

# DH-IPC-HDW3641EM-S-S2

6MP IR Fixed focal Eyeball WizSense Network Camera



WizSense

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.

## System 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.

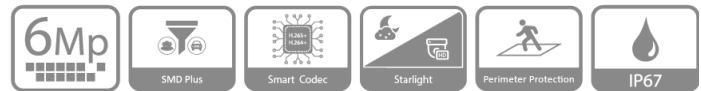
### Smart H.265+ & Smart H.264+

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

- 6MP, 1/2.7" progressive scan CMOS, low illuminance, high image definition
- Outputs max. 6MP (3072 × 2048) @ 25/30 fps
- H.265 codec, high compression rate, low bit rate
- Built-in IR LED, max. IR distance: 50 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: Tripwire, intrusion
- Abnormality detection: Motion detection, video tampering, defocus detection; scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Supports max. 256 G Micro SD card, built-in Mic
- 12V DC/PoE power supply
- IP67 protection
- SMD Plus



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.

### 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. With UL CAP Certification, TÜV Rheinland Protected Privacy IoT Product Certification, and ETSI EN 303645 Certification, Dahua network camera better meets the demands of cyber security and privacy protection.

### 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 work normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows ±30% 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" 6Megapixel progressive scan CMOS
Max. Resolution	3072(H) × 2048(V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
Min. Illumination	0.005 Lux @F1.6
S/N Ratio	> 56 dB
Illumination Distance	50 m (164.0 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–78°; Rotation: 0°–360°

### Lens

Lens Type	Fixed-focal				
Mount Type	M12				
Focal Length	2.8 mm; 3.6 mm				
Max. Aperture	F1.6				
Field of View	2.8 mm: Horizontal 99° × Vertical 72° × Diagonal 131° 3.6 mm: Horizontal 80° × Vertical 58° × Diagonal 106°				
Iris Type	Auto				
Close Focus Distance	2.8 mm: 0.9 m (3.0 ft) 3.6 mm: 1.6 m (5.3 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	56.0 m (183.8 ft)	22.4 m (73.49ft)	11.2 m (36.74 ft)	5.6 m (18.37 ft)
	3.6 mm	79.4 m (260.49 ft)	31.8 m (104.33 ft)	15.9 m (52.16 ft)	7.9 m (25.91 ft)

### Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion (classification and accurate detection of vehicle and human)
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.264B,H.264H,MJPEG (only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream (3072 × 2048@1–25/30 fps) Sub stream (704 × 576@1–25 fps/ 704 × 480@1–30 fps) Third stream (1920 × 1080@1–25/30 fps)
Stream Capability	3 streams
Resolution	6M (3072 × 2048/3072 × 1728-16:9); 5M (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 (640 × 480); CIF (352 × 288/352 × 240)

Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270° Support 90°/270° with 1920 × 1080 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

### Audio

Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G726

### Alarm

Alarm Event	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; SMD; safety exception
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### Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP
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: 72M)
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

Certification	EN 55032 EN 61000-3-2 EN 61000-3-3 EN 55024 EN 50130-4 EN55035 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU RCM AS/NZS CISPR 32
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## Power

Power Supply	12V DC (±30%), PoE (802.3af)
Power Consumption	Basic power consumption: 2.8W (12V DC); 3.5W (PoE) Max. power consumption (WDR + H.265 + IR LED intensity): 6.7W (12V DC); 7.5W (PoE)

## Environment

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

## Structure

Casing	Metal
Dimensions	Φ106 mm × 93.6 mm (Φ4.17" × 3.69")
Net Weight	0.55 kg (1.21 lb)
Gross Weight	0.71 kg (1.57 lb)

## Ordering Information

Type	Model	Description
6MP Camera	DH-IPC-HDW3641EM-S-S2	6MP IR Fixed focal Eyeball WizSense Network Camera,PAL
Accessories (optional)	PFA130-E	Junction Box
	PFA200W	Rain Shade
	PFB204W	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
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

## Accessories

### Optional:



PFA130-E  
Junction Box



PFA200W  
Rain Shade



PFB204W  
Wall Mount



PFA152-E  
Pole Mount



PFA106  
Mount Adapter



PFB220C  
Celling Mount



PFM321D  
DC12V1A Power  
Adapter



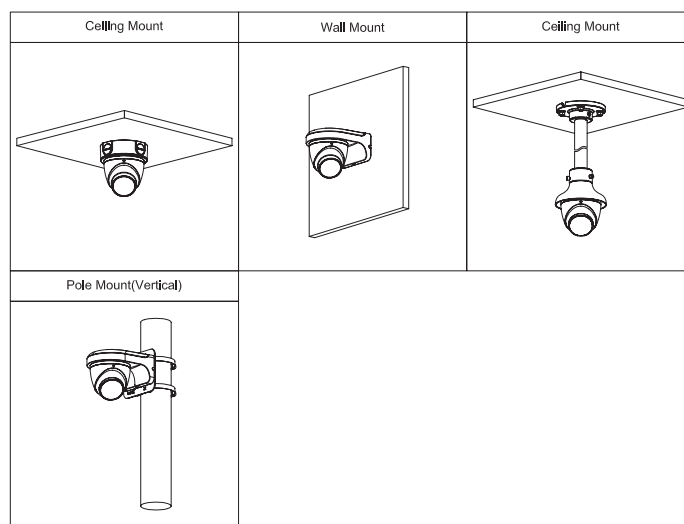
LR1002-1ET/1EC  
Single-port Long  
Reach Ethernet over  
Coax Extender



PFM900-E  
Integrated Mount  
Tester



PFM114  
TLC SD Card



## Dimensions (mm[inch])

