

# DH-HAC-HDW1239TLQ(-A)-LED

## 2MP Full-color HDCVI Quick-to-install Eyeball Camera



Full-color

\* The parameters and datasheets below can only be applied to 1239-S2 series.

- 24/7 color imaging, Max. 30 fps@1080p
- 20 m illumination distance
- Super Adapt, 130 dB true WDR, 3D NR
- Built-in mic (-A)
- Quick-to-install eyeball saves installation time
- 3.6 mm fixed lens (2.8 mm optional)
- CVI/CVBS/AHD/TVI switchable
- IP67, DC 12 V



### 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

#### Full-color

Full-color camera adopts large aperture lens and high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera provides 24/7 color monitoring that collects clear and vivid information, significantly increasing probability of gathering valid human, vehicle, and event evidence that can be used for further intelligent analysis.

#### 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.

#### 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.

#### Warm Supplemental lights

With warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total darkness. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposing of the objects in the image center.

#### 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.

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

#### Easy Installation

HDCVI quick-to-install eyeball adopts quick-to-install pedestal, which can achieve easier installation than conventional eyeball. Quick-to-install camera reduces time and labor costs.

### 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          | 0.001 Lux/F1.6, 30IRE, 0 Lux LED on                 |
| Illumination Distance      | 20 m (65.6 ft)                                      |
| Illuminator On/Off Control | Auto; manual  |
| Illuminator Number         | 1   |
| Pan/Tilt/Rotation Range    | Pan: 0°–360°<br>Tilt: 0°–78°<br>Rotation: 0°–360°   |

#### Lens

|                      |   |                   |                  |                  |                 |
|----------------------|---|-------------------|------------------|------------------|-----------------|
| Lens Type            | Fixed lens  |                   |                  |                  |                 |
| Mount Type           | M12   |                   |                  |                  |                 |
| Focal Length         | 2.8 mm; 3.6 mm  |                   |                  |                  |                 |
| 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° |                   |                  |                  |                 |
| 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)                    |                   |                  |                  |                 |
| DORI Distance        | Lens  | Detect            | Observe          | Recognize        | Identify        |
|                      | 2.8 mm  | 43.9 m (144 ft)   | 17.5 m (57.4 ft) | 8.8 m (28.9 ft)  | 4.4 m (14.4 ft) |
|                      | 3.6 mm  | 53.7 m (176.2 ft) | 21.5 m (70.5 ft) | 10.7 m (35.1 ft) | 5.4 m (17.7 ft) |

#### Video

|               |  |
|---------------|--|
| Frame Rate    | CVI:<br>PAL: 1080p@25 fps;<br>NTSC: 1080p@30 fps;<br>AHD:<br>PAL: 1080p@25 fps;<br>NTSC: 1080p@30 fps;<br>TVI:<br>PAL: 1080p@25 fps;<br>NTSC: 1080p@30 fps;<br>CVBS:<br>PAL: 960 × 576H;<br>NTSC: 960 × 480H |
| Resolution    | 1080p (1920 × 1080); 960H (960 × 576/960 × 480)  |
| BLC           | BLC/WDR/HLC  |
| WDR           | 130 dB   |
| White Balance | Auto; Area WB  |

|                 |                            |
|-----------------|----------------------------|
| Gain Control    | Auto; manual               |
| Noise Reduction | 3D NR                      |
| Smart Light     | 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 BNC port |
| Audio Input  | One channel built-in mic (-A)                            |

#### Power

|                   |                             |
|-------------------|-----------------------------|
| Power Supply      | 12 V ±30% DC                |
| Power Consumption | Max 3.3 W (12 V DC, LED on) |

#### Environment

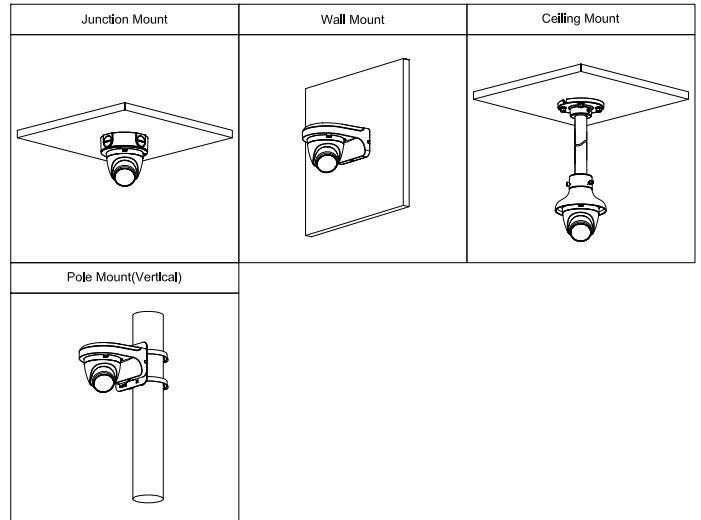
|                       |   |
|-----------------------|---|
| Operating Temperature | -40 °C to +60 °C (-40 °F to 140 °F); < 95% (non-condensation) |
| Storage Temperature   | -40 °C to +60 °C (-40 °F to 140 °F); < 95% (non-condensation) |
| Protection Grade      | IP67  |

#### Structure

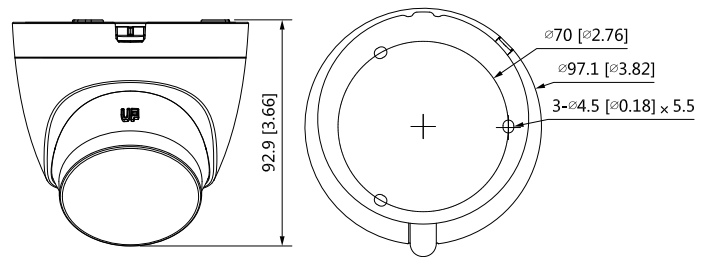
|                   |   |
|-------------------|---|
| Casing            | Metal inner core + plastic cover + plastic pedestal |
| Camera Dimensions | φ97.1 mm × 92.9 mm (φ3.82" × 3.66")                 |
| Net Weight        | 0.22 kg (0.49 lb)                                   |
| Gross Weight      | 0.28 kg (0.62 lb)                                   |

**Ordering Information**

| Type                   | Model                    | Description   |
|------------------------|--------------------------|---|
| 2MP Camera             | DH-HAC-HDW1239TLQP-LED   | 2MP Full-color HDCVI Quick-to-install Eyeball Camera, PAL           |
|                        | DH-HAC-HDW1239TLQN-LED   | 2MP Full-color HDCVI Quick-to-install Eyeball Camera, NTSC          |
|                        | DH-HAC-HDW1239TLQP-A-LED | 2MP Full-color HDCVI Quick-to-install Eyeball Camera, PAL           |
|                        | DH-HAC-HDW1239TLQN-A-LED | 2MP Full-color HDCVI Quick-to-install Eyeball Camera, NTSC          |
| Accessories (Optional) | PFA13G                   | Junction Box  |
|                        | PFA130-E                 | Water-proof Junction Box  |
|                        | PFB205W                  | Wall Mount Bracket  |
|                        | PFA109+PFB220C           | Mount Adapter + Ceiling Mount Bracket of Mini Dome & Eyeball Camera |
|                        | PFA152-E+PFB205W         | Pole Mount Bracket + Wall Mount Bracket                             |
|                        | PFM800-E                 | Passive HDCVI Balun   |
|                        | PFM321D                  | 12 V 1A Power Adapter   |
|                        | PFM820                   | UTC Controller  |
|                        | PFM904                   | Integrated Mount Tester   |



**Dimensions (mm [inch])**



**Accessories**

**Optional:**



PFA13G  
Junction box



PFA130-E  
Water-proof Junction Box



PFB205W  
Wall Mount Bracket



PFA109+PFB220C  
Mount Adapter + Ceiling Mount Bracket of Mini Dome & Eyeball Camera



PFA152-E+PFB205W  
Pole Mount Bracket + Wall Mount Bracket



PFM800-E  
Passive HDCVI Balun



PFM321D  
12V 1A Power Adapter



PFM820  
UTC Controller



PFM904  
Integrated Mount Tester