alhua TECHNOLOGY

DH-IPC-PFW83242-A180-S2

4x8MP WizMind Multi-Sensor Panoramic Bullet Network Camera

WizMind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS, 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

The splicing camera supports a 180° panoramic view and 4-channel hardware splicing to realize HD panoramic surveillance. It is widely applied in various scenes such as squares, airports, safe city, and traffic.

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 four-sensor camera can be 180°, and the field of view of eight-sensor camera can be 360°.
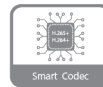
Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

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.

- 4 × 8 MP, 1/1.8" CMOS image sensor, low illuminance, high image definition.
- Outputs max. 32 MP (8192 × 3840) @25/30 fps.
- Built-in IR LED, and the max. illumination distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Supports image correction.
- Support video clip, the image can be clipped as needed.
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- Alarm: 2 in, 2 out; audio: 1 in, 1 out; 485; BNC; supports max. 256G SD card.
- 12 VDC/24 VAC/PoE power supply; easy for installation.
- IP67 and IK10 protection.

32Mp	Panoramic Splicing	Smart Codec	Distortion Correction	IP67&IK10	AR Panorama

Distortion Correction

With advanced distortion correction algorithm, Dahua Distortion Correction corrects the image distortion in both horizontal and vertical directions to be consistent with the actual situation.

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.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Max. Resolution	8192 (H) × 3840 (V)
ROM	8 GB
RAM	4 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.6 (Color,30 IRE) 0.0005 lux@F1.6 (B/W,30 IRE) 0 Lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	30 m (98.43 ft) (IR LED)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	8 (IR LED)
Pan/Tilt/Rotation Range	Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal			
Lens Mount	M16			
Focal Length	2.8 mm			
Max. Aperture	F1.6			
Field of View	H: 180°; V: 100°			
Iris Control	Fixed			
Close Focus Distance	1.8 m (5.90 ft)			
DORI Distance	Detect	Observe	Recognize	Identify
	84.0 m (275.59 ft)	33.6 m (110.24 ft)	16.8 m (55.12 ft)	8.4 m (27.56 ft)

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+
Video Frame Rate	Main stream: 8192 × 3840@ (1–25/30 fps) Sub stream: 1280 × 600@(1–25/30 fps) Third stream: 2304 × 1080@(1–25/30 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	8192 × 3840; 7680 × 3600; 7168 × 3360; 6720 × 3152; 5760 ×2700; 4800 × 2252; 4096 × 1920; 2880 × 1360; 2304 × 1080; 2048× 960; 1520 × 712; 1280 × 600
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 96 kbps–23808 kbps H.265: 38 kbps–14336 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes

HLC	Yes
WDR	DWDR
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)	Yes (4 areas)
Privacy Masking	4 areas

Audio

Audio Compression	G.711a; G.711Mu; G.726; G.723; PCM

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; scene changing; audio detection; voltage detection; external alarm; security exception

Network

Network Port	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
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
Interoperability	ONVIF (Profile S/Profile GProfileT); CGI; Milestone; Genetec
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE 9 and later Chrome: Chrome 86 and later Firefox: Firefox 86 and later
Management Software	Smart PSS; DSS; DMSS
Cyber Security	Configuration encryption;trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification

Certification

Certifications	CE-LVD:EN62368-1; CE-EMC:Electromagnetic Compatibility Directive 2014/30/EU; FCC:47 CFR FCC Part 15, Subpart B; UL/CUL:UL62368-1 & CAN/CSA C22.2 No. 62368-1-14

Port

RS-485	1 (baud rate range:1200 bps–115200 bps)
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channels in: 5 mA 3–5 VDC
Alarm Output	2 channels out: 1,000 mA 30 VDC/500 mA 50 VAC

Power

Power Supply	12 VDC/24 VAC/PoE+(802.3at)
Power Consumption	Basic power consumption: 10.6 W (12 VDC); 11.9 W(24 VAC); 11.9 W (PoE) Max. power consumption (ICR + IR LED): 22.2 W (12 VDC); 25 W (24 VAC); 25 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	IK10; IP67

Structure

Casing Material	Metal + plastic
Product Dimensions	298.3 mm × 172.5 mm × 120.5 mm (11.74" × 6.79" × 4.74") (L × W × H)
Net Weight	3.16 kg (6.97 lb)
Gross Weight	4.06 kg (8.95 lb)

Ordering Information

Type	Model	Description
32MP Camera	DH-IPC-PFW83242-A180-S2	4x8MP WizMind Multi-Sensor Panoramic Bullet Network Camera
	IPC-PFW83242-A180-S2	4x8MP WizMind Multi-Sensor Panoramic Bullet Network Camera
Accessories (Optional)	PFA120-SG	Junction Box
	PFA150-SG	Pole Mount Bracket
	PFM320D	12 VDC 2 A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories
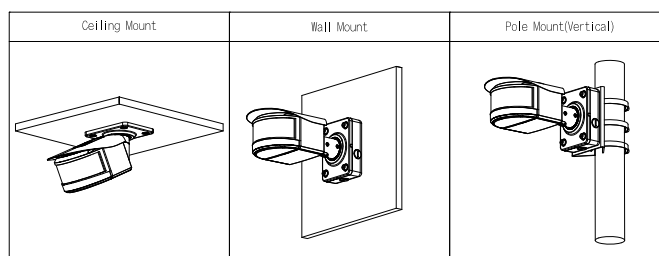
Optional:

PFA120-SG
Junction Box

PFA150-SG
Pole Mount Bracket

PFM320D
12 VDC 2 A
Power Adapter

PFM900-E
Integrated
Mount Tester

TF-P100
MicroSD
Memory Card

Ceiling Mount	Wall Mount	Pole Mount(Vertical)

Dimensions (mm[inch])

298.3 [11.74]
187.0 [7.36]
172.5 [6.79]
120.5 [4.74]

119.0 [4.69]
84.0 [3.31]
115.0 [4.53]
160.0 [6.3]
4−∅9.0 [∅0.35]