

# DH-HAC-HFW1400D

4MP HDCVI IR Bullet Camera

## HDCVI



- Max 30fps@4MP
- HD and SD output switchable
- 3.6mm fixed lens (6mm, 8mm, 12mm optional)
- Max. IR length 80m, Smart IR
- IP67, DC12V



### System Overview

Experience superior clarity of real-time 4Mega-pixel video with the simplicity of using existing cabling infrastructure. The Lite series features compact design and high quality image at friendly price. It offers various vari-focal/fixed lens models with multi-language OSD and HD/SD switchable output. The structure flexibility and best cost-performance makes lite series camera an ideal choice for SMB solutions.

### Functions

#### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras.

#### Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 700m for 4MP HD video via coaxial cable, and up to 300m via UTP cable.\*

\*Actual results verified by real-scene testing in Dahua's test laboratory.

#### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

#### Smart IR

The camera is designed with array LED IR illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Dahua's unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

#### HD/SD Switchable

The camera supports switchable HDCVI high definition video output and CVBS standard definition video output. The two formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with both HCVRs and existing analog DVRs and also facilitates debugging through analog testers.

#### Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

#### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments.

With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments.

Supporting ±25% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

## Technical Specification

### Camera

|                          |   |
|--------------------------|---|
| Image Sensor             | 1/3" CMOS                                   |
| Effective Pixels         | 2688(H)×1520(V), 4.1MP                      |
| Scanning System          | Progressive                                 |
| Electronic Shutter Speed | PAL: 1/25~1/100000s<br>NTSC: 1/30~1/100000s |
| Minimum Illumination     | 0.03Lux/F2.0, 30IRE, 0Lux IR on             |
| S/N Ratio                | More than 65dB                              |
| IR Distance              | Up to 80m (262feet)                         |
| IR On/Off Control        | Auto / Manual                               |
| IR LEDs                  | 2   |

### Lens

|                      |   |
|----------------------|---|
| Lens Type            | Fixed lens / Fixed iris                                       |
| Mount Type           | Board-in  |
| Focal Length         | 3.6mm (6mm, 8mm, 12mm Optional)                               |
| Max Aperture         | F2.0  |
| Angle of View        | H: 84.8° (52.5°/32.9°/23.6°)                                  |
| Focus Control        | N/A   |
| Close Focus Distance | 1100mm (2200mm/4000mm/8500mm)<br>43.3" ( 86.6"/157.5"/334.6") |

### DORI Distance

Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

|           | DORI Definition      | Distance   |
|-----------|----------------------|--|
| Detect    | 25px/m<br>(8px/ft)   | 3.6mm: 80m(262ft)<br>6mm: 117m(385ft)<br>8mm: 161m(527ft)<br>12mm: 250m(820ft) |
| Observe   | 63px/m<br>(19px/ft)  | 3.6mm: 32m(105ft)<br>6mm: 47m(154ft)<br>8mm: 64m(210ft)<br>12mm: 100m(328ft)   |
| Recognize | 125px/m<br>(38px/ft) | 3.6mm: 16m(53ft)<br>6mm: 23m(77ft)<br>8mm: 32m(105ft)<br>12mm: 50m(164ft)      |
| Identify  | 250ppm<br>(76px/ft)  | 3.6mm: 8m(26ft)<br>6mm: 12m(39ft)<br>8mm: 16m(53ft)<br>12mm: 25m(82ft)         |

### Pan / Tilt / Rotation

|                   |   |
|-------------------|---|
| Pan/Tilt/Rotation | Pan: 0° ~ 360°<br>Tilt: 0° ~ 87°<br>Rotation: 0° ~ 360° |
|-------------------|---|

### Video

|                 |   |
|-----------------|---|
| Resolution      | 4MP (2560×1440)   |
| Frame Rate      | 25/30fps@4MP, 25/30fps@1080P, 25/30fps@720P                                 |
| Video Output    | 1-channel BNC high definition video output / CVBS video output (Can switch) |
| Day/Night       | Auto (ICR) / Manual   |
| OSD Menu        | Multi-language  |
| BLC Mode        | BLC / HLC / DWDR  |
| WDR             | DWDR  |
| Gain Control    | AGC   |
| Noise Reduction | 2D  |
| White Balance   | Auto / Manual   |
| Smart IR        | Auto / Manual   |

### Certifications

|                |   |
|----------------|---|
| Certifications | CE (EN55032, EN55024, EN50130-4)<br>FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)<br>UL (UL60950-1+CAN/CSA C22.2 No.60950-1) |
|----------------|---|

### Interface

|                 |     |
|-----------------|-----|
| Audio Interface | N/A |
|-----------------|-----|

### Electrical

|                   |                          |
|-------------------|--------------------------|
| Power Supply      | 12V DC ±25%              |
| Power Consumption | Max 5.2W (12V DC, IR on) |

### Environmental

|  |   |
|--|---|
| Operating Conditions                   | -40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH<br>* Start up should be done at above -40°C (-40°F) |
| Storage Conditions                     | -40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH   |
| Ingress Protection & Vandal Resistance | IP67  |

### Construction

|              |   |
|--------------|---|
| Casing       | Aluminium                                 |
| Dimensions   | 241.8mm×90.4mm×90.4mm (9.52"×3.56"×3.56") |
| Net Weight   | 0.59kg (1.30lb)                           |
| Gross Weight | 0.72kg (1.59lb)                           |

**Ordering Information**

| Type        | Part Number            | Description  |
|-------------|------------------------|--|
| 4MP Camera  | DH-HAC-HFW1400DP 3.6mm | 4MP HDCVI IR Bullet Camera, PAL                        |
|             | DH-HAC-HFW1400DP 6mm   |  |
|             | DH-HAC-HFW1400DP 8mm   |  |
|             | DH-HAC-HFW1400DP 12mm  |  |
|             | DH-HAC-HFW1400DN 3.6mm | 4MP HDCVI IR Bullet Camera, NTSC                       |
|             | DH-HAC-HFW1400DN 6mm   |  |
|             | DH-HAC-HFW1400DN 8mm   |  |
|             | DH-HAC-HFW1400DN 12mm  |  |
| Accessories | PFA135                 | Junction box (For use alone or with PFA150 pole mount) |
|             | PFA150                 | Pole mount (For use with PFA135 junction box)          |
|             | PFM800                 | Passive HDCVI Balun                                    |
|             | PFM801                 | Passive HDCVI Balun with Power                         |
|             | PFM809-4CH             | 4 Channel Passive HDCVI Balun                          |
|             | PFM809                 | 16 Channel Passive HDCVI Balun                         |
|             | PFM810                 | POC Transceiver  |

**Accessories**

Optional:



PFA135  
Junction box



PFA150  
Pole mount



PFM800  
Passive HDCVI Balun



PFM801  
Passive HDCVI Balun with Power



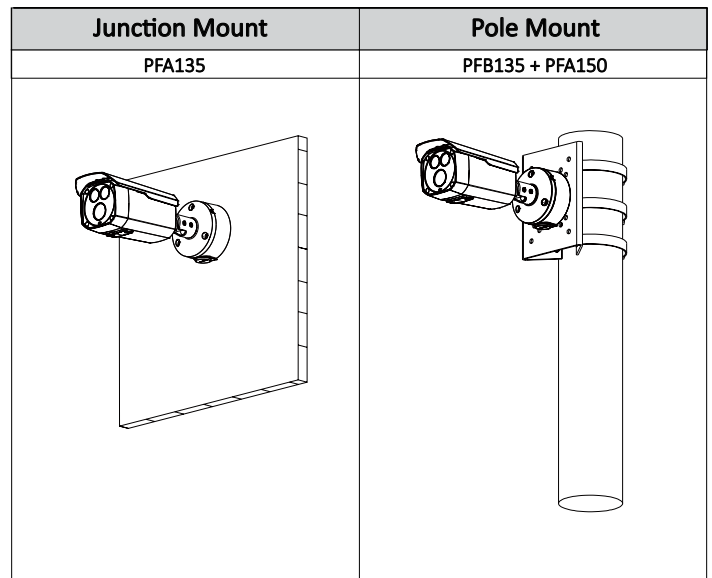
PFM809-4CH  
4 Channel Passive HDCVI Balun



PFM809  
16 Channel Passive HDCVI Balun



PFM810  
POC Transceiver



**Dimensions (mm/inch)**

