# DH-HAC-HFW1801TH-I8

4K HDCVI IR Bullet Camera



· 120dB True WDR, 3DNR

· Max. 4K resolution

· CVI/CVBS/AHD/TVI switchable

· 3.6mm fixed lens (6mm optional)

· Max. IR length 80m, Smart IR

· IP67, 12V±30%DC




## System Overview

Experience 4K video surveillance with the simplicity of reusing existing coaxial infrastructure. The 4K HDCVI camera adopts a powerful Dahua ISP and advanced 1/2.7" CMOS sensor, which provides superior high quality images. In addition, the camera features broadcastquality audio to provide enhanced supplementary evidence collection.Ultra-high definition and a complete set of features makes the 4K HDCVI camera an ideal choice for mid to large-size businesses and projects where both highly reliable surveillance and construction flexibility are demanded.

## 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 real-time transmission at long distance without any loss. It supports up to 700m transmission for 4K and 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.

### Multiple-formats

The camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats in the market. This feature makes the camera compatible with not only XVRs, but also most existing HD/SD DVRs.

*Use OSD menu to switch HDCVI to other video formats.

### Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology,vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

### Advanced 3DNR

3DNR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. Dahua's advanced 3DNR technology allows remarkable noise reduction with little impact to sharpness,especially under limited lighting condition. Besides, the advanced 3DNR effectively decreases the band width and saves the storage space.

### 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.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

### Camera

| | |
|---|---|
| Image Sensor | 1/2.7 inch CMOS |
| Effective Pixels | 3840 (H) × 2160 (V), 4K |
| Electronic Shutter Speed | PAL:1/3s–1/100000s<br>NTSC:1/4s–1/100000s |
| Minimum Illumination | 0.03Lux/F2.0, 30IRE, 0Lux IR on |
| IR Distance | Distance up to 80 m (262.46 ft) |
| IR On/Off Control | Auto; manual |
| IR LEDs Number | 2 |
| Pan/Tilt/Rotation Range | Pan: 0°–360°<br>Tilt: 0°–180°<br>Rotation: 0°–360° |

### Lens

| | |
|---|---|
| Lens Type | Fixed-focal |
| Mount Type | M12 |
| Focal Length | 3.6 mm; 6 mm |
| Max. Aperture | F2.0 |
| Angle of View | 3.6 mm: 104°×87°×47°<br>(diagonal × horizontal × vertical)<br>6 mm: 62.4° × 54.7° × 31.3°<br>(diagonal × horizontal × vertical) |
| Iris Type | Fixed iris |
| Min Photographic Distance | 1.8 m/3.6 m (5.91 ft/11.81 ft) |

| | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| DORI Distance | 3.6mm | 106.7 m (350.06 ft) | 42.7 m (140.09 ft) | 21.3 m (69.88 ft) | 10.7 m (35.10 ft) |
| | 6 mm | 160.0 m (525 ft) | 64.0 m (210 ft) | 32.0 m (105 ft) | 16.0 m (52 ft) |

### Video

| | |
|---|---|
| Video Frame Rate | CVI: 4K@15fps; 5M@20fps; 4M@25fps/30fps<br>CVBS: PAL/NTSC<br>AHD: 4K@15fps; 5M@20fps; 4M@25fps/30fps<br>TVI: 4K@15fps; 5M@20fps; 4M@25fps/30fps |
| Resolution | 4K (3840 × 2160); 5M (2592 × 1944); 4M (2560 × 1440); 960H (960 × 576/960 × 480) |
| Day/Night | Auto switch by ICR |
| BLC | BLC/HLC/WDR |
| WDR | 120dB/WDR |
| White Balance | Auto; manual |
| Gain Control | Auto; manual |
| Noise Reduction | 2D & 3D NR |
| Smart IR | Yes |
| Electronic Defog | Yes |
| Digital Zoom | 4X |
| Mirror | Off/On |
| Privacy Masking | Off/On (8 area, rectangle) |

### 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) |

### Port

| | |
|---|---|
| Video Port | Video output choices of CVI/TVI/AHD/CVBS by one BNC port |

### Power

| | |
|---|---|
| Power Supply | 12V±30% DC |
| Power Consumption | Max 5.9W (12V DC, IR on) |

### Environment

| | |
|---|---|
| Operating Temperature | -40°C to +60°C (-40°F to +140°F);<br><95% (non-condensation) |
| Storage Temperature | -40°C to +60°C (-40°F to +140°F);<br><95% (non-condensation) |
| Protection Grade | IP67 |

### Structure

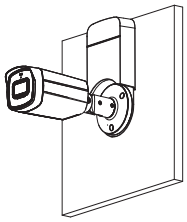
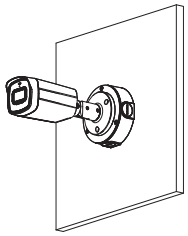
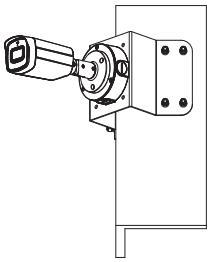
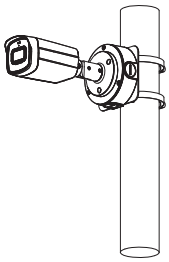
| | |
|---|---|
| Casing | Metal front face + plastic main body + metal bracket |
| Dimensions | 240.7 mm × 90.7 mm × 90.4 mm (9.48" × 3.57" × 3.56") |
| Net Weight | 410 g (0.90 lb) |
| Gross Weight | 616 g (1.36 lb) |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 4K Camera | DH-HAC-HFW1801THP-I8 3.6mm | 4K HDCVI IR Bullet Camera, PAL |
| | DH-HAC-HFW1801THP-I8 6mm | |
| | DH-HAC-HFW1801THN-I8 3.6mm | 4K HDCVI IR Bullet Camera, NTSC |
| | DH-HAC-HFW1801THN-I8 6mm | |
| Accessories | PFA130-E | Water-proof junction box (ceiling mount) |
| | PFA130-E + PFA152-E | Water-proof wall mount bracket + pole mount bracket (pole mount) |
| | PFA130-E + PFA151 | Water-proof wall mount bracket+corner bracket (corner mount) |
| | PFA12A | Plastic junction box |
| | DH-PFM320D-015 | 12V 1.5A DC power adapter |
| | DH-PFM321-EN | 12V 1A DC power adapter (for european countries) |
| | DH-PFM321-BS | 12V 1A DC power adapter (for UK) |
| | DH-PFM321-US | 12V 1A DC power adapter (for US) |
| | DH-PFM906 | Integrated mount tester |
| | DH-PFM800-4K | Passive video balun |



DH-PFM906
Integrated mount tester

| Wall Mount | Wall Mount |
|---|---|
| PFA12A | PFA130-E |
|  |  |
| **Corner Mount** | **Pole Mount** |
| PFA130-E + PFA151 | PFA130-E + PFA152-E |
|  |  |

## Accessories

### Optional:



PFA130-E
Water-proof junction box (ceiling mount)



PFA130-E + PFA152-E
Water-proof wall mount bracket + pole mount bracket (pole mount)



PFA130-E + PFA151
Water-proof wall mount bracket+corner bracket (corner mount)



PFA12A
Plastic junction box



DH-PFM320D-015
12V 1.5A DC power adapter



DH-PFM321-EN
12V 1A DC power adapter (for european countries)



DH-PFM321-BS
12V 1A DC power adapter (for UK)

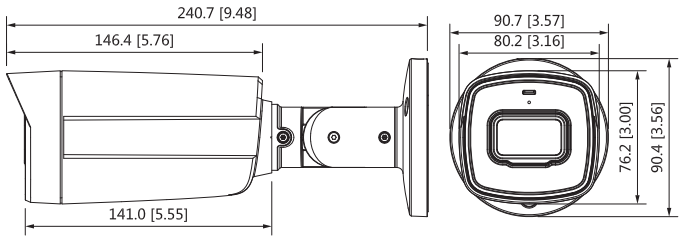


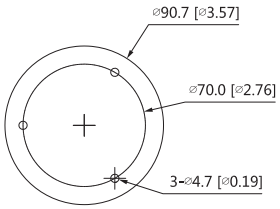
DH-PFM321-US
12V 1A DC power adapter (for US)



DH-PFM800-4K
Passive video balun

## Dimensions (mm[inch])




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