

# DH-IPC-HFW3249T1-AS-PV

2MP Full-color Active Deterrence Fixed-focal Bullet 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. In addition, with full-color technology, it 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.

#### Full-color

With high-performance sensor and large aperture lens, Dahua Full-color technology can display clear colorful image in the environment of ultralow illuminance. With this photosensitivity technology, the camera can capture more available light, and display more colorful image details.

#### Siren and Light Active Deterrence

Dahua siren and light active deterrence network camera supports light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing.

- $\cdot$  2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- · Outputs max. 2MP (1920 × 1080) @30 fps
- · H.265 codec, high compression rate, low bit rate
- $\cdot$  Built-in warm illuminator, and the max. illumination distance: 40 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- · 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, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Supports sound and light alarm linkage. When an alarm is triggered, the camera links sound alarm and light flashing.
- Supports one-tap disarming. You can disarm the events of alarm output, sending email, audio, and light in the configured period.
- · Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card, built-in Mic and speaker
- · 12V DC/PoE power supply
- · IP67 protection
- · SMD Plus
- · Red and blue flashlight alarm



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

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#### **Technical Specification**

| Technical Specification    |              |                                                                                                                                                                     |                      |                     |                    |  |
|----------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|--------------------|--|
| Camera                     |              |                                                                                                                                                                     |                      |                     |                    |  |
| Image Sensor               |              | 1/2.8"2Megapixel progressive CMOS                                                                                                                                   |                      |                     |                    |  |
| Max. Resolution            |              | 1920 (H) × 1080 (V)                                                                                                                                                 |                      |                     |                    |  |
| ROM                        |              | 128 MB                                                                                                                                                              |                      |                     |                    |  |
| RAM                        |              | 512 MB                                                                                                                                                              |                      |                     |                    |  |
| Scanning System            |              | Progressive                                                                                                                                                         |                      |                     |                    |  |
| Electronic Shutter Speed   |              | Auto/Manual 1/3 s-1/100,000 s                                                                                                                                       |                      |                     |                    |  |
| Min. Illuminati            | on           | 0.0015 Lux @F1.0                                                                                                                                                    |                      |                     |                    |  |
| S/N Ratio                  |              | > 56 dB                                                                                                                                                             |                      |                     |                    |  |
| Illumination Di            | istance      | 40 m (131.2 ft)                                                                                                                                                     |                      |                     |                    |  |
| Illuminator On             | /Off Control | Auto/Manual                                                                                                                                                         |                      |                     |                    |  |
| Illuminator Nu             | mber         | 2 (Warm light)                                                                                                                                                      |                      |                     |                    |  |
| Pan/Tilt/Rotation Range    |              | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360°                                                                                                                   |                      |                     |                    |  |
| Lens                       |              |                                                                                                                                                                     |                      |                     |                    |  |
| Lens Type                  |              | Fixed-focal                                                                                                                                                         |                      |                     |                    |  |
| Mount Type                 |              | M12                                                                                                                                                                 |                      |                     |                    |  |
| Focal Length               |              | 2.8 mm; 3.6 mm; 6 mm                                                                                                                                                |                      |                     |                    |  |
| Max. Aperture              |              | F1.0                                                                                                                                                                |                      |                     |                    |  |
| Field of View              |              | 2.8 mm: Horizontal 107° × Vertical 55° × Diagonal 127<br>3.6 mm: Horizontal 84° × Vertical 44° × Diagonal 99°<br>6 mm: Horizontal 57° × Vertical 31° × Diagonal 65° |                      |                     |                    |  |
| Iris Type                  |              | Fixed                                                                                                                                                               |                      |                     |                    |  |
| Close Focus Distance       |              | 2.8 mm: 0.8 m (2.6 ft)<br>3.6 mm: 1.5 m (4.9 ft)<br>6 mm: 3.4 m (11.2 ft)                                                                                           |                      |                     |                    |  |
|                            | Lens         | Detect                                                                                                                                                              | Observe              | Recognize           | Identify           |  |
| DORI<br>Distance           | 2.8 mm       | 46.5 m<br>(152.6 ft)                                                                                                                                                | 18.6 m<br>( 61.0 ft) | 9.3 m<br>(30.5 ft)  | 4.6 m<br>(15.1 ft) |  |
|                            | 3.6 mm       | 55.2 m<br>(181.1 ft)                                                                                                                                                | 22.1 m<br>(72.5 ft)  | 11.0 m<br>(36.1 ft) | 5.5 m<br>(18.0 ft) |  |
|                            | 6 mm         | 82.8 m<br>(271.7 ft)                                                                                                                                                | 33.1 m<br>(108.6 ft) | 16.6 m<br>(54.5ft)  | 8.3 m<br>(27.2 ft) |  |
| Professional, intelligent  |              |                                                                                                                                                                     |                      |                     |                    |  |
| IVS (Perimeter Protection) |              | Tripwire; intrusion (support the classification and accurate detection of vehicle and human)                                                                        |                      |                     |                    |  |
|                            |              | Work together with Smart NVR to perform refine                                                                                                                      |                      |                     |                    |  |

Stream Capability 3 streams 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × Resolution 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (354 × 288/354 × 240)240) Bit Rate Control CBR/VBR H.264: 32 kbps-8192 kbps Video Bit Rate H.265: 12 kbps-8192 kbps Day/Night Color/B/W BLC Yes HI C Yes WDR 120 dB Scene Self-adaptation (SSA) Yes Auto/natural/street lamp/outdoor/manual/regional White Balance custom Gain Control Auto/Manual Noise Reduction 3D NR OFF/ON (4 areas) Motion Detection Region of Interest (Rol) Yes (4 areas) Smart Illumination Yes 0°/90°/180°/270° Image Rotation (Support with 1080p resolution and lower) Mirror Yes Privacy Masking 4 areas Audio Built-in MIC Yes PCM; G.711a; G.711Mu; G.726; G.723 Audio Compression Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene Alarm Event changing; audio detection; voltage detection; external alarm; SMD; safety exception; light alarm; sound alarm (11 built-in sounds and custom voices importing) Network RJ-45 (10/100 Base-T) Network SDK and API Yes IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; Protocol UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security Cyber Security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade ONVIF(Profile S/Profile G/Profile T); CGI; Milestone; Interoperability Genetec; P2P User/Host 20 (Total bandwidth: 80 M) Storage FTP; SFTP; Micro SD card (support max. 256 G) NAS

| Intelligent Search | Work together with Smart NVR to perform refine<br>intelligent search, event extraction and merging to<br>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+                                                                                                               |  |  |
| Video Frame Rate   | Main stream: 1920 × 1080 @1-25/30 fps<br>Sub stream: 704 × 576 @1-25 fps/704 × 480 @ 1-30 fps<br>Third stream: 1920 × 1080 @1-25/30 fps |  |  |

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| Browser              | IE: IE8 and later<br>Chrome<br>Firefox                                                                                                                                                            |                                | PFM321D        | 12V DC 1A Powe            | er Adapter<br>3 Reach Ethernet over Coax |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------|---------------------------|------------------------------------------|
|                      | Safari: Safari 12 and later                                                                                                                                                                       |                                | LR1002-1ET/1EC | Extender                  |                                          |
| Management Software  | Smart PSS; DSS; DMSS                                                                                                                                                                              |                                | PFM900-E       | Integrated Mou            | nt Tester                                |
| Mobile Phone         | IOS; Android                                                                                                                                                                                      |                                | PFM114         | TLC SD Card               |                                          |
| Certification        |                                                                                                                                                                                                   |                                |                |                           |                                          |
| Certification        | CE-LVD: EN62368-1<br>CE-EMC: Electromagnetic Compatibility Directive<br>2014/30/EU<br>FCC: 47 CFR FCC Part 15, Subpart B                                                                          | Accessories<br>Optional:       | ;              |                           |                                          |
| Port                 |                                                                                                                                                                                                   | Optional.                      |                |                           |                                          |
| Audio Input          | 1 channel (RCA port)                                                                                                                                                                              |                                |                | _                         | 1                                        |
| Audio Output         | 1 channel (RCA port)                                                                                                                                                                              |                                |                |                           |                                          |
| Alarm Input          | 1 channel in: 5mA 3V–5V DC                                                                                                                                                                        |                                |                |                           | 0                                        |
| Alarm Output         | 1 channel out: 300mA 12V DC                                                                                                                                                                       | PFA130-E<br>Junction Bc        |                | PFA152-E<br>Pole Mount    | PFM321D<br>12V DC 1A Power               |
| Power                |                                                                                                                                                                                                   |                                |                |                           | Adapter                                  |
| Power Supply         | 12V DC/PoE (802.3af)                                                                                                                                                                              | -                              |                |                           |                                          |
| Power Consumption    | Basic power consumption: 1.8W (12V DC); 2.4W (PoE)<br>Max. power consumption (H.265 + warm light + IVS +<br>sound alarm + red and blue lights flashing alternately):<br>7.2W (12V DC); 8.5W (PoE) |                                |                |                           | aidhna<br>12B ary                        |
| Environment          |                                                                                                                                                                                                   | LR1002-1ET/1<br>Single-port Lo |                | PFM900-E<br>egrated Mount | PFM114<br>TLC SD Card                    |
| Operating Conditions | -40°C to +60°C (-40°F to +140°F)/Less than 95% RH                                                                                                                                                 | Reach Ethernet<br>Coax Extend  | over           | Tester                    | TEC 3D Card                              |
| Storage Conditions   | -40°C to +60°C (-40°F to +140°F)                                                                                                                                                                  |                                |                |                           |                                          |
| Protection Grade     | IP67                                                                                                                                                                                              | Junction Mo                    | unt            | Wall Mount                | Pole Mount(Vertical)                     |
| Structure            |                                                                                                                                                                                                   |                                |                |                           |                                          |
| Casing               | Metal + plastic                                                                                                                                                                                   |                                |                |                           |                                          |
| Dimensions           | 288.4 mm × 94.4 mm × 84.7 mm<br>(11.4" × 3.7" × 3.3") (L × W × H)                                                                                                                                 | ODE                            |                |                           |                                          |
| Net Weight           | 1.0 kg (2.2 lb)                                                                                                                                                                                   |                                |                |                           |                                          |
| Gross Weight         | 1.23 kg (2.7 lb)                                                                                                                                                                                  | L                              | I              |                           | <u> </u>                                 |
|                      |                                                                                                                                                                                                   |                                |                |                           |                                          |

#### **Ordering Information**

| Туре                      | Part Number                     | Description                                                                          |
|---------------------------|---------------------------------|--------------------------------------------------------------------------------------|
| 2MP Camera                | DH-IPC-<br>HFW3249T1P-<br>AS-PV | 2MP Full-color Active Deterrence Fixed-focal<br>Bullet WizSense Network Camera, PAL  |
|                           | DH-IPC-<br>HFW3249T1N-<br>AS-PV | 2MP Full-color Active Deterrence Fixed-focal<br>Bullet WizSense Network Camera, NTSC |
|                           | IPC-HFW3249T1P-<br>AS-PV        | 2MP Full-color Active Deterrence Fixed-focal<br>Bullet WizSense Network Camera, PAL  |
|                           | IPC-HFW3249T1N-<br>AS-PV        | 2MP Full-color Active Deterrence Fixed-focal<br>Bullet WizSense Network Camera, NTSC |
| Accessories<br>(optional) | PFA130-E                        | Junction Box                                                                         |
|                           | PFA152-E                        | Pole Mount                                                                           |

94.4 [3.72] 197.3 [7.77] • ( 0 Ø90.4 [Ø3.56] Ø70.0 [Ø2.76]

3-04.7 [00.19]

84.7 [3.33]

Dimensions (mm/inch)

288.4 [11.35]