

# DH-IPC-HDW3866TP-ZS-AUS

8MP IR Vari-focal Eyeball 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**

Dahua WizSense 3 Series Network Camera greatly saves on bandwidth and storage space through its AI Coding technology. Driven by its advanced deep learning algorithms, the camera supports intelligent functions such as perimeter protection, smart motion detection (SMD), Quick Pick, and AI SSA (AI Scene Self-adaptation), making it easy and convenient to use. Starlight technology and its large aperture lens also allow the camera to produce clear, vivid images even in poor lighting conditions.

## **Functions**

#### **SMD 4.0**

Dahua Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

#### AI SSA

Dahua AI Scene Self-adaptation (AI SSA) adopts deep learning algorithms to detect environmental conditions, such as rain, fog, backlight, low light and flicker, to adjust the parameters of the image to suit the conditions, ensuring that clear images are always produced.

#### 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.

- 8-MP 1/2.8" CMOS image sensor, excellent low luminance performance and high definition of images.
- Outputs max. 8 MP (3840 × 2160) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- · Built-in IR LED, max. IR distance: 40 m.
- ROI, SMART H.264 +/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage.
- Rotation mode, WDR, 3D NR, 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, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- · Max. 256 G Micro SD card. built-in Mic.
- 12 VDC/PoE power supply facilitates installation.
- IP67 protection.
- SMD 4.0. AI SSA.













## **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) are largely reduced.

#### Protection (IP67, 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.

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.

# **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.

Camera	Technical Specification					Main stream: 3840 × 2160 @ (1–25/30) fps Sub stream 1: 704 × 576 @ (1–25 fps)/704 × 480 @			
The vibro above at the max. Fame rate of each streem, Family Fame rate of each streem, Fame rate of each streem, Family Family Fame rate of each streem, Family Fame rate of each streem, Family Fam								Video Frame Rate	(1–30 fps)
Stream Capability   3 stream   Support   Stream Capability   Str			1/2.8" CMOS						
PAM	Max. Resolution		3840 (H) × 2160 (V)					Stroom Comphility	
Scanning System	ROM		128 MB					Stream Capability	
Electronic Shutter Speed	RAM		1 GB					Danalistian	1728/2592 × 1944); 4M (2688 × 1520); 3.6M (2560 ×
Min. illumination	Scanning System		Progressive					Resolution	
Min. Illumination	Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s					Dit Data Cantral	
Blumination Distance   40 m (131.23 ft)   BlC   Yes	Min. Illumination		0.0007 lux@F1.5 (B/W, 30 IRE)						H.264: 3 kbps–8192 kbps
Huminator On/Off Control   Auto/Monaul   HLC   Yes	S/N Ratio		>56 dB					Day/Night	Auto (ICR)/Color/B/W
More	Illumination	Distance	40 m (131.23 ft)					BLC	Yes
Pan/Tit/Rotation Range  Lens  Lens Type  Motorized vari-focal  Lens Mount  di 4  Focal Length  2,7 mm-13.5 mm  Max. Aperture  F1.5  Horizontal: 109°-30° Verrical: 56°-17° Diagonal: 131°-35°  Iris Control  Fixed  Close Focus Distance  Lens  Detect  Detect  Dosn  W  (289.7 m)  115.7 m  57.9 m  29.0 m  (280.7 fb) (115.8 fb) (180.9	Illuminator C	On/Off Control						HLC	Yes
Lens   Lens   Lens   White Balance   Auto; natural; street lamp; outdoor; manual; regional custom   Call	Illuminator N	lumber	2 (IR LED)					WDR	120 dB
Lens Type Motorized vari-focal  Lens Mount	Pan/Tilt/Rotation Range		Pan: 0°–360°; Tilt: 0°–78°; Rotation: 0°–360°					Yes	
Lens Mount  Lens Mount  Auto  Auto  Noise Reduction  Aperture  Fil.5  Horizontal: 109"-30"  Vertical: 50"-17"  Diagonal: 131"-35"  Region of Interest (RoI)  Pes  Region of Interest (RoI)  Pes  Lens  Defog  Ves  AFSA  Yes  Lens  Detect  Doserve  Lens  Detect  Doserve  Recognize  Identify  Image Rotation  O'590',180',720" (support 90",7270" with 2688 × 1520 resolution and lower)  The 289.7 m							White Balance		
Focal Length 2.7 mm=13.5 mm  Max. Aperture F1.5  Field of View Verticals 56"-17" Diagonal: 131"-35"  Iris Control Fixed Defect Observe Recognize Identify Distance Uses S6"-17" Region of Interest (Roll) Per S4 AFSA Yes  DORI Distance W 88.3 m 35.3 m 17.7 m 8.8 m 17.7 m (88.07 th) (28.87 th) (88.07 th) (28.87 th) (88.07 th) (28.87 th) (88.07 th) (28.87 th) (95.04 th) (95.14 th) Mirror Yes  Intelligence  IVS (Perimeter Protection) Tripwire, intrusion (support the classification and accurate detection of vehicle and human)  Al SSA Yes  Quick Pick With Al NVR, quickly pick up the human/vehicle targets that users are innerested in from SMD events videos  Video Compression H.265; H.264; H.264B; MJPEG (only supported by the sub stream)  Video Compression Al 12.25  Al Coding Al 14.265  Al Coding Al 14.265  Motion Detection OFF/ON (4 areas, rectangular)  Image Rotation Electronic image Stabilization (ElS)  Region of Interest (Rol) Yes (4 areas)  Defog Yes  Lens Detect Observe Recognize Identify  Image Rotation O'/90/180"/270" (support 90"/270" with 2688 x 1520 resolution and lower)  Mirror Yes  Mirror Yes  Mirror Yes  Privacy Masking 4 areas  Audio  Built-in MIC Yes  Alarm  No SD card: SD card full; SD card error; service life warming (only supported by Dahua card); network disconnection; Picorhical, illegal accust, motion detection; video ammening intrusion; tripwire; scene changing audio detection; video ammening intru			Motorized vari-focal					Gain Control	
Max. Aperture F1.5 Horizontal: 109*-30* Vertical: 56*-17* Diagonal: 131*-35* Uris Control Fixed  Lens Detect Doserve Recognize Lens Detect Observe Recognize Lens Detect Observe Recognize Lens Detect Distance  V Resorting Region of Interest (RoI)  Ves (4 areas)  Defog Ves  AFSA Ves  AFSA Ves  AFSA Ves  Mirror Ves  W R8.3 m 35.3 m 17.7 m 8.8 m (28.9 7.01) (118.1 lt) (58.07 ft) (28.87 ft) Mirror Ves  T 289.7 m 115.7 m (950.46 ft) (379.59 ft) (189.96 ft) (95.14 ft)  Intelligence  IVS (Perimeter Protection) AI SSA Ves  Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Smart Search With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Video  Video  Video Compression  H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)  AI Coding AI 1255  Motion Detection OFF/ON (4 areas, rectangular) Image Stabilization Electronic image Stabilization (EIS) Region of Interest (RoI) Ves (A areas)  Begion of Interest (RoI) Ves (A areas)  Begion of Interest (RoI) Ves (A areas)  Region of Interest (RoI) Ves (A areas)  AFSA Ves  Image Rotation O'/90°/180°/270° (support 90°/270° with 2688 × 1520 resolution and lower) Vies  Mirror Ves Privacy Masking 4 areas  Audio  Built-in MIC Ves  Audio Compression G.711a; G.711Mu; PCM; G.726; G.723  Alarm  No SD card; SD card full; SD card error; service life warring (only supported by Dahua card); network disconnection; IP conflict; Illegal access, motion detection; with son time the privacy scene changing; audio detection; defocus detection; sMD; safety exception  Network Network Network Port R.45 (10/100 Base-1) SDK and API Ves	Lens Mount		ф14					Noise Reduction	3D NR
Field of View   Fixed    Close Focus Distance   Lens   Detect   Doberve   Recognize   Identify   Identify   Identify   Image Rotation   Fixed    Fixed    DORI   DO	Focal Length		2.7 mm-13.5 mm						
Field of View    Horizonta: 199"-30"   Ves (4 areas)	Max. Aperture		F1.5						
Close Focus Distance	Field of View	1	Vertical: 56° –17°						
Lens Detect Observe Recognize Identify  DORI Distance  W 8.8.3 m (289.70 ft) (115.81 ft) (58.07 ft) (28.87 ft)  T 289.7 m (15.7 m (950.46 ft)) (379.59 ft) (189.96 ft) (195.14 ft)  Intelligence  IVS (Perimeter Protection)  Al SSA  Ves  Quick Pick  With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events  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; MIPEG (only supported by the sub stream)  Al Coding  Al L265  Al Coding  Al Al Coding  Al L265  Al Coding  Al	Iris Control							Defog	Yes
Lens Detect Observe Recognize Identify  DORI DISTANCE  W 88.3 m (289.70 ft) (115.81 ft) (58.07 ft) (28.87 ft)  T 289.7 m (115.7 m (95.04 ft)) (189.96 ft) (189.96 ft) (95.14 ft)  Intelligence  IVS (Perimeter Protection)  Al SSA  Yes  Quick Pick  With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events wideos  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video  Video Compression  Lens  Detect  Observe  Recognize  Identify  Image Rotation  O"/90"/180"/270" (support 90"/270" with 2688 × 1520 resolution and lower)  Mirror  Yes  Privacy Masking  4 areas  Audio  Built-in MIC  Yes  Alarm  No SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; lifegal access; motion detection; video ampering; intrusion; tripwire; scene changing; audio detection; video ampering; intrusion; tripwire; scene changing; audio detection; woltage detection; defocus detection; SMD; safety exception  Network  Network  Network  Network  Network Port  Al Coding  Al L265	Close Focus I	Distance						AFSA	Yes
DORI Distance  W					Recognize	Identify		Image Rotation	
T 289.7 m (115.7 m (279.59 ft) (189.96 ft) (295.14 ft)  Intelligence  IVS (Perimeter Protection) Tripwire, intrusion (support the classification and accurate detection of vehicle and human)  Al SSA Yes  Quick Pick With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events  Smart 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+  Al Coding Al H.265  Al L.265  Al L.265  Al L.266 SM AL SA SM		W						Mirror	·
Intelligence  IVS (Perimeter Protection) Tripwire, intrusion (support the classification and accurate detection of vehicle and human)  AI SSA Yes  Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events  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+  AI Coding AI H.265  AI H.265	Distance	т						Privacy Masking	4 areas
IVS (Perimeter Protection)  Tripwire, intrusion (support the classification and accurate detection of vehicle and human)  Al SSA  Yes  Quick Pick  With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events  Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video  Video  Video Compression  H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)  Smart Codec  All Coding  Al H.265  Al Loding  Al H.265			(950.46 ft)	(379.59 ft)	(189.96 ft)	(95.14 ft)		Audio	
Al SSA  Yes  Alarm  Quick Pick  With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events  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.264B; MJPEG (only supported by the sub stream)  Smart Codec  Al Al Coding  Audio Compression  G.711a; G.711Mu; PCM; G.726; G.723  Alarm  Alarm  Audio Compression  G.711a; G.711Mu; PCM; G.726; G.723  Alarm  Alarm  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; defocus detection; SMD; safety exception  NetWork  Network  Network Port  RJ-45 (10/100 Base-T)  SDK and API  Yes  Al L265	Intelligen	ce					Built-in MIC	Yes	
Alarm  Quick Pick  With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events  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.264B; MJPEG (only supported by the sub stream)  Smart Codec  Smart H.265+ Smart H.264+  AI Coding  AI H.265  AI H.267  AI H.265  AI H.267  AI H.268	IVS (Perimeter Protection)							Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
Quick PickWith AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD eventsNo SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion 	AI SSA		Yes					Alarm	
Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos  Video  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+ Smart H.264+ Al Coding  Al H.265  Al H.265  Al H.264  Al H.265  Al H.265  Al H.264  Al H.265  Al H.265  Al H.264  Al H.265  Al H.265  Al H.265  Al H.265  Al H.265  Al H.267  Al H.265  Al H.265  Al H.265  Al H.265  Al H.265  Al H.265	Quick Pick								· · · · · · · · · · · · · · · · · · ·
Video Compression  H.265; H.264; H.264B; MJPEG (only supported by the sub stream)  Smart H.265+ Smart H.265+ Smart H.264+  Al Coding  Al H.265  Al H.265  Al H.265  Al H.265  Al H.265  Al H.267  Al H.267  Al H.267			intelligent search, event extraction and merging to event					Alarm Event	disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; defocus
Video Compression by the sub stream)  Smart H.265+ Smart H.264+  Al Coding  Al H.265				Wast 11264 1126411 112612 11125				Network	and the state of t
Smart Codec         Smart H.265+ Smart H.264+         SDK and API         Yes           AI Coding         AI H.265         IPv4; IPv6; HTTP;TCP; UDP; ARP; RTCP; RTMP	Video Compression		by the sub stream)						RJ-45 (10/100 Base-T)
Al Coding  Al H.265  Al Coding  Al H.265  Al H.265  Al H.265  Al H.265  Al H.265	Smart Codec							SDK and API	Yes
Multicast; ICMP; IGMP; NFS; SAMBA; PPPOE; SNMP	Al Coding						Network Protocol	IPv4; IPv6; HTTP;TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;	

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	
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec	
User/Host	20 (Total bandwidth: 64 M)	
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS	
Browser	IE: IE11 Chrome Firefox	
Management Software	Smart PSS; DSS; DMSS	
Mobile Client	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: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14
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# Power

Power Supply	12 VDC/PoE (802.3af)	
Power Consumption	Basic: 5.7 W (12 VDC); 6.4 W (PoE) Max. (WDR + IR intensity + Intelligence): 8.9 W (12 VDC); 10.2 W (PoE)	

## Environment

Operating Temperature	$-30~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (–22 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F})$ /Less than 95% RH		
Storage Temperature	-40 °C to +60 °C (-40 °F to 140 °F)		
Protection	IP67		

# Structure

Casing	Metal
Product Dimensions	108.3 mm × Φ122 mm (4.26" × Φ4.8")
Net Weight	715 g (1.58 lb)
Gross Weight	915 g (2.02 lb)

Ordering Information				
Туре	Model	Description		
8MP Camera	DH-IPC-HDW3866TP-ZS-AUS	8MP IR Vari-focal Eyeball WizSense Network Camera		
	PFA137	Junction Box Bracket		
	PFA109	Mount Adapter		
	PFB220C	Ceiling Mount Bracket		
Accessories	PFB205W-E	Wall Mount		
(Optional)	PFA152-E	Pole Mount		
	PFM321D	12 VDC 1 A Power Adapter		
	PFM900-E	Integrated Mount Tester		
	TF-P100	TLC SD Card		

## **Accessories**

# Optional:



PFA137 Junction Box Bracket



PFA109 Mount Adapter



PFB220C Ceiling Mount Brack



PFM321D 12 VDC 1 A Power Adapter



PFB205W-E Wall Mount



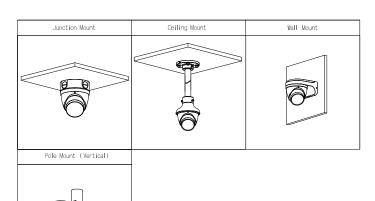
PFA152-E Pole Mount



PFM900-E Integrated Mount Tester



TF-P100 TLC SD Card



# Dimensions (mm[inch])

