920 × 832 @ (1–20 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	3 streams
Resolution	8M (4096 × 1800); 6.5M (3840 × 1680); 4M (3840 × 1080); 4M (2880 × 1264); 1.6M (1920 × 832); 0.7M (1280 × 560); 0.5M (1024 × 452)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 9 kbps–8192 kbps H.265: 9 kbps–8192 kbps
Day/Night	Color/B/W
BLC	Yes
HLC	Yes
WDR	140 dB
Scene Self-adaptation (SSA)	Yes
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (Rol)	Yes (4 areas)
Privacy Masking	4 areas
Defog	Yes
Audio	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
Alarm	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; external alarm; SMD; people counting in area; stay detection; people counting; security exception
Network	
Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes

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
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE 11 and later Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Client	iOS; Android

### Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
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### Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channels in: 5 mA 3 V-5 VDC
Alarm Output	1 channel out: 300 mA 12 VDC

### Power

Power Supply	12 VDC (±30%)/PoE+ (802.3at)/ePoE
Power Consumption	Basic: 4.8 W (12 VDC); 5.5 W (PoE) Max. (WDR + intelligence + warm light + SPK): 12.3 W (12 VDC); 13.8 W (PoE)

### Environment

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Protection	IP67

### Structure

Casing	Metal + plastic
Product Dimensions	301.2 mm × 128.2 mm × 120.1 mm (11.86" × 5.05" × 4.73") (L × W × H)
Net Weight	1420 g (3.13 lb)
Gross Weight	1570 g (3.46 lb)

### Ordering Information

Type	Model	Description
8MP Camera	DH-IPC-PFW5849P-A180-E2-ASTE	2×4MP Full-Color Duo Splicing WizMind Network CAMERA, PAL
	IPC-PFW5849P-A180-E2-ASTE	2×4MP Full-Color Duo Splicing WizMind Network CAMERA, PAL
Accessories (Optional)	PFA5300R	Junction Box
	PFA157	Pole Mount Bracket
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card
	PFM321D	12 VDC 1A Power Adapter

### Accessories

#### Optional:



PFA5300R  
Junction Box



PFA157  
Pole Mount  
Bracket



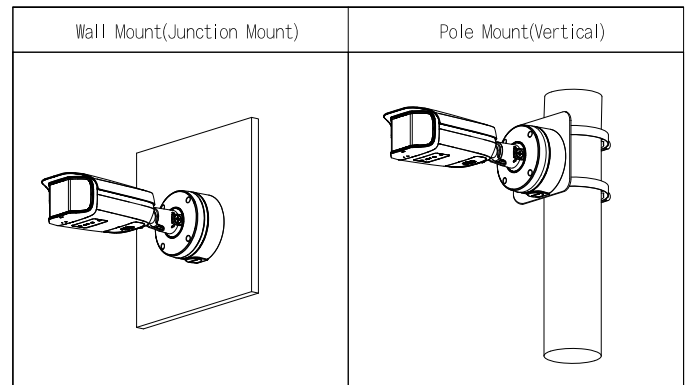
PFM900-E  
Integrated  
Mount Tester



TF-P100  
MicroSD  
Memory Card



PFM321D  
12V DC 1A  
Power Adapter



Dimensions (mm[inch])

