

# DH-HAC-HFW1500RL-IL-A

## 5MP Smart Dual Light HDCVI Fixed-focal Bullet Camera



### Series Overview

The Lite Series is a great choice for consumers looking for high quality monitoring products at a reasonable price. Its low cost and high performance make it ideal for residential areas and SMB solutions. This series is equipped with a wide range of technologies, such as full-color and starlight, providing various solutions for different scenarios.

### Functions

#### Smart Light+

Equipped with advanced LEDs and beam processing technology, the camera effectively reduces interference of stray light, ensuring concentrated illumination within the lens's field of view. This allows the camera to easily produce clear images that reveal the fine details of targets even in low light conditions.

#### Built-in Mic

Audio signal transmission over coaxial cables is supported by the HDCVI camera. It adopts a unique audio processing and transmission technology that restores source audio and eliminates noise, ensuring the quality and reliability of the audio information that is collected. This becomes important for video surveillance applications that use audio information as a type of supplementary evidence.

#### Smart Dual Light

With its smart dual light mechanism, the camera automatically turns on the white light when Perimeter Protection/SMD Plus function of AI XVR detects a target in the rule area to capture clear, vivid images. When the target leaves the rule area, the camera automatically switches over from the white light to the IR light to significantly reduce light pollution.

- \* The parameters and datasheets below can only be applied to 1500-IL-S3 series.
- \* In order to use the 5MP 16:9 and the Smart Dual Light HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000004.1.R.220323 or later version.
- Max. 25 fps@5MP (16:9 video output)
- Starlight, 3D NR
- Smart Dual Light.
- 30 m illumination distance.
- Built-in Mic.
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



### Super Adapt

With its intelligent algorithm, the camera automatically adjusts its parameters to provide optimal performance and vivid images.

### Advanced 3DNR

Dahua's advanced 3DNR technology reduces image noise with little to no impact on image sharpness, especially in poor lighting conditions. It detects the noise, and compares the sequential frames to effectively reduce the noise. It also makes efficient use of bandwidth, saving on storage space.

### Protection (IP67, Wide Voltage)

**IP67:** The camera passed a series of rigorous dust and immersion tests. Its enclosure is both dust-proof and waterproof, and can function normally while being immersed in 1 m deep water for up to 30 minutes.

**Wide voltage:** The camera has  $\pm 30\%$  input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

Technical Specification

|                            |                                                                                         |
|----------------------------|-----------------------------------------------------------------------------------------|
| Camera                     |                                                                                         |
| Image Sensor               | 5 MP CMOS                                                                               |
| Max. Resolution            | 2880 (H) × 1620 (V)                                                                     |
| Scanning System            | Progressive                                                                             |
| Electronic Shutter Speed   | PAL: 1/25 s–1/100,000 s<br>NTSC: 1/30 s–1/100,000 s                                     |
| Min. Illumination          | 0.05 lux@F1.6 (Color, 30 IRE)<br>0.005 lux@F1.6 (B/W, 30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio                  | >65 dB                                                                                  |
| Illumination Distance      | IR: 30 m (98.43 ft)<br>Warm Light: 30 m (98.43 ft)                                      |
| Illuminator On/Off Control | Auto                                                                                    |
| Illuminator Number         | 2 (Multi-core light)                                                                    |
| Angle Adjustment           | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360°                                       |

|                      |                                                                                 |
|----------------------|---------------------------------------------------------------------------------|
| Lens                 |                                                                                 |
| Lens Type            | Fixed-focal                                                                     |
| Auto Focus           | No                                                                              |
| Lens Mount           | M12                                                                             |
| Focal Length         | 2.8 mm; 3.6 mm                                                                  |
| Max. Aperture        | F1.6                                                                            |
| Field of View        | 2.8 mm: H: 113.3°; V: 62.1°; D: 134.3°<br>3.6 mm: H: 90.1°; V: 47.8°; D: 109.3° |
| Iris Control         | Fixed                                                                           |
| Close Focus Distance | 2.8 mm: 0.8 m (2.62 ft)<br>3.6 mm: 1.3 m (4.27 ft)                              |

|               |                                                                                                                                                                                                                                                                                                                                                                                 |                        |                        |                       |                      |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|-----------------------|----------------------|
| DORI Distance | Lens                                                                                                                                                                                                                                                                                                                                                                            | Detect                 | Observe                | Recognize             | Identify             |
|               | 2.8 mm                                                                                                                                                                                                                                                                                                                                                                          | 59.8 m<br>( 196.19 ft) | 23.9 m<br>( 78.41 ft)  | 12.0 m<br>( 39.37 ft) | 6.0 m<br>( 19.69 ft) |
|               | 3.6 mm                                                                                                                                                                                                                                                                                                                                                                          | 77 m<br>( 252.62 ft)   | 30.8 m<br>( 101.05 ft) | 15.4 m<br>( 50.52 ft) | 7.7 m<br>( 25.26 ft) |
|               | *DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool. |                        |                        |                       |                      |

|                  |                                                                                                                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video            |                                                                                                                                                                                                                                    |
| Video Frame Rate | CVI:<br>PAL: 5M@25 fps; 5M@12.5 fps; 4M@25 fps; 1080p@25 fps<br>NTSC: 5M@25 fps; 5M@20 fps; 5M@10 fps; 4M@30 fps; 1080p@30 fps<br>AHD:<br>PAL: 4M@25 fps<br>NTSC: 4M@30 fps<br>TVI:<br>PAL: 5M 16:9@20 fps<br>NTSC: 5M 16:9@20 fps |

|                   |                                                                                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------|
|                   | CVBS:<br>PAL: 960H<br>NTSC: 960H                                                                               |
| Resolution        | 5M (2880 × 1620); 4M (2560 × 1440); 1080p (1920 × 1080); 960H (960 × 576/960 × 480); TVI 5M 16:9 (2960 × 1665) |
| Day/Night         | Auto(ICR)/Color/B/W                                                                                            |
| BLC               | BLC; HLC; WDR                                                                                                  |
| WDR               | DWDR                                                                                                           |
| White Balance     | Auto;Area white balance                                                                                        |
| Gain Control      | Auto                                                                                                           |
| Noise Reduction   | 3D NR                                                                                                          |
| Motion Detection  | Yes                                                                                                            |
| Illumination Mode | Smart IR&WL; WL Mode; IR Mode                                                                                  |
| Mirror            | Yes                                                                                                            |
| Privacy Masking   | Off/On (8 areas, rectangle)                                                                                    |

|                |                                                    |
|----------------|----------------------------------------------------|
| Certification  |                                                    |
| Certifications | CE-LVD: EN 62368-1;<br>CE-EMC: EN 55032; EN 55035; |

|              |          |
|--------------|----------|
| Audio        |          |
| Built-in Mic | Yes      |
| Camera Audio | CVI; TVI |

|              |                                                                       |
|--------------|-----------------------------------------------------------------------|
| Port         |                                                                       |
| Video Output | Video output choices of CVI/TVI/AHD/CVBS by one BNC port (DIP Switch) |

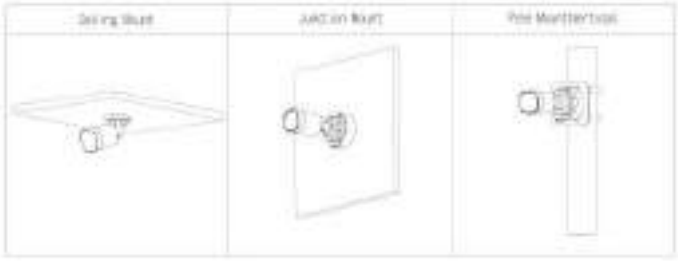
|                   |                             |
|-------------------|-----------------------------|
| Power             |                             |
| Power Supply      | 12 VDC (±30%)               |
| Power Consumption | Max 4.3 W (12 VDC, WLED on) |

|                       |                                      |
|-----------------------|--------------------------------------|
| Environment           |                                      |
| Operating Temperature | −40 °C to +60 °C (−40 °F to +140 °F) |
| Operating Humidity    | <95% (RH), non-condensing            |
| Storage Temperature   | −40 °C to +60 °C (−40 °F to +140 °F) |
| Storage Humidity      | <95% (RH), non-condensing            |
| Protection            | IP67                                 |
| Anti-corrosion Level  | Basic Protection                     |

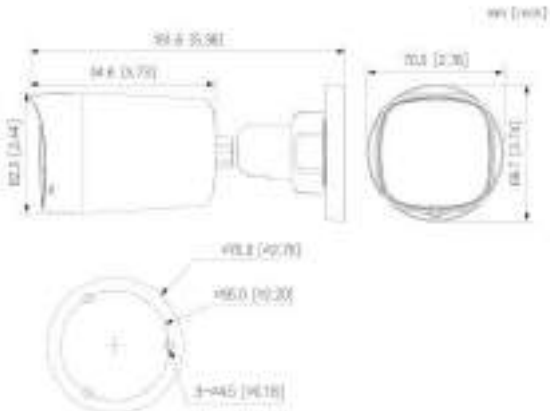
|                    |                                                                     |
|--------------------|---------------------------------------------------------------------|
| Structure          |                                                                     |
| Casing Material    | Plastic                                                             |
| Product Dimensions | 161.6 mm × 70.0 mm × 69.7 mm (6.36" × 2.76" × 2.74")<br>(L × W × H) |
| Net Weight         | 0.20 kg (0.44 lb)                                                   |
| Gross Weight       | 0.27 kg (0.60 lb)                                                   |
| Installation       | Wall mount; ceiling mount; vertical pole mount                      |

Ordering Information

| Type                   | Model                  | Description                                               |
|------------------------|------------------------|-----------------------------------------------------------|
| HDCVI CAMERA           | DH-HAC-HFW1500RLN-IL-A | SMP Smart Dual Light HDCVI Fixed-focal Bullet Camera,NTSC |
|                        | DH-HAC-HFW1500RLP-IL-A | SMP Smart Dual Light HDCVI Fixed-focal Bullet Camera,PAL  |
| Accessories (Optional) | G3416GW                | G3/4" Water Joint                                         |
|                        | DH-PFA130-E            | Water-proof Junction Box                                  |
|                        | DH-PFA151              | Corner Mount Bracket                                      |
|                        | DH-PFA152-E            | Pole Mount Bracket                                        |
|                        | DH-PFA134              | Junction Box                                              |
|                        | DH-PFM800-4K           | 1 Channel Passive HDCVI Balun                             |
|                        | DH-PFM321-EN           | DC12V1A power adapter                                     |
|                        | DH-PFM320D-EN          | DC12V2A power adapter                                     |
|                        | PFM904                 | Integrated Mount Tester                                   |



Dimensions (mm[inch])



Accessories

Optional:



DH-PFA130-E  
Water-proof Junction Box



DH-PFA134  
Junction Box



DH-PFA151  
Corner Mount Bracket



DH-PFA152-E  
Pole Mount Bracket



DH-PFM320D-EN  
DC12V2A power adapter



DH-PFM321-EN  
DC12V1A power adapter



DH-PFM800-4K  
1 Channel Passive HDCVI Balun



G3416GW  
G3/4" Water Joint



PFM904  
Integrated Mount Tester