# DH-HAC-HDW1500TRQ-A

## 5MP IR HDCVI Fixed-focal Eyeball Camera



* The parameters and datasheets below can only be applied to 1500-S3 series.
* In order to use the 5 MP 16:9 HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000001.0.R.200908 or later version.

- Max. 25 fps@5 MP (16:9 video output).
- Starlight, 3D NR.
- 25 m illumination distance.
- Quick-to-install eyeball saves installation time.
- Built-in MIC.
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP50, 12 VDC.




## 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

### Starlight

With its large image sensor and large aperture, the camera delivers high performance and quality, even in low-light conditions. The starlight feature allows the camera to capture highly detailed images in accurate color, recognizing targets even at night or in scenes with limited light.

### 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 IR Illumination

With its IR illumination, the camera provides optimal performance in low light conditions, ensuring uniformity in the brightness of B/W images. Through its smart IR technology, the camera also compensates for the distance of targets by adjusting the intensity of its IR LEDs, preventing overexposure of images as targets move closer to the camera.

### Super Adapt

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

### Easy Installation

HDCVI eyeball comes with a quick-to-install pedestal, which makes it easier to install than conventional eyeballs and reduces cost on time and labor.

### 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.

### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals (video, audio*, data and power) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms. HDCVI technology also supports PoC, which makes the camera easy and quick to install.

* Audio input is available for select HDCVI camera models.

## 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 | 0.01 lux@F1.6 (Color, 30 IRE)<br>0.001 lux@F1.6 (B/W, 30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio | >65 dB |
| Illumination Distance | IR: 25 m (82.02 ft) |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 2 (IR light) |
| Angle Adjustment | Pan: 0°–360°<br>Tilt: 0°–78°<br>Rotation: 0°–360° |

### Lens

| | |
|---|---|
| Lens Type | Fixed-focal |
| 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) |

| | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| DORI Distance | 2.8 mm | 59.8 m ( 196.19 ft) | 23.9 m ( 78.41 ft) | 12.0 m ( 39.37 ft) | 6.0 m ( 19.69 ft) |
| | 3.6 mm | 77 m ( 252.62 ft) | 30.8 m ( 101.05 ft) | 15.4 m ( 50.52 ft) | 7.7 m ( 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<br>CVBS:<br>PAL: 960H |
| Video Frame Rate | NTSC: 960H |
| Resolution | 5M (2880 × 1620); 4M (2560 × 1440); 1080p (1920 × 1080); 960 H (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/Manual |
| Noise Reduction | 3D NR |
| Illumination Mode | Smart IR |
| 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 |
| Pick-up Distance | 8 m (26.25 ft) |

### 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 2.9 W (12 VDC, IR 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 |
| Anti-corrosion Level | Basic Protection<br>*The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection. |

### Structure

| | |
|---|---|
| Casing Material | Plastic |
| Product Dimensions | Φ97.1 mm × 93.0 mm (Φ3.82" × 3.66") |
| Net Weight | 0.17 kg (0.37 lb) |
| Gross Weight | 0.23 kg (0.51 lb) |
| Installation | Wall mount; ceiling mount; vertical pole mount |

## Ordering Information

| Type | Model | Description |
|---|---|---|
| HDCVI CAMERA | DH-HAC-HDW1500TRQN-A | 5MP IR HDCVI Fixed-focal Eyeball Camera,NTSC |
| | DH-HAC-HDW1500TRQP-A | 5MP IR HDCVI Fixed-focal Eyeball Camera,PAL |
| Accessories (Optional) | DH-PFA106 | Mount Adapter |
| | DH-PFB220C | Ceiling Mount Bracket |
| | DH-PFA151 | Corner Mount Bracket |
| | DH-PFB305W | Wall Mount Bracket |
| | DH-PFA150 | Pole Mount Bracket |
| | DH-PFA156 | Pole Mount Bracket |
| | DH-PFB2204W | Wall Mount Bracket |
| | DH-PFA13G | Junction Box |
| | DH-PFM800-4K | 1 Channel Passive HDCVI Balun |
| | DH-PFM321-EN | DC12V1A power adapter |
| | DH-PFM325D-1210EN | DC12V 1A Power Adapter |
| | DH-PFM320D-EN | DC12V2A power adapter |
| | PFM904 | Integrated Mount Tester |

Optional:

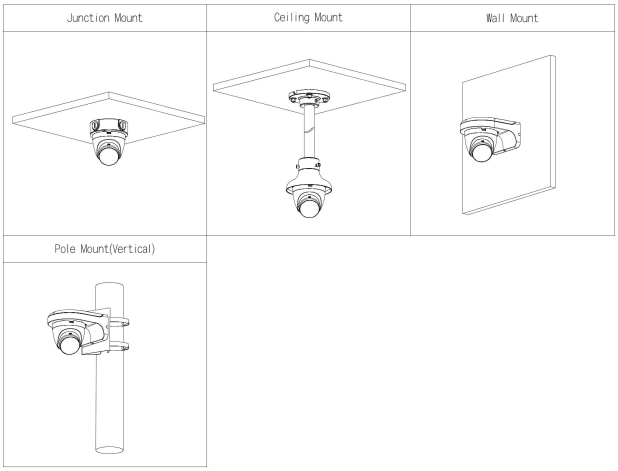
DH-PFM321-EN
DC12V1A power adapter

DH-PFM325D-1210EN
DC12V 1A Power Adapter

DH-PFM320D-EN
DC12V2A power adapter



PFM904
Integrated Mount Tester




## Accessories

Optional:



DH-PFA106
Mount Adapter



DH-PFB220C
Ceiling Mount Bracket



DH-PFA151
Corner Mount Bracket



DH-PFB305W
Wall Mount Bracket



DH-PFA150
Pole Mount Bracket



DH-PFA156
Pole Mount Bracket



DH-PFB2204W
Wall Mount Bracket



DH-PFA13G
Junction Box



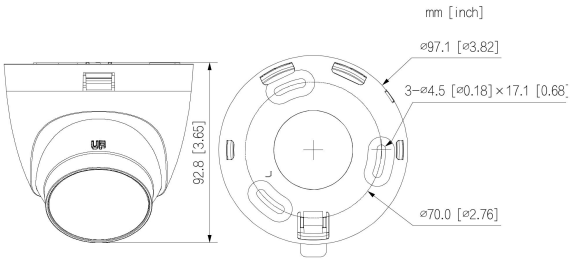
DH-PFM800-4K
1 Channel Passive HDCVI Balun







## Dimensions (mm[inch])




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