

DH-IPC-HDBW3841E-(A)S

8MP IR Fixed focal Dome WizSense Network Camera





Launched by Dahua Technology, WizSense is a series of AI 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.

- 8MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 8MP (3840 \times 2160) @20 fps (AI function enabled by default) and supports 8MP (3840 \times 2160) @25/30 fps (when AI function disabled)
- · H.265 codec, high compression rate, low bit rate
- · Built-in IR LED, max. IR distance: 30 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, audio detection (Only - AS supports), no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
- Alarm: 1 in, 1 out (Only AS supports); audio: 1 in, 1 out (Only AS supports)
- · 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.

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 $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification				Stream Capability	3 streams		
Camera							8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 ×
Image Sensor		1/2.8"8Megapixel progressive CMOS				Resolution	1728/2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1(704 × 576/704 × 480); VGA
Max. Resolution		3840 (H) × 2160 (V)				20.2.	(640 × 480); CIF (352 × 288/352 × 240)
ROM		128 MB				Bit Rate Control	CBR/VBR H.264: 3 kbps–8192 kbps
RAM		512 MB				Video Bit Rate	H.265: 3 kbps-8192 kbps
Scanning System		Progressive				Day/Night	Auto (ICR)/Color/B/W
Electronic Shutte	er Speed	Auto/Manual 1/3 s-1/100,000 s				BLC	Yes
Min. Illuminatio	n	0.007 Lux@F1.4 (Color, 30IRE) 0.0007 Lux@F1.4 (B/W, 30IRE) 0 Lux (Illuminator on)				HLC	Yes
S/N Ratio		> 56 dB	,			WDR	120 dB
Illumination Dis	tance	30 m (98.4 ft)				Scene Self-adaptation (SSA)	Yes
Illuminator On/0	Off Control	Auto/Manua	I			White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Illuminator Number		3 (IR LED)				Gain Control	Auto/Manual
		Pan: 0°–360°				Noise Reduction	3D DNR
Pan/Tilt/Rotation Range		Tilt: 0°-60° Rotation: 0°-355°				Motion Detection	OFF/ON (4 areas, rectangular)
Lens						Region of Interest (RoI)	Yes (4 areas)
Lens Type		Fixed-focal				Smart Illumination	Yes
Mount Type		M12				Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower.)
Focal Length		2.8 mm;3.6 mm				Mirror	Yes
Max. Aperture		F1.4				Privacy Masking	4 areas
Field of View		2.8 mm: Horizontal 108° × Vertical 58° × Diagonal 127° 3.6 mm: Horizontal 85° × Vertical 45° × Diagonal 100°			-	Audio	
Iris Type		Fixed				Audio Compression	G.711a; G.711Mu; G726
Close Focus Dist	ance	2.8 mm: 1.4 m (4.6 ft) 3.6 mm: 2.4 m (7.9 ft)				Alarm	
	Lens	Detect	Observe	Recognize	Identify		- AS: No SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; external alarm; SMD; safety exception -S: No SD card; SD card full; SD card error; service life
DORI Distance	2.8 mm	85.5 m (280.5 ft)	34.2 m (112.2 ft)	17.1 m (56.1 ft)	8.6 m (28.2 ft)		
	3.6 mm	110.3 m (361.9 ft)	44.1 m (144.7 ft)	22.1 m (72.5 ft)	11.0 m (36.1 ft)	Alarm Event	
Professional	, Intellige	ent					
Perimeter Prote	ction	Tripwire; intrusion (support the classification and accurate detection of vehicle and human)					warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene
Intelligent Search		Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event				changing; voltage detection; SMD; safety exception Network	
		videos.				Network	RJ-45 (10/100 Base-T)
Video						SDK and API	Yes
Video Compression		H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)				Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTM SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPOE; SNMP
Smart Codec		Smart H.265+/ Smart H.264+					
Video Frame Rate		Main stream: $3840 \times 2160 \ @(1-20 \ fps \ by \ default)$ $3840 \times 2160 \ @(1-25/30 \ fps \ when \ Al \ function \ disabled)$ sub stream: $704 \times 576 \ @(1-25 \ fps)/704 \times 480 \ @(1-30 \ fps)$			·	Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security log IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trust execution; trusted upgrade
		third stream:					ONVIE (Profile S/Profile G/Profile T): CGI: P2P: Mileston

Interoperability

1920 × 1080 @(1–25/30 fps)

ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone;

Genetec

Wiz Sense | DH-IPC-HDBW3841E-(A)S

User/Host	20 (Total bandwidth: 72 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE8; IE9; IE11 Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	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
Port	
Audio Input	1 channel (RCA port) (Only - AS supports)
Audio Output	1 channel (RCA port) (Only - AS supports)
Alarm Input	1 channel in: 5mA 3V–5V DC (Only- AS supports)
Alarm Output	1 channel out: 300mA 12V DC (Only- AS supports)
Power	
Power Supply	12V DC/PoE (802.3af)
Power Consumption	Basic power consumption: 2.7W (12V DC); 3.6W (PoE) Max. power consumption (WDR + H.265 +IR LED intensity): 6W (12V DC); 7W (PoE)
Environment	
Operating Conditions	-40°C to +55°C (-40°F to +131°F)/Less than 95% RH

Storage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection Grade	IP67; IK10
Structure	
Casing	Metal
Dimensions	81 mm × Φ109.9 mm (3.2" × Φ4.3")
Net Weight	378 g (0.8 lb)

523 g (1.2 lb)

Gross Weight

Ordering Information				
Туре	Model	Description		
	DH-IPC-HDBW3841EP-AS	8MP IR Fixed focal Dome WizSense Network Camera, PAL		
8MP	DH-IPC-HDBW3841EN-AS	8MP IR Fixed focal Dome WizSense Network Camera, NTSC		
Camera	DH-IPC-HDBW3841EP-S	8MP IR Fixed focal Dome WizSense Network Camera, PAL		
	DH-IPC-HDBW3841EN-S	8MP IR Fixed focal Dome WizSense Network Camera, NTSC		

8MP Camera	IPC-HDBW3841EP-AS	8MP IR Fixed focal Dome WizSense Network Camera, PAL	
	IPC-HDBW3841EN-AS	8MP IR Fixed focal Dome WizSense Network Camera, NTSC	
	IPC-HDBW3841EP-S	8MP IR Fixed focal Dome WizSense Network Camera, PAL	
	IPC-HDBW3841EN-S	8MP IR Fixed focal Dome WizSense Network Camera, NTSC	
	PFA136	Junction Box	
	PFA200W	Rain Shade	
	PFB203W	Wall Mount	
	PFA152-E	Pole Mount	
Accessories	PFA106	Mount Adapter	
(optional)	PFB220C	Celling Mount	
	PFM321D	DC12V1A Power Adapter	
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender	
	PFM900-E	Integrated Mount Tester	
	PFM114	TLC SD Card	

Accessories

Optional:







PFA200W Rain Shade



PFB203W Wall Mount



PFA152-E Pole Mount



PFA106 Mount Adapter



PFB220C Celling Mount



PFM321D DC12V1A Power Adapter



LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender



Integrated Mount Tester



PFM114 TLC SD Card

Wiz Sense | DH-IPC-HDBW3841E-(A)S

Junction Mount	Wall Mount	Wall Mount	Pole Mount
PFA136	PFA136+PFA200W	PFB203W	PFB203W+PFA152-E
Ceiling Mount			
PFA106+PFB220C			

Dimensions (mm[inch])



