



# DH-IPC-HDW8341X-BV-3D

3MP WizMind Dual-Lens 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**

Equipped with advanced chip and fast lens, Dahua WizMind Dual-Lens series network camera provides excellent image effects. With advanced deep learning algorithm, the camera supports various intelligent functions, such as people counting, queue management, stereo analysis, perimeter protection and face detection, which provides better intelligent apllication solutions based on scenes.

# **Functions**

# Smart Codec (H.265+ & 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.

#### Starlight

Dahua Starlight technology mainly applies to the environment of low illuminance, and it can provide clear colorful video. Even in the environment of ultra-low illuminance, the technology can guarantee the good image effect.

# ePoE

Dahua ePoE technology provides a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

# **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.

- •3MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- •Outputs max. 3MP (2048 × 1536) @30 fps
- •ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- •Stereo analysis: Fall detection, people approaching detection, people No. error, stay detection, and violence detection
- ·Alarm: 2 in, 2 out; audio: 2 in, 1 out; 485; BNC; supports max. 256 G
- •Micro SD card, built-in Mic and speaker. Siren active deterrence, built-in 8 voices, and user can import custom voices.
- •12V DC/PoE power supply
- •IP67, IK10 protection









## **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.

## **Stereo Analysis**

With deep learning algorithm and scene 3-dimensional information, Dahua Stereo Analysis technology can recognize people's behaviors, such as Fall detection; people approaching detection; people No. error; stay detection; violence detection, and then generates alarm signals and triggers linkage.

#### **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.

#### 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% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Max. Rend   Max	Technical Specification				Video				
Max. Renolity	Camera				Video Compression				
Mail	Image Sensor		1/2.8"3Megapixel progressive CMOS				Smart Codes		
ROM	Max. Resolution		2048 (H) × 1536 (V)				Smart Codec		
Part	ROM		4 GB				Wide France Date	Sub stream: D1 (1–25/30 fps)	
	RAM		2 GB					Video Frame Rate	Fourth stream: 2MP (1–25/30 fps)
Min.	Scanning System		Progressive				Stream Capability	5 streams	
Min.	Electronic Shutte	er Speed	Auto/Manual	1/3 s-1/100,0	00 s			Resolution	, , , , , , , , , , , , , , , , , , , ,
Note	Min. Illumination	n	0.0005 Lux@F1.6 (B/W,30IRE)					240); 640 × 480 (VGA)	
Illuminator On/OFF Control   Auto (Manual   BLC   Manual   Manua	S/N Ratio		>56 dB						
	Illumination Dist	tance	20 m (IR) (65	.6 ft)				Video Bit Rate	·
	Illuminator On/0	Off Control	Auto/Manua	ſ				Day/Night	Auto (ICR)/Color/B/W
Pan/Tilt/Rotation Range   Till: 0"-70"   W/R   D/W/R	Illuminator Num	ber					BLC	Yes	
Lens   Fixed-docal   Winter Balance   Auto/matural/street lamp/outdoor/manual/regional category   Mount Type   M12   Gain Control   Auto/matural/street lamp/outdoor/manual/regional category   Mount Type   M12   Gain Control   Auto/matural Street lamp/outdoor/manual/regional category   Mount Type   M12   Smm: F1.6   Smm: F1.6   Smm: F1.6   Smm: F1.6   Smm: F1.6   Smm: Horizontal 95" x Vertical 57" x Diagonal 122"   Region of Interest (Roi)   Yes (4 areas)   Smart Illumination   Yes								HLC	Yes
Mount Type		ni nange	7111.0 70					WDR	DWDR
Focal Length  2.8 mm; 3.6 mm; 1.6 3.6 mm; F1.6 3.6 mm; Horizontal 95° x Vertical 70° x Diagonal 128° 3.6 mm; Horizontal 79° x Vertical 70° x Diagonal 128° 3.6 mm; Horizontal 79° x Vertical 70° x Diagonal 128° 3.6 mm; Horizontal 79° x Vertical 70° x Diagonal 128° 3.6 mm; Horizontal 79° x Vertical 70° x Diagonal 104° 5.  Field of View  3.6 mm; Horizontal 79° x Vertical 70° x Diagonal 128° 3.6 mm; Horizontal 79° x Vertical 70° x Diagonal 104° 5.  Field of View  3.6 mm; 13 m (4.3 ft)			Fixed-focal				White Balance	· · · · · · · · · · · · · · · · · · ·	
Max. Aperture   2.8 mm. F1.6   3.6 mm. Horizontal 79" × Vertical 70" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 57" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Horizontal 79" × Vertical 79" × Diagonal 128"   5.8 mm. Hor	Mount Type		M12				Gain Control	Auto/Manual	
Field of View  2.8 mm: Horizontal 96° x Vertical 70° x Diagonal 128° 3.6 mm: F1.6  Field of View  Field of View  Field  Close Focus Distance  2.8 mm: O.7 m (2.3 ft) 3.6 mm: 13 m (4.3 ft)  3.6 mm: 13 m (4.3 ft)  3.6 mm: 13 m (4.3 ft)  3.6 mm: 13 m (4.3 ft)  3.6 mm: 13 m (4.3 ft)  3.6 mm: 13 m (4.3 ft)  3.6 mm: 13 m (4.3 ft)  3.6 mm: 12 m (4.8 ft)  3.6 mm (4.7 ft)  3.6 mm (4.8 m)  3.6 mm  4.8 m  3.6 mm  4.8 m  3.6 mm  4.8 m  3.6 mm  4.8 m  3.6 mm  4.5 m  4.4 sm			2.8 mm; 3.6 mm				Noise Reduction	3D NR	
Region of Interest (Rol)   Yes (4 areas)	_		2.8 mm: F1.6				Motion Detection	OFF/ON (4 areas, rectangular)	
Fixed   Smart Horizontal 79" × Vertical 57" × Diagonal 104"   Smart Hlumination   Yes	Wax. Aperture						Region of Interest (RoI)	Yes (4 areas)	
Close Focus Distance  2.8 mm: 0.7 m (2.3 ft) 3.6 mm: 1.3 m (4.3 ft)  DORI Distance  2.8 mm 44.8 m 17.9 m 9.0 m 45. m 164.0 ft) 3.6 mm (210.0 ft) 3.6 mm (210.0 ft) 44.0 ft) 42.0 ft) 42	Field of View		-				Smart Illumination	Yes	
Lens Detect Observe Recognize Identify  Lens Detect Observe Recognize Identify  2.8mm 44.8 m 17.9 m (29.5 ft) (14.8 ft) (14.8 ft) (14.8 ft) (14.9 ft) (58.7 ft) (29.5 ft) (14.8 ft) (14.8 ft)  3.6mm 64.0 m 25.6 m (21.0 ft) (84.0 ft) (21.0 ft) (21.0 ft)  Smart Event  IVS Abandoned object; missing object  Professional, intelligent  Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of whicle and human), loitering detection, people gathering, parking detection, scene changing; audio detection, voltage detection, scene changing; audio detection, people aphroaching detection; people again; face detection, feal time senting.  Face Detection  Face Detection  Fall detection; people approaching detection to pople Noerror; stay detection; people approaching detection; people Noerror; stay detection; people approaching detection people Noerror; stay detection; people approaching detection people Noerror; stay detection; people approaching detection people Noerror; stay detection; people Noerror; stay detection people option and morning of X-509 certification; sysloge; HTPS, 802.1x; trusted boot; trusted execution; provide upgrade well of X-509 certification; sysloge; HTPS, 802.1x; trusted boot; trusted execution; provide upgrade well on the long real provided page and the people approaching detection; people approaching detection; people Noerror; stay detection; people approaching detection; people noerror; stay detection; people Noerror; stay detection; people approaching detection; people Noerror; stay detection; people Noerror; s	Iris Type		Fixed				Defog	Yes	
DORI Distance  2.8mm	Close Focus Dist	ance					Privacy Masking	4 areas	
DORI Distance    2.5mm		Lens	Detect	Observe	Recognize	Identify		Audio	
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; people gathering, parking detection; people gathering, parking detection; people gathering, parking detection; scene changing; audio detection; people counting exception detection; fall detection; people approaching detection; safety exception detection; fall detection; people approaching detection; safety exception detection; fall detection; safety exception detection; safety exception detection; people approaching detection; people approaching detection; people approaching detection; people approaching detection; safety exception detection; fall detection; people approaching d	DORI Distance	2.8mm						Built-in MIC	Yes
Smart Event   Sullt-in Speaker   Yes		3.6mm						Audio Compression	G.711a; G.711Mu; G.726; G.723
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; scene changing; audio detection; yidea detection; yeople gathering, parking detection; scene changing; audio detection; people gathering, parking detection; scene changing; audio detection; people gathering, parking detection; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 5 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, surprise), mask, beard; face matting setting; face, single inch photo; three snapshot methods: real-time snapshot, optimization time setting  Stereo Analysis  Fall detection; people approaching detection; people No. error; stay detection; violence detection; people approaching detection; people approaching detection; people approaching detection; violence detection; violence detection; people approaching detection; people No. error; stay detection; people approaching detection; people No. error; people No. error; stay detection; people No. error; pe	Smart Event		(210.0 10)	( 5 1.5 1.5)	(12.010)	(2110 10)		Built-in Speaker	Yes
Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human), loitering detection, people gathering, parking detection; scape changing; audio detection; violence detection; violence detection; people gathering, parking detection; exception detection; people gathering, parking detection; exception detection; fall detection; people gathering, parking detection; exception detection; fall detection; people gathering, parking detection; exception detection; fall detection; people approaching detection; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 5 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, surprise), 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.  Stereo Analysis  Fall detection; people approaching detection; people No. error; stay detection; violence detection.  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event.	IVS		Abandoned o	bject; missing	object			Alarm	
Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human), loitering detection, people gathering, parking detection; of vehicle and human), loitering detection, people gathering, parking detection; scene changing; audio detection; violence detection; people gathering; parking detection; scene changing; audio detection; violence detection; people gathering; parking detection; excene changing; audio detection; people gathering; parking detection; excene changing; audio detection; people counting exception detection; face detection; people approaching detection; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 5 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, surprise), mask, beard; face matting setting; face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization snapshot, quality priority; face angle filter; optimization snapshot, quality priority; face angle filter; optimization snapshot, violence detection; people approaching detection; people No. error; stay detection; violence detection  Stereo Analysis  Fall detection; people approaching detection; people No. error; stay detection; violence detection  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event	Professional	intellige	ent						
report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 5 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, surprise), 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  Stereo Analysis  Fall detection; people approaching detection; people Noerror; stay detection; violence detection  Work together with Smart NVR to perform refine intelligent Search  Intelligent Search  Violence detection; stay detection; safety exception  Network  RJ-45 (10/100 Base-T)  Yes  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			Tripwire, intrusion, fast moving (the three functions support the classification and accurate detection of vehicle and human), loitering detection, people				Alarm Event	detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; external	
Face Detection  5 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, surprise), 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  Stereo Analysis  Fall detection; people approaching detection; people No. error; stay detection; violence detection  Work together with Smart NVR to perform refine intelligent Search  Intelligent Search  Network  RJ-45 (10/100 Base-T)  Yes  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	Face Detection		report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 5 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, surprise), mask, beard; face matting setting: face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter;						
beard; face matting setting: face, single inch photo; three snapshot methods: real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization time setting  Stereo Analysis  Fall detection; people approaching detection; people No. error; stay detection; violence detection  Work together with Smart NVR to perform refine intelligent Search  Intelligent Search  Network  RJ-45 (10/100 Base-T)  Yes  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		
optimization snapshot, quality priority; face angle filter; optimization time setting  Fall detection; people approaching detection; people No. error; stay detection; violence detection  Work together with Smart NVR to perform refine intelligent Search  Intelligent Search  Optimization snapshot, quality priority; face angle filter; optimization specified and API  Yes  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	RJ-45 (10/100 Base-T)	
Fall detection; people approaching detection; people No. error; stay detection; violence detection  Work together with Smart NVR to perform refine intelligent Search  Intelligent Search  Fall detection; people approaching detection; people No. error; stay detection; violence detection  Cyber Security  Cyber Security  Cyber Security  Cyber Security  Cyber Security  IP/MAC filtering; generation and importing of X.509  certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade							SDK and API	Yes	
Work together with Smart NVR to perform refine Intelligent Search Work together with smart NVR to perform refine Intelligent Search Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event  Cyber Security IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade	Stereo Analysis		Fall detection; people approaching detection; people No.				Cyber Security	encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted	
	Intelligent Search		Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event						

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; Bonjour		
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P; RTMP		
User/Host	20		
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS		
Browser	IE9; IE11; FireFox; Chrome		
Management Software	Smart PSS; DSS; NVR; IVSS		
Mobile Phone	IOS; Android		
Certification			

	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

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

# Power

Power Supply	12V DC/PoE; ePoE
Power Consumption	Basic power consumption: 3.5W (12V DC); 4.4W (PoE) Max. power consumption (ICR switch + IR full intensity + WDR + Intelligent functions enabled): 9.1W (12V DC); 10.6W (PoE)

## Environment

Operating Conditions	-40°C to +60°C/Less than 95% RH
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Ingress Protection	IP67; IK10

# Structure

Casing	Metal
Dimensions	204.0 mm × 78.0 mm × 61.5 mm (8.0" × 3.1" × 2.4") (L × W × H)
Net Weight	0.81 kg (1.8 lb)
Gross Weight	1.19 kg (2.6 lb)

Ordering Information				
Туре	Part Number	Description		
	DH-IPC-HDW8341XP-BV-3D	3MP WizMind Dual-Lens Network Camera		
3МР	IPC-HDW8341XP-BV-3D	3MP WizMind Dual-Lens Network Camera		
Camera	DH-IPC-HDW8341XN-BV-3D	3MP WizMind Dual-Lens Network Camera		
	IPC-HDW8341XN-BV-3D	3MP WizMind Dual-Lens Network Camera		
Accessories	PFB110W	Ceiling Mount/Wall Mount		
(Optional)	PFA152-E	Pole Mount		

# Accessories

# **Optional**



PFB110W Ceiling Mount/Wall Mount

PFA152-E

PFA152-E Pole Moun

Ceiling Mount	Pole Mount	Ceiling Mount
PFB110W	PFA152-E	

# Dimensions (mm [inch])

