# DH-IPC-HDBW3541E-AS

## 5MP Lite AI IR Fixed focal Dome Network Camera

- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944)@20 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: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, scene changing, audio abnormality detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Alarm: In, out; Audio: In, out; Supports max. 256 G Micro SD card
- 12V DC/POE power support
- IP67, IK10 protection
- SMD

| 5Mp | H.265+ | Starlight | Perimeter | SMD | IP67 |

## System Overview

With advanced deep learning algorithm, Dahua Lite AI series network camera supports some intelligent functions, such as perimeter protection and smart motion detection. It adopts starlight solution, which makes a better image effect in low illuminance.

## Functions

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

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart encoding technology realizes the higher efficiency than (H.265 & H.264 ), providing high-quality video, and reducing the cost of storage and transmission.

### Wide dynamic range (WDR)

Dahua adopts advanced Wide Dynamic Range (WDR) technology. You can get clear details in the environment of strong brightness contrast. In high brightness and back-light environment, bright region and dark region with strong light source, you can also get clear images.

### 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.

## Intelligent Video Analysis (IVS)

With advanced video algorithm, Dahua camera supports intelligent detection, such as tripwire and intrusion and so on.

## Smart Motion Detection (SMD)

With intelligent algorithm, Dahua Smart Motion Detection technology can effectively recognize the target types, flitting the motion detection alarm triggered by non-concerned target types. It can realize effective and accurate alarm.

## 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 m (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 |
| Effective Pixels | 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 |
| IR Distance | 50 m (164.0 ft) |
| IR On/Off Control | Auto/Manual |
| IR LEDs Number | 3 (IR LEDs) |
| Pan/Tilt/Rotation Range | Horizontal: 0°–355°; vertical: 0°–65°; rotation: 0°–355° |

### 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 aperture |
| 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

| | |
|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG |
| Smart Codec | Yes |
| Video Frame Rate | Main stream (2592 × 1944@1–20 fps)<br>           (2688 × 1520@1–25/30 fps)<br>sub stream (704 × 576@1–25/30 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 IR | Yes |
| Image Rotation | 0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution.) |
| Mirror | Yes |
| Privacy Masking | 4 areas |

### Audio

| | |
|---|---|
| Audio Compression | G.711a; G.711Mu; G726; AAC |

### Network

| | |
|---|---|
| Network | RJ-45 (10/100 Base-T) |
| Protocol | HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP |
| Interoperability | ONVIF(Profile S/Profile G);CGI;P2P;Milestone;Genetec |
| Scene Self-adaptation | Yes |
| User/Host | 20 (Total bandwidth: 64 M) |
| Edge Storage | FTP; Micro SD Card (support  max. 256 G); Dahua Cloud; NAS |
| Browser | IE: IE8, IE9, IE11<br>Chrome<br>Firefox |
| Management Software | Smart PSS, DSS, DMSS |
| Mobile Phone | IOS; Android |

### Certification

| | |
|---|---|
| Certifications | CE-LVD: EN60950-1<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B<br>UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07 |

### Port

| | |
|---|---|
| Audio Input | 1-channel (RCA port) |
| Audio Output | 1-channel (RCA port) |
| Alarm Input | 1 channel in: 5mA 3V–5V DC |
| Alarm Output | 1 channel out: 300mA 12V DC |

### Power

# Lite AI Series | DH-IPC-HDBW3541E-AS

| Power Supply | 12V DC/PoE (802.3af) |
|---|---|
| Power Consumption | <7.3W |

## Environment

| Operating Conditions | -40°C to +60°C  (-40°F to +140°F)/less than≤95% |
|---|---|
| Strorage Conditions | -40°C to +60°C  (-40°F to +140°F) |
| Ingress Protection | IP67; IK10 |

## Structure

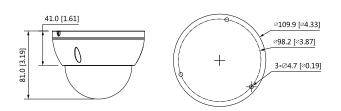| Casing | Metal + Plastic |
|---|---|
| Dimensions | 81 mm × Φ109.9 mm (3.2" × Φ4.3") |
| Net Weight | 378 g (0.8 lb) |
| Gross Weight | 523 g (1.2 lb) |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 5MP Camera | DH-IPC-HDBW3541EP-AS | 5MP Lite AI IR Fixed focal Dome Network Camera,PAL |
| | DH-IPC-HDBW3541EN-AS | 5MP Lite AI IR Fixed focal Dome Network Camera,NTSC |
| Accessories (optional) | PFA136 | Junction Box |
| | 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 |
| | PFM900-E | Integrated Mount Tester |
| | PFM114 | TLC SD Card |

## Accessories

### Optional:



PFA136
Junction Box

PFA200W
Rain Shade

PFB203W
Wall Mount



PFA152-E
Pole Mount

PFA106
Mount Adapter

PFB220C
Ceiling 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

| Junction Mount | Wall Mount | Wall Mount | Pole Mount |
|---|---|---|---|
| PFA136 | PFA136+PFA200W | PFB203W | PFB203W+PFA152-E |

| Ceiling Mount | | | |
|---|---|---|---|
| PFA106+PFB220C | | | |



## Dimensions (mm[inch])



41.0 [1.61]
81.0 [3.19]
⌀109.9 [⌀4.33]
⌀98.2 [⌀3.87]
3-⌀4.7 [⌀0.19]