dahua TECHNOLOGY

DH-IPC-PDBW82041-B360

4 × 5MP WizMind Multi-Sensor No-Splicing Panoramic Dome 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

The non-splicing camera can adjust each lens to realize 360° surveillance, which can be used in the scenes with multiple cameras, and is easy to install. Stereo vision camera has the functions such as deep detection and behavior analysis.

Functions

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.

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.

Face Detection

Dahua Face Detection technology can detect the face in the image. With deep learning algorithm, the technology supports detecting, tracking, capturing and selecting the best face image, and then outputs face snapshot.

• 4 × 5MP 1/2.7" CMOS image sensor, low illuminance, high image definition

• 4-channel stream output, and each channel can output max. 5MP (2592 × 1944) @25/30 fps

• ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments

• Support 4-channel 120 dB WDR

• The intelligent functions of 4 channels can be enabled at the same time

• Intelligent detection: Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human), abandoned object, missing object, loitering detection, people gathering, parking detection, and face detection

• FlexStream: The 4 channels of images can be viewed in a defined channel with 1 channel stream. That is, the multiple images can be displayed in 1 channel.

• Web5.0 interface design, which is friendly to users, and easy for operation

• Built-in efficient IR LED illuminator, and the max. illumination distance is 30 m

• Alarm: 3 in, 2 out; audio: 1 in, 1 out; 485; supports max. 256 G Micro SD card

• 12V DC/POE power supply; 12V power output, and max. current 165mA; easy for installation

• IP67, IK10 protection

5Mp	Perimeter Protection	FlexStream	WDR	Face Detection	IP67&IK10

One IP Address for Multiple Streams

With one IP address, Dahua multi-sensor camera can display multiple images. The camera can do multi-image monitoring through software platform or NVR.

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 comprising the device.

WDR

With advanced Wide Dynamic Range 120dB WDR technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

Protection (IP67, IK10, 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.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

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	1/2.7"5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	32 GB
RAM	4 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 Lux@F1.7(Color,30IRE) 0.0005 Lux@F1.7(B/W,30IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.4 ft) (IR LED)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	8 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–80° Rotation: 0°–355°

Lens

Lens Type	Motorized vari-focal
Mount Type	φ14
Focal Length	2.8 mm–12 mm
Max. Aperture	F1.7
Field of View	Horizontal: 100°–36° Vertical: 74°–27° Diagonal: 133°–45°
Iris Type	Fixed
Close Focus Distance	0.8 m (2.6 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	66 m (216.5 ft)	26.4 m (86.6 ft)	13.2 m (43.3 ft)	6.6 m (21.7ft)
	T	140.4 m (460.6 ft)	56.1 m (184.1 ft)	28 m (91.9 ft)	14 m (45.9 ft)

Smart Event

IVS	Abandoned object; missing object

Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion; fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection; people gathering; parking detection
Face Detection	Face detection; track; optimization; snapshot; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear), mask, beard; face matting setting: face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization time setting
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.265+/Smart H.264+
Video Frame Rate	Single Stream: Main stream: 5MP (1–25/30 fps) Sub stream: D1 (1–25/30 fps) Third stream: 2MP (1–25/30 fps) FlexStream: Main stream: 2MP (1–25/30 fps) Sub stream: D1 (1–25/30 fps) Third stream: 8MP (1–25/30 fps)
Stream Capability	3 streams
Resolution	Single Stream: 5M(2592×1944); 4M(2688×1520); 3M(2048×1536);2M(1920×1080);720P(1280×720); D1(704× 576/704×480);CIF(352×288/352×240) FlexStream:8M(3296×2472);5M(2592×1944); 2M(1600×1200);1.3M(1280×960); D1(704× 576/704×480);CIF(352×288/352×240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–19456 kbps H.265: 3 kbps–19456 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	4 × 120 dB
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)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

Audio

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; intrusion; tripwire; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; defocus detection; external alarm; face detection; safety exception; voltage detection

Network

Network	RJ-45 (10/100/1000 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
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 G/Profile T); CGI; Milestone; Genetec; RTMP; P2P
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE9 and later Chrome: 41.0 and later No-plug version: Safari and edge
Management Software	Smart PSS; DSS
Mobile Phone	IOS; Android

Certification

Certification	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

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	3 channel in: 5mA 3V–5V DC
Alarm Output	2 channel out: 300mA 12V DC

Power

Power Supply	12V DC/POE(802.3at)
Power Consumption	Basic power consumption: 8.1W (12V DC); 9W (PoE) Max. power consumption (ICR + IR intensity): 21.5W (12V DC); 22.2W (POE+)

Environment

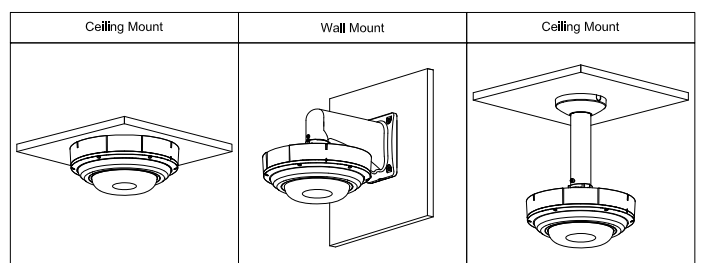|	
Operating Conditions	−30°C to +60°C (−22°F to +140°F)/Less than 95% RH
Storage Conditions	−30°C to +60°C (−22°F to +140°F)
Protection Grade	IP67; IK10

Structure

Casing	Metal + Plastic
Dimensions	286.1 mm × 111.3 mm (11.3" × 4.4")
Net Weight	2.75 kg (8.9 lb)
Gross Weight	4.5 kg (11.0 lb)

Ordering Information

Type	Model	Description
4 × 5MP Camera	DH-IPC-PDBW82041P-B360	4 × 5MP WizMind Multi-Sensor No-Splicing Panoramic Dome Network Camera , PAL
	DH-IPC-PDBW82041N-B360	4 × 5MP WizMind Multi-Sensor No-Splicing Panoramic Dome Network Camera , NTSC
	IPC-PDBW82041P-B360	4 × 5MP WizMind Multi-Sensor No-Splicing Panoramic Dome Network Camera, PAL
	IPC-PDBW82041N-B360	4 × 5MP WizMind Multi-Sensor No-Splicing Panoramic Dome Network Camera, NTSC
Accessories	PFB303W	Wall Mount Bracket
	PFB300C	Ceiling Mount Bracket
	PFA111	Mount Adapter
	PFA108	Mount Adapter

Accessories

Optional

PFB303W
Wall Mount Bracket

PFB300C
Ceiling Mount Bracket

PFA111
Mount Adapter

PFA108
Mount Adapter

Ceiling Mount	Wall Mount	Ceiling Mount

Dimensions (mm [inch])

80.4 [3.17]

111.3 [4.38]

⌀286.1 [⌀11.26]

⌀210.0 [⌀8.27]

4-∅4.5 [∅0.18]