# DH-IPC-HDBW3541F-AS-M

## 5MP IR Fixed focal Dome WizSense Network Camera



**Wiz** Sense

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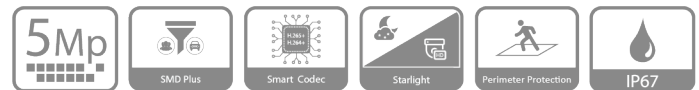
#### Smart H.265+ & Smart H.264+

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) are largely reduced.

- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944) @20 fps, and supports 4MP (2688 × 1520) @25/30 fps
- 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, 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, 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 ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Onvif

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.7"5Megapixel progressive CMOS |
| Max. Resolution | 2592 (H) ×1944 (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 (Color, 30IRE)<br>0.0005 Lux@F1.6 (B/W, 30IRE)<br>0 Lux (Illuminator on) |
| S/N Ratio | > 56 dB |
| Illumination Distance | 30 m (98.4ft) |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 8 (IR LED) |
| Pan/Tilt/Rotation Range | Pan: -30°–30°; Tilt: 0°–80°; Rotation: 0° to 360° |

### Lens

| | |
|---|---|
| Lens Type | Fixed-focal |
| Mount Type | M12 |
| Focal Length | 2.8 mm; 3.6 mm; 6 mm |
| Max. Aperture | F1.6 |
| Field of View | 2.8 mm: Horizontal: 98°; vertical: 72°; diagonal: 130°<br>3.6 mm: Horizontal: 80°; vertical: 59° ; diagonal: 106°<br>6 mm: Horizontal: 50°; vertical: 36°; diagonal: 64° |
| Iris Type | Fixed |
| Close Focus Distance | 2.8 mm: 0.9 m (3.0 ft)<br>3.6 mm: 1.6 m (5.3 ft)<br>6 mm: 3.2 m (10.5 ft) |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | 2.8mm | 56.0 m (183.7 ft) | 22.4 m (73.5 ft) | 11.2 m (36.8 ft) | 5.6 m (18.4 ft) |
| | 3.6mm | 80.0 m (262.5 ft) | 32.0 m (105.0 ft) | 16.0 m (52.5 ft) | 8.0 m (26.3 ft) |
| | 6mm | 120.0 m (393.7 ft) | 48.0 m (157.5 ft) | 24.0 m (78.7 ft) | 12.0 m (39.4ft) |

### 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 |

### Video

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|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream) |
| Smart Codec | Smart H.265+/ Smart H.264+ |
| Video Frame Rate | Main stream (2592 × 1944@1–20 fps)<br>(2688 × 1520@1–25/30 fps)<br>sub stream (704 × 576@1–25 fps/704 × 480@1–30 fps)<br>third stream (1280 × 720@1–25/30 fps) |
| Stream Capability | 3 streams |

| | |
|---|---|
| Resolution | 5M (2592 × 1944); 4M (2688 × 1520); 3M (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<br>H.265: 3 Kbps–8192 Kbps |
| Day/Night | Auto(ICR)/Color/B/W |
| BLC | Yes |
| HLC | Yes |
| WDR | 120 dB |
| 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 |
| 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

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|---|---|
| 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; video tampering; scene changing; intensity change; tripwire; intrusion; SMD |

### 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 |
| Scene Self-adaptation (SSA) | Yes |
| User/Host | 20 (Total bandwidth: 64 M) |
| Storage | FTP; SFTP;Micro SD Card (support max. 256 G); NAS |
| Browser | IE: IE8, IE9, IE11<br>Chrome<br>Firefox |

| | |
|---|---|
| Management Software | Smart PSS, DSS, DMSS |
| Mobile Phone | IOS; Android |

## Certification

| | |
|---|---|
| Certifications | CE-LVD: EN62368-1<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B |

## Power

| | |
|---|---|
| Power Supply | 12V DC/PoE (802.3af) |
| Power Consumption | <5.7W |

## 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; IK10 |

## Structure

| | |
|---|---|
| Casing | Metal |
| Dimensions | 55 mm × Φ108.9 mm (2.2" × Φ4.3") |
| Net Weight | 380 g (0.8 lb) |
| Gross Weight | 520 g (1.1 lb) |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 5MP Camera | DH-IPC-HDBW3541FP-AS-M | 5MP IR Fixed focal Dome WizSense Network Camera,PAL |
| | DH-IPC-HDBW3541FN-AS-M | 5MP IR Fixed focal Dome WizSense Network Camera,NTSC |
| Accessories (optional) | PFA139 | Junction Box |
| | PFB204W | Wall Mount |
| | PFA152-E | Pole Mount |
| | PFB220C | Mount Adapter |
| | PFA106 | 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:**


PFA139
Junction Box


PFB204W
Wall Mount


PFA152-E
Pole Mount


PFB220C
Ceiling Mount


PFA106
Mount Adapter


PFM321D
DC12V1A Power Adapter


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


PFM900-E
Integrated Mount tester


PFM114
TLC SD card

| Junction Mount | Wall Mount | Pole Mount | Celling Mount |
|---|---|---|---|
| PFA139 | PFB204W | PFB204W+PFA152-E | PFB220C+PFA106 |
|  |  |  |  |

## Dimensions (mm[inch])



55.0 [2.17]
108.9 [4.29]
∅108.9 [∅4.29]
∅91.0 [∅3.58]
36°
∅4.5 [∅0.18]