

# DH-HAC-HFW1231TLM-I6(-A)

2MP Starlight HDCVI IR Bullet Camera



- · Max 30 fps@1080P
- · Starlight, 130 dB true WDR, 3D NR
- $\cdot$  3.6 mm fixed lens (2.8 mm, 6 mm optional)
- · CVI/CVBS/AHD/TVI switchable
- · Super Adapt
- · Built-in mic (-A)
- · Max. IR length 60 m, Smart IR
- IP67, DC12V



#### System Overview

Lite Series is suitable for users who requires high quality monitoring products at a reasonable price. It is cost effective and offers high performance, which makes it an ideal choice for residential and small-medium business applications. This series offers an option of a wide range of technologies such as Full-color and Starlight, providing various solutions for different scenarios.

#### Functions

#### Starlight

With the adoption of large sized high performance sensor and large aperture lens, the camera is able to provide incomparable performance even under extreme lowlight environment. The starlight feature allows more details to be captured and accurate color to be recognized at night or in scenes with limited illumination.

#### **Broadcast-quality Audio**

Audio information is used as supplementary evidence in video surveillance applications. The HDCVI camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

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

#### Wide Dynamic Range

With advanced Wide Dynamic Range (WDR) technology, Dahua HDCVI camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

#### Super Adapt

Embedded with intelligent algorithm, for changing external environment, camera can automatically adjust parameters to present the optimal image, and it solves the trouble of configuration.

#### 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.

#### **Smart Illumination**

The camera is designed with 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.

#### 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 ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

## Lite Series | DH-HAC-HFW1231TLM-I6(-A)

| Technical Specification    |               |   |                     |                     |                    |
|----------------------------|---------------|---|---------------------|---------------------|--------------------|
| Camera                     |               |   |                     |                     |                    |
| Image Sensor               |               | 1/2.8" CMOS   |                     |                     |                    |
| Max. Resolution            |               | 1920 (H) × 1080 (V)   |                     |                     |                    |
| Pixel                      |               | 2MP   |                     |                     |                    |
| Scanning System            |               | Progressive   |                     |                     |                    |
| Electronic Shutter Speed   |               | PAL: 1/25 s-1/100,000 s<br>NTSC: 1/30 s-1/100/000 s   |                     |                     |                    |
| S/N Ratio                  |               | > 65 dB   |                     |                     |                    |
| Min. Illumination          |               | 0.002 Lux/F1.6, 30 IRE, 0 Lux IR on   |                     |                     |                    |
| Illumination Distance      |               | 60 m (196.9 ft)   |                     |                     |                    |
| Illuminator On/Off Control |               | Auto; manual  |                     |                     |                    |
| Illuminator Number         |               | 2 (IR light)  |                     |                     |                    |
| Pan/Tilt/Rotation Range    |               | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360°   |                     |                     |                    |
| Lens                       | Lens          |   |                     |                     |                    |
| Lens Type                  |               | Fixed lens  |                     |                     |                    |
| Mount Type                 |               | M12   |                     |                     |                    |
| Focal Length               |               | 2.8 mm; 3.6 mm; 6 mm  |                     |                     |                    |
| Max. Aperture              | Max. Aperture |   | F1.6                |                     |                    |
| Field of View              |               | 2.8 mm: H: 107°; V: 56°; D: 127°<br>3.6 mm: H: 86°; V: 46°; D: 101°<br>6 mm: H: 54°; V: 29°; D: 63° |                     |                     |                    |
| Iris Type                  |               | Fixed iris  |                     |                     |                    |
| Close Focus Distance       |               | 2.8 mm: 0.7 m (2.3 ft)<br>3.6 mm: 1.1 m (3.6 ft)<br>6 mm: 2.5 m (8.2 ft)                            |                     |                     |                    |
| DORI<br>Distance           | Lens          | Detect  | Observe             | Recognize           | Identify           |
|                            | 2.8 mm        | 43.9 m<br>(144 ft)  | 17.5 m<br>(57.4 ft) | 8.8 m<br>(28.9 ft)  | 4.4 m<br>(14.4 ft) |
|                            | 3.6 mm        | 53.7 m<br>(176.2 ft)  | 21.5 m<br>(70.5 ft) | 10.7 m<br>(35.1 ft) | 5.4 m<br>(17.7 ft) |

| White Balance         | Auto; manual  |  |
|-----------------------|---|--|
| Gain Control          | Auto; manual  |  |
| Noise Reduction       | 3D NR   |  |
| Smart IR              | Yes   |  |
| 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 Output          | Video output choices of CVI/TVI/AHD/CVBS by one<br>BNC port   |  |
| Audio Input           | One channel built-in mic (-A)   |  |
| Power                 |   |  |
| Power Supply          | 12V ±30% DC   |  |
| Power Consumption     | Max 5.1 W (12V DC, IR on)   |  |
| Environment           |   |  |
| Operating Temperature | -40°C to +60°C (-40°F to 140°F); < 95% (non-conden-<br>sation)  |  |
| Storage Temperature   | –40°C to +60°C (–40°F to 140°F); < 95% (non-conden-<br>sation)  |  |
| Structure             |   |  |
| Casing                | Metal front cover+plastic main body+metal bracket   |  |
| Camera Dimensions     | 198.4 mm × 80.2 mm × 76.2 mm (7.81" × 3.16" × 3.00")  |  |
| Net Weight            | 0.3 kg (0.66 lb)  |  |
| Gross Weight          | 0.45 kg (0.99 lb)   |  |
|                       |   |  |

| Ordering Information      |                             |   |  |  |  |
|---------------------------|-----------------------------|---|--|--|--|
| Туре                      | Part Number                 | Description   |  |  |  |
| 2M Camera                 | DH-HAC-<br>HFW1231TLMP-I6-A | 2MP Starlight HDCVI IR Bullet Camera, PAL               |  |  |  |
|                           | DH-HAC-<br>HFW1231TLMN-I6-A | 2MP Starlight HDCVI IR Bullet Camera, NTSC              |  |  |  |
|                           | DH-HAC-<br>HFW1231TLMP-I6   | 2MP Starlight HDCVI IR Bullet Camera, PAL               |  |  |  |
|                           | DH-HAC-<br>HFW1231TLMN-I6   | 2MP Starlight HDCVI IR Bullet Camera, NTSC              |  |  |  |
| Accessories<br>(Optional) | PFA134                      | Junction box  |  |  |  |
|                           | PFA130-E                    | IP66 Junction box                                       |  |  |  |
|                           | PFA152-E                    | Pole Mount Bracket (For use with PFA130-E junction box) |  |  |  |
|                           | PFM800-E                    | Passive HDCVI Balun                                     |  |  |  |
|                           | PFM321                      | 12V 1A Power Adapter                                    |  |  |  |
|                           | PFM904                      | Integrated Mount Tester                                 |  |  |  |

### Video

6 mm

|              | CVI:  |
|--------------|---|
|              | PAL: 1080P@25 fps; NTSC: 1080P@30 fps;          |
|              | AHD:  |
| Frame Rate   | PAL: 1080P@25 fps; NTSC: 1080P@30 fps;          |
| Fidille Nate | TVI:  |
|              | PAL: 1080P@25 fps; NTSC: 1080P@30 fps;          |
|              | CVBS:   |
|              | PAL: 960 × 576H; NTSC: 960 × 480H               |
| Resolution   | 1080P (1920 × 1080); 960H (960 × 576/960 × 480) |
| Day/Night    | Auto switch by ICR                              |
| BLC          | BLC/WDR/HLC                                     |
| WDR          | 130 dB  |

82.8 m

(271.7 ft)

33.1 m

(108.6 ft)

16.6 m

(54.5 ft)

8.3 m

(27.2 ft)

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#### Accessories

#### Optional:



PFA134 Junction Box



PFA130-E IP66 Junction box





PFM800-E Passive HDCVI Balun

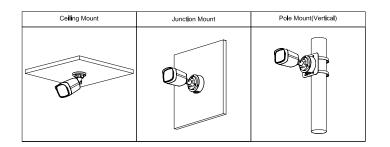
PFM321 12V 1A Power Adapter



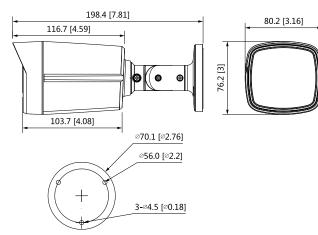
PFA152-E Pole Mount Bracket (For use with PFA130-E junction box)



PFM904 Integrated Mount Tester



#### Dimensions (mm [inch])



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