

# DH-HAC-HDW1231TMQ-A

2MP Starlight HDCVI IR Quick-to-install Eyeball Camera



- · Max 30 fps@1080p
- · Starlight, 130 dB true WDR, 3D NR
- · 3.6 mm fixed lens (2.8 mm, 6 mm optional)
- · CVI/CVBS/AHD/TVI switchable
- · Super Adapt
- · Built-in mic
- · Max. IR length 60 m, Smart IR
- · IP67, DC 12 V
- · Quick-to-install saves installation time















# 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**

#### Starligh

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.

#### **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.

#### 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-HDW1231TMQ-A

PAL: 1080p@25 fps; NTSC: 1080p@30 fps;

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1080p (1920 × 1080); 960H (960 × 576/960 × 480)

CVBS: PAL: 960 × 576H; NTSC: 960 × 480H

Frame Rate

Resolution

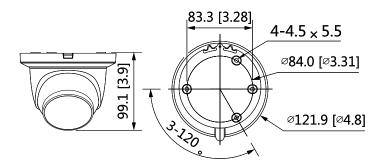
| Technical Specification    |             |   |                                    |                     |                    | Day/Night             | Auto switch by ICR   |
|----------------------------|-------------|---|------------------------------------|---------------------|--------------------|-----------------------|--|
| Camera                     |             |   |                                    |                     |                    | BLC                   | BLC/WDR/HLC  |
| Image Sensor               |             | 1/2.8" CMOS   |                                    |                     |                    | WDR                   | 130 dB   |
| Max. Resoluti              | ion         | 1920 (H) × 1080 (V)                                 |                                    |                     |                    | White Balance         | Auto; Area WB  |
| Pixel                      |             | 2MP   |                                    |                     |                    | Gain Control          | Auto; manual   |
| Scanning Syst              | tem         | Progressive   |                                    |                     |                    | Noise Reduction       | 3D NR  |
| Electronic Sh              | utter Speed | PAL: 1/25 s-1/100,000 s<br>NTSC: 1/30 s-1/100,000 s |                                    |                     |                    | Smart IR              | Yes  |
| S/N Ratio                  |             | > 65 dB   |                                    |                     |                    | Mirror                | Off/On   |
| Min. Illumina              | tion        | 0.002 Lux/F1.6, 30 IRE, 0 Lux IR on                 |                                    |                     |                    | Privacy Masking       | Off/On (8 area, rectangle)   |
| Illumination Distance      |             | 60 m (196.9 ft)                                     |                                    |                     |                    | Certifications        |  |
| Illuminator On/Off Control |             | Auto; manual  |                                    |                     |                    | Certifications        | CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)    |
| Illuminator Number         |             | 2 (IR light)  |                                    |                     |                    | Port                  | OE (0100930-1+CAN) C3A C22.2 NO.00930-1)   |
| Pan/Tilt/Rotation Range    |             | Pan: 0°–360°  Tilt: 0°–78°  Rotation: 0°–360°       |                                    |                     |                    | Video Output          | Video output choices of CVI/TVI/AHD/CVBS by one BNC port   |
| Lens                       |             |   |                                    |                     |                    | Audio Input           | One channel built-in mic   |
| Lens Type                  |             | Fixed lens  |                                    |                     |                    | Power                 |  |
| Mount Type                 |             | M12   |                                    |                     |                    | Power Supply          | 12 V ±30% DC   |
| Focal Length               |             | 2.8 mm; 3.6 mm; 6 mm                                |                                    |                     |                    | Power Consumption     | Max 5.1 W (12 V DC, IR on)   |
| Max. Aperture              |             | F1.6  |                                    |                     |                    | Environment           |  |
| Field of View              |             | 3.6 mm: H:86  | 07°; V:56°;D:12<br>5°; V:46°;D:101 |                     |                    | Operating Temperature | $-40~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ ( $-40~^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$ ); < 95% (noncondensation) |
| Iris Type                  |             | 6mm:H:54°; \ Fixed iris                             | √:29°;D:63°"                       |                     |                    | Storage Temperature   | $-40~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (–40 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$ ); < 95% (non-condensation) |
| Close Focus Distance       |             | 2.8 mm: 0.7 r                                       |                                    |                     |                    | Protection Grade      | IP67   |
|                            |             | 3.6 mm: 1.1 m (3.6 ft)<br>6 mm: 2.5 m (8.2 ft)      |                                    |                     |                    | Structure             |  |
| DORI<br>Distance           | Lens        | Detect  | Observe                            | Recognize           | Identify           | Casing                | Metal dome+metal cover+plastic decorative ring   |
|                            | 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) | Camera Dimensions     | Φ121.9 mm × 99.1 mm (Φ4.80" × 3.90")   |
|                            | 3.6 mm      | 53.7 m  | 21.5 m                             | 10.7 m              | 5.4 m              | Net Weight            | 0.42 kg (0.93 lb)  |
|                            | 3.0 111111  | (176.2 ft)  | (70.5 ft)                          | (35.1 ft)           | (17.7 ft)          | Gross Weight          | 0.62 kg (1.37 lb)  |
|                            | 6 mm        | 82.8 m<br>(271.7 ft)                                | 33.1 m<br>(108.6 ft)               | 16.6 m<br>(54.5 ft) | 8.3 m<br>(27.2 ft) |                       |  |
| Video                      |             |   |                                    |                     |                    |                       |  |

# Lite Series | DH-HAC-HDW1231TMQ-A

| Ordering Information |                          |  |  |  |  |  |  |  |
|----------------------|--------------------------|--|--|--|--|--|--|--|
| Туре                 | Model                    | Description  |  |  |  |  |  |  |
| 2M Camera            | DH-HAC-<br>HDW1231TMQP-A | 2MP Starlight HDCVI IR Quick-to-install Eyeball Camera, PAL  |  |  |  |  |  |  |
|                      | DH-HAC-<br>HDW1231TMQN-A | 2MP Starlight HDCVI IR Quick-to-install Eyeball Camera, NTSC |  |  |  |  |  |  |
|                      | PFA137                   | Junction box   |  |  |  |  |  |  |
|                      | PFA130-E                 | IP66 Junction box  |  |  |  |  |  |  |
|                      | PFB205W                  | Wall Mount Bracket (For use alone or with PFA152-E)          |  |  |  |  |  |  |
| Accessories          | PFA152-E                 | Pole Mount Bracket (For use with PFB205W)                    |  |  |  |  |  |  |
| (Optional)           | PFM800-E                 | Passive HDCVI Balun  |  |  |  |  |  |  |
|                      | PFM321                   | 12 V 1A Power Adapter  |  |  |  |  |  |  |
|                      | PFM820                   | UTC Controller   |  |  |  |  |  |  |
|                      | PFM904                   | Integrated Mount Tester                                      |  |  |  |  |  |  |

| Junction Mount | Wa <b>il</b> Mount | Pole Mount(Vertical) |
|----------------|--------------------|----------------------|
|                |                    |                      |

## Dimensions (mm[inch])



### Accessories

# Optional:



PFA137 Junction box



PFA130-E IP66 Junction box



PFB205W Wall Mount Bracket (For use alone or with PFA152-E)



PFA152-E Pole Mount Bracket (For use with PFB205W)



PFM800-E Passive HDCVI Balun



PFM321 12V 1A Power Adapter



PFM820 UTC Controller



PFM904 Integrated Mount Tester