

# DH-HAC-HFW1400CM(-A)

4MP HDCVI IR Bullet Camera



- Max 30fps@4MP
- CVI/CVBS/AHD/TVI switchable
- 3.6mm fixed lens (2.8mm optional)
- Max. IR length 30m, Smart IR
- Built-in mic(-A)
- IP67, DC12V



## System Overview

Experience 4MP full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Lite series 4MP HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various motorized/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the 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 XVR, 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 real-time transmission at long distance without any loss. It supports up to 700 m for 4MP HD video via coaxial cable, and up to 300 m 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 IR LED 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.

## Multi-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with most end users' existing HD/SD DVRs.

## 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 ±30% 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    |        |                                                                                                                                                                                                 |                 |               |              | WDR                                                                                                                                                                                                                   |  | DWDR                                                     |  |
|----------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|--|
| Camera                     |        |                                                                                                                                                                                                 |                 |               |              | White Balance                                                                                                                                                                                                         |  | Auto; manual                                             |  |
| Image Sensor               |        | 1/2.7 inch CMOS                                                                                                                                                                                 |                 |               |              | Gain Control                                                                                                                                                                                                          |  | Auto; manual                                             |  |
| Max. Resolution            |        | 2560(H)×1440(V)                                                                                                                                                                                 |                 |               |              | Noise Reduction                                                                                                                                                                                                       |  | 2D NR                                                    |  |
| Pixel                      |        | 4MP                                                                                                                                                                                             |                 |               |              | Smart IR                                                                                                                                                                                                              |  | Yes                                                      |  |
| Scanning System            |        | Progressive                                                                                                                                                                                     |                 |               |              | Electronic Defog                                                                                                                                                                                                      |  | Yes                                                      |  |
| Electronic Shutter Speed   |        | PAL: 1/25s–1/100000s<br>NTSC: 1/30s–1/100000s                                                                                                                                                   |                 |               |              | Mirror                                                                                                                                                                                                                |  | Off/On                                                   |  |
| S/N Ratio                  |        | >65dB                                                                                                                                                                                           |                 |               |              | Privacy Masking                                                                                                                                                                                                       |  | Off/On (8 area, rectangle)                               |  |
| Min. Illumination          |        | 0.02Lux/F2.0, 30IRE, 0Lux IR on                                                                                                                                                                 |                 |               |              | Certifications                                                                                                                                                                                                        |  |                                                          |  |
| Illumination Distance      |        | 30 m (98.4 ft)                                                                                                                                                                                  |                 |               |              | CE (EN55032:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN55024:2010+A1:2015, EN 55035:2017, EN50130-4:2011+A1:2014)<br>FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)<br>UL (UL60950-1+CAN/CSA C22.2 No.60950-1) |  |                                                          |  |
| Illuminator On/Off Control |        | Auto; manual                                                                                                                                                                                    |                 |               |              | Port                                                                                                                                                                                                                  |  |                                                          |  |
| Illuminator Number         |        | 3                                                                                                                                                                                               |                 |               |              | Video Output                                                                                                                                                                                                          |  |                                                          |  |
| Pan/Tilt/Rotation Range    |        | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360°                                                                                                                                               |                 |               |              | Video output choices of CVI/TVI/AHD/CVBS by one BNC port                                                                                                                                                              |  |                                                          |  |
| Lens                       |        |                                                                                                                                                                                                 |                 |               |              | Power                                                                                                                                                                                                                 |  |                                                          |  |
| Lens Type                  |        | Fixed-focal                                                                                                                                                                                     |                 |               |              | Power Supply                                                                                                                                                                                                          |  | 12V ±30% DC                                              |  |
| Mount Type                 |        | M12                                                                                                                                                                                             |                 |               |              | Power Consumption                                                                                                                                                                                                     |  | Max 3.7W (12V DC, IR on)                                 |  |
| Focal Length               |        | 2.8 mm; 3.6 mm                                                                                                                                                                                  |                 |               |              | Environment                                                                                                                                                                                                           |  |                                                          |  |
| Max. Aperture              |        | F2.0                                                                                                                                                                                            |                 |               |              | Operating Temperature                                                                                                                                                                                                 |  | -40°C to +60°C (-40°F to 140°F); <95% (non-condensation) |  |
| Field of View              |        | 2.8 mm: 125° x 105° x 56°<br>(diagonal x horizontal x vertical)<br>3.6 mm: 104° x 87° x 47°<br>(diagonal x horizontal x vertical)                                                               |                 |               |              | Storage Temperature                                                                                                                                                                                                   |  | -40°C to +60°C (-40°F to 140°F); <95% (non-condensation) |  |
| Iris Type                  |        | Fixed iris                                                                                                                                                                                      |                 |               |              | Protection Grade                                                                                                                                                                                                      |  | IP67                                                     |  |
| Close Focus Distance       |        | 2.8 mm: 0.7m (2.3 ft)<br>3.6 mm: 1.1m (3.6 ft)                                                                                                                                                  |                 |               |              | Structure                                                                                                                                                                                                             |  |                                                          |  |
| DORI Distance              | Lens   | Detect                                                                                                                                                                                          | Observe         | Recognize     | Identify     | Casing                                                                                                                                                                                                                |  | Metal throughout the whole casing                        |  |
|                            | 2.8 mm | 49.8m (163.4 ft)                                                                                                                                                                                | 19.9m (65.3 ft) | 10m (32.8 ft) | 5m (16.4 ft) | Camera Dimensions                                                                                                                                                                                                     |  | 166.6mm×69.7mm×70.0mm (6.56"×2.75"×2.75")                |  |
|                            | 3.6 mm | 64m (210.0 ft)                                                                                                                                                                                  | 25.6m (84 ft)   | 12.8m (42 ft) | 6.4m (21 ft) | Net Weight                                                                                                                                                                                                            |  | 0.33 Kg (0.73 lb)                                        |  |
| Video                      |        |                                                                                                                                                                                                 |                 |               |              | Gross Weight                                                                                                                                                                                                          |  | 0.43 Kg (0.95 lb)                                        |  |
| Frame Rate                 |        | CVI:<br>PAL: 4M@25fps; 1080P@25fps;<br>NTSC: 4M@30fps; 1080P@30fps<br>AHD:<br>PAL: 4M@25fps;<br>NTSC: 4M@30fps<br>TVI:<br>PAL: 4M@25fps;<br>NTSC: 4M@30fps<br>CVBS:<br>PAL: 960H;<br>NTSC: 960H |                 |               |              |                                                                                                                                                                                                                       |  |                                                          |  |
| Resolution                 |        | 4M (2560 × 1440); 1080P (1920 × 1080); 960 H (960 × 576/960 × 480)                                                                                                                              |                 |               |              |                                                                                                                                                                                                                       |  |                                                          |  |
| Day/Night                  |        | Auto switch by ICR                                                                                                                                                                              |                 |               |              |                                                                                                                                                                                                                       |  |                                                          |  |
| BLC                        |        | BLC/HLC/DWDR                                                                                                                                                                                    |                 |               |              |                                                                                                                                                                                                                       |  |                                                          |  |

## Ordering Information

| Type        | Part Number                                    | Description                                                   |
|-------------|------------------------------------------------|---------------------------------------------------------------|
| 4MP Camera  | DH-HAC-HFW1400CMP 2.8mm                        | 4MP HDCVI IR Bullet Camera                                    |
|             | DH-HAC-HFW1400CMN 2.8mm                        |                                                               |
|             | DH-HAC-HFW1400CMP-A 2.8mm                      |                                                               |
|             | DH-HAC-HFW1400CMN-A 2.8mm                      |                                                               |
|             | DH-HAC-HFW1400CMP 3.6mm                        |                                                               |
|             | DH-HAC-HFW1400CMN 3.6mm                        |                                                               |
|             | DH-HAC-HFW1400CMP-A 3.6mm                      |                                                               |
|             | DH-HAC-HFW1400CMN-A 3.6mm                      |                                                               |
| Accessories | PFA134                                         | Junction Box                                                  |
|             | PFA130-E                                       | IP66 Junction Box (For use alone or with PFA152-E pole mount) |
|             | PFA152-E                                       | Pole Mount Bracket (For use with PFA130-E junction box)       |
|             | PFM800-4K                                      | Passive HDCVI Balun                                           |
|             | PFM321D                                        | 12V 1A Power Adapter                                          |
|             | PFM820<br>(Only 1080P and below are available) | UTC Controller                                                |
|             | PFM904                                         | Integrated Mount Tester                                       |

## Accessories

### Optional:



PFA134  
Junction box



PFA130-E  
IP66 Junction Box  
(For use alone or with  
PFA152-E pole mount)



PFA152-E  
Pole Mount Bracket  
(For use with PFB204W)



PFM800-4K  
Passive HDCVI Balun



PFM321D  
12V 1A Power Adapter



PFM820  
UTC Controller



PFM904  
Integrated Mount Tester

| Ceiling Mount | Junction Mount | Pole Mount(Vertical) |
|---------------|----------------|----------------------|
|               |                |                      |

## Dimensions (mm[inch])

