



# DH-IPC-HDBW3441R-ZS-B

4MP IR Vari-focal Dome WizSense Network Camera



Launched by Dahua Technology, WizSense is a series of Al products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

#### **Series Overview**

With advanced deep learning algorithm, Dahua WizSense 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

# **Functions**

#### **SMD Plus**

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

#### 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.

- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs max. 4MP (2688 × 1520)@30 fps
- H.265 codec, high compression rate, low bit rate
- · Built-in IR LED. max. IR distance: 40 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- · Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- · Intelligent detection: Intrusion, tripwire (support the classification and accurate detection of vehicle and human)
- · Abnormality detection: Motion detection, video tampering, scene changing, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- · Supports max. 256 G Micro SD card
- 12V DC/POE power supply
- IP67, IK10 protection
- SMD Plus













#### Starlight

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

#### **WDR**

With advanced Wide Dynamic Range (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% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.



Electronic Shutter Speed	Technical Specification						Bit Rate Control	CBR/VBR	
Mask Resolution   2888	Camera							Video Bit Rate	·
ROM	Image Sensor		1/3"4Megapixel progressive CMOS				Day/Night	· ·	
Max	Max. Resolution		2688 (H) ×1520 (V)				BLC	Yes	
Scanning System Progressive Electronic Shutter's Speed Auto/Manual 1/3 = 1/100000 s Min. Illumination 0.005 Lux@F1.5  5/N Ratio > 56 dB  Illumination Distance 40 m (131.23 ft) Motion Detection 30 DNR Motion Detection 0.075/ON IA auto/Manual 1/3 = 1/100000 s  Illuminator On/Off Control Illumination Plance 2 (0.8 LED)  Pan/Titl/Rotation Range Pan 0"-385", Titl: 0"-75", Rotation: 0"-385"  Lens  Lens  Lens  Motorized vari-focal Pane 4 Alarm Mount Type 414  Focal Length 2,7 mm-11.5 mm Max. Aperture F1.5 Morostonal: 1.04"-22" Privacy Masking 4 areas  Alarm Event Protection 50 Card full; 50 card error; less service of 5D card (mant card supports), network discomme in Profits, include access years generated in Standard (mant card supports), network discomme in Profits, include access years generated in Standard (mant card supports), network discomme in Profits, include access years generated in Standard (mant card supports), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card support) access years generated in Standard (mant card supports), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card support), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card supports), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card supports), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card supports), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card supports), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card support), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card support), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card support), network discomme in Profits (manual privacy manual/regional customs of Standard (mant card support), network discomme in Profits (manual privacy m	ROM		128 MB				HLC	Yes	
Electronic Shutter Speed  Min: Illumination  O.005 Lux@F1.5  S/N Ratio  > 56 dB  Illumination Distance  Illumination Distance  Illumination Distance  Illumination Distance  Illuminator On/Off Control  Muta/Manual  Illuminator Number  2 (IR LED)  Pan/Tilt/Rotation Range  Par: 0"-355"; Tilt: 0"-75"; Rotation: 0"-355"  Lens Type  Motorized vari-focal  Mount Type  4.14  Mount Type  Motorized vari-focal  Mount Type  4.15  Mount Type  4.16  Mount Type  5.15  Horizontal: 1.04"-27" Field off View  Privacy Masking  Lens Type  Fixed  Lens  Horizontal: 1.04"-27" Field off View  Disgonal: 124"-31"  Iris Type  Fixed  Lens	RAM		512 MB					WDR	120 dB
Gain Control   Auto/Manual   30 DNR	Scanning System		Progressive					White Balance	Auto/natural/street lamp/outdoor/manual/regional
Min. Illumination	Electronic Shutter Speed		Auto/Manual 1/3 s–1/100000 s					Cain Control	
Motion Detection   OFF/ON (dianeas, rectangular)   Syn Ratio   OFF/ON (dianeas, rectangular)   Region of Interest(Rol)   Ves (aireas)   Region of Interest(Rol)   Ves (aireas)   Ves (ai	Min. Illumination	1	0.005 Lux@F1.5						
Illumination Distance   40 m (131.23 ft)   Region of Interest[Rol]   Yes (4 areas)	S/N Ratio		> 56 dB						
Illuminator On/Off Control   Auto/Manual   Smart Illumination   Yes	Illumination Dista	ance	40 m (131.23 ft)						
Illuminator Number   2 (IR LED)	Illuminator On/O	off Control	Auto/Manual						Yes (4 areas)
Pan/Tit/Rotation Range  Lens  Lens  Lens Type  Motorized vari-focal  Mount Type  Motorized vari-focal  Mount Type  pan : 0"-a55"; Tilt: 0"-75"; Rotation: 0"-a55"  Mirror  Yes  Mirror  Yes  Alarm  Alarm  No SD card; SD card full; SD card error; less service of SD Card (smart card supports); network disconner in Poorflict, ligeal access; volted of SD Card (smart card supports); network disconner in Poorflict, ligeal access; voltage detection; security exception; motion detection, seen changing; intens change; tripwire; intrusion; SMD  Network  Ris Type  Fixed  Lens  Detect  Observe  Recognize  Lens  Detect  Observe  Recognize  Lens  Detect  Observe  Recognize  Recognize  Identify  Protocol  Tripwire; lens (94.0 m) (25.6 m) 12.8 m) 6.4 m (210.0 ft) (42.0 ft) (22.0 ft) (42.0 ft) (42.0 ft) (42.0 ft) (42.0 ft) (22.0 ft)	Illuminator Numl	ber	2 (IR LED)					Smart Illumination	
Lens Type   Motorized vari-focal   Privacy Masking   4 areas    Mount Type   \$\phi4	Pan/Tilt/Rotation	n Range						Image Rotation	
Mount Type	Lens							Mirror	Yes
Focal Length 2.7 mm-13.5 mm  Max. Aperture F1.5  Field of View F1.5  Field of View Protection: 55°-15° Diagonal: 124*-31°  Close Focus Distance O.8 m (2.6 ft)  DORI Distance W 64.0 m (210.0 ft) (84.0 ft) (22.0 ft) (210.0 ft) (210.5 ft) (22.9 ft) (72.8 ft)  Professional, Intelligent  Professional, Intelligent  Professional, Intelligent  Work together with Smart NVR to perform refine intelligent Search Wideo Wideo Wideo Wideo Wideo Wideo Wideo Compression  H.265; H.264; H.264H; H.264B; MIPEG(only supported by sub stream)  No SD card; SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card (support service); less service to of SD card full; SD card error; less service to of SD card full; SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card full; SD card error; less service to of SD card error; less error; less error; less error; less er	Lens Type		Motorized vari-focal					Privacy Masking	4 areas
Max. Aperture F1.5  Alarm Event Profict; Ilegal access, voltage detection; security exception; motion detection; scene changing; intension change; tripwire; intrusion; SMD  Network  N	Mount Type		ф14					Alarm	
Max. Aperture F1.5	Focal Length		2.7 mm-13.5 mm					Alarm Event	No SD card; SD card full; SD card error; less service time of SD card (smart card supports); network disconnection; IP conflict; illegal access; voltage detection; security exception; motion detection; scene changing; intensity change; tripwire; intrusion; SMD
Vertical: 55*-15*   Diagonal: 124*-31*   Network	Max. Aperture								
Close Focus Distance  O.8 m (2.6 ft)  DORI Distance  Lens Detect Observe Recognize U21.0 ft) Recognize Recognize Identify W 64.0 m (210.0 ft) Recognize Identify W (210.0 ft) Recognize Identify W (210.0 ft) Recognize Identify RTMP;SMTP;FTP;STP;DHCP;DNS;DDNS;QoS;UPnP;Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;SNMP Interoperability ONVIF(Profile S/Profile G);CGI;P2P;Milestone;Genet Scene Self-adaptation Ves  Professional, Intelligent User/Host User/Host User/Host User/Host 20 (Total bandwidth: 64 M) Storage FTP; SFTP; Micro SD Card (support max. 256 G); Dal Cloud; NAS Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video  Video  Video Ompression  H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)  Mobile Phone IOS; Android  Certification	Field of View							Network	
Lens Detect Observe Recognize Identify  W 64.0 m (210.0 ft) (84.0 ft) (42.0 ft) (21.0 ft)  T 222.0 m (728.3 ft) (291.3 ft) (145.7 ft) (72.8 ft)  Professional, Intelligent  Professional, Intelligent  User/Host 20 (Total bandwidth: 64 M)  Professional, Intelligent Search Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video Compression  Lens Detect Observe Recognize Identify  Protocol Professional, Intelligent Protocol Multicast; ICMP; IGMP; NFS; PPPo6; 802.1x; SNMP  Interoperability ONVIF (Profile S/Profile G); CGI; P2P; Milestone; Genet Self-adaptation Yes  User/Host 20 (Total bandwidth: 64 M)  Storage FTP; SFTP; Micro SD Card (support max. 256 G); Data Cloud; NAS  Intelligent Search Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Wideo Compression H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)  Mobile Phone IOS; Android  Certification	Iris Type		Fixed					Network	RJ-45 (10/100 Base-T)
DORI Distance  W  64.0 m (210.0 ft) (84.0 ft) (210.0 ft) (84.0 ft) (220.0 ft) (84.0 ft) (220.0 ft)	Close Focus Distance		0.8 m (2.6 ft)					SDK and API	Yes
T (210.0 ft) (84.0 ft) (42.0 ft) (21.0 ft) (21.0 ft) (145.7 ft) (21.0 ft) (145.7 ft) (72.8 f								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;PPPoE;802.1x;SNMP
Professional, Intelligent  Perimeter Protection  Tripwire; intrusion (Recognition of human and vehicle)  Intelligent Search  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Wideo Compression  H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)  Video Certification  Scene Self-adaptation  Yes  User/Host  20 (Total bandwidth: 64 M)  Storage  Cloud; NAS  IE: IE8, IE9, IE11  Chrome Firefox  Management Software  Smart PSS, DSS, DMSS  Mobile Phone  IOS; Android  Certification	DORI Distance	VV	, ,					Interoperability	ONVIF(Profile S/Profile G);CGI;P2P;Milestone;Genetec
Perimeter Protection  Tripwire; intrusion (Recognition of human and vehicle)  Intelligent Search  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video  Wideo Compression  H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)  Storage  Storage  FTP; SFTP; Micro SD Card (support max. 256 G); Dal Cloud; NAS  IE: IE8, IE9, IE11 Chrome Firefox  Management Software  Smart PSS, DSS, DMSS  Mobile Phone  IOS; Android  Certification		Т						Scene Self-adaptation	Yes
Intelligent Search  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Browser  Browser  Management Software  Smart PSS, DSS, DMSS  Video Compression  H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)  Certification	Professional, Intellige		ent					User/Host	20 (Total bandwidth: 64 M)
Intelligent Search intelligent search, event extraction and merging to event videos    Browser   Browser   Chrome Firefox	Perimeter Protection		, , , , , , , , , , , , , , , , , , , ,					Storage	FTP; SFTP; Micro SD Card (support max. 256 G); Dahua Cloud; NAS
Video Compression  H.265; H.264; H.264B; MJPEG(only supported by sub stream)  Mobile Phone IOS; Android  Certification	Intelligent Search		intelligent search, event extraction and merging to event					Browser	Chrome
by sub stream)  Certification	Video							Management Software	Smart PSS, DSS, DMSS
Certification	Video Compression		, , , , , , , , , , , , , , , , , , , ,					Mobile Phone	IOS; Android
	Smart Codec							Certification	
Video Frame Rate  Main stream (2688 × 1520@1–25/30 fps) sub stream (704 × 576@1–25 fps/704 × 480@1–30 fps) third stream (1280 × 720@1–25/30 fps)  Certifications  Certifications  Certifications  Certifications  UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07			Main stream (2688 × 1520@1–25/30 fps) sub stream (704 × 576@1–25 fps/704 × 480@1–30 fps)					Certifications	CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
Stream Capability 3 streams Power	Stream Capability		3 streams					Power	
4M (2688 × 1520); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704	Penalutia:						Power Supply	12V DC/PoE (802.3af)	
x 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 Power Consumption < 8 5W	Resolution						Power Consumption	<8.5W	

# Wiz Sense | DH-IPC-HDBW3441R-ZS-B

### Environment

Operating Conditions	-30°C to +60°C (-22°F to +140°F)/less than 95%		
Storage Conditions	-40°C to +60°C (-40°F to +140°F)		
Protection Grade	IP67; IK10		

### Structure

Casing	Metal
Dimensions	Φ122 mm × 88.9 mm (Φ4.8" × 3.5")
Net Weight	492 g (1.1 lb)
Gross Weight	663 g (1.5 lb)

Ordering Information						
Туре	Part Number	Description				
4MP Camera	DH-IPC-HDBW3441RP-ZS-B	4MP IR Vari-focal Dome WizSense Network Camera,PAL				
	DH-IPC-HDBW3441RN-ZS-B	4MP IR Vari-focal Dome WizSense Network Camera,NTSC				
	PFA137-DG	Junction Box				
	PFB203W-DG	Wall Mount				
	PFA152-E	Pole Mount				
	PFA200W	Rain Shade				
	PFA106	Mount Adapter				
Accessories	PFB220C	Celling Mount				
(optional)	PFB200C	In-Celling Mount				
	PFM321D	DC12V1A Power Adapter				
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender				



PFM114

TLC SD card





PFM321D DC12V1A Power Adapter

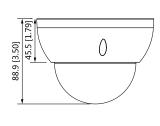
LR1002-1ET/1EC Single-port long reach ethernet over coax extender

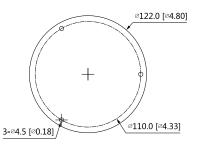


tester

Junction Mount	Wall Mount	Wall Mount	Pole Mount	
PFA137	PFA137+PFA200W	PFB203W	PFB203W+PFA152-E	
Ceiling Mount	In-Ceiling Mount			
PFA106+PFB220C	PFB200C			
	6			

# Dimensions (mm[inch])





# Accessories

PFM900-E

PFM114

# **Optional:**







PFA152-E Pole mount



Integrated Mount Tester

TLC SD Card

PFB203W-B Junction box