

DH-HAC-HDBW1239RA-IL-A

2MP Smart Dual Light HDCVI Vandal-proof Dome 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 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.

Wide Dynamic Range

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

Broadcast-quality Audio

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.

Super Adapt

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

- * The parameters and datasheets below can only be applied to 1239-IL-S3 series.
- * In order to use the Smart Dual Light HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000004.1.R.220323 or later version.

- Smart Dual Light
- Max. 30 fps@1080p
- 40 m illumination distance
- Super Adapt, 130 dB true WDR, 3D NR
- Built-in Mic
- 3.6 mm fixed lens (2.8 mm optional)
- CVI/CVBS/AHD/TVI switchable
- IP67, IK10, 12 VDC



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, IK10, Wide Voltage)

IP67: The camera passed a series of rigorous 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.

IK10: The enclosure can withstand up to 5 punches from a 5 kg hammer falling from a height of 40 cm (impact energy is 20 J).

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.

Long Distance Transmission

HDCVI technology provides long distance transmission in real time without transmission loss. It supports transmission distances up to 700 m for 2-MP/5-MP/8-MP HD videos through coaxial cables, and up to 300 m through UTP cables. The results were obtained and verified through rigorous testing in Dahua's test laboratory.

Technical Specification

Camera

| | |
|----------------------------|---|
| Image Sensor | 2 MP CMOS |
| Max. Resolution | 1920 (H) × 1080 (V) |
| Scanning System | Progressive |
| Electronic Shutter Speed | PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s |
| Min. Illumination | 0.001 lux@F1.0 (Color, 30 IRE) 0.0001 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on) |
| S/N Ratio | >65 dB |
| Illumination Distance | 40 m (131.23 ft) |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 3 (Multi-core light) |
| Angle Adjustment | Pan: 0°–355° Tilt: 0°–80° Rotation: 0°–355° |

Lens

| | |
|----------------------|--|
| Lens Type | Fixed-focal |
| Lens Mount | M12 |
| Focal Length | 3.6 mm; 2.8 mm |
| Max. Aperture | F1.0 |
| Field of View | 2.8 mm: H: 101.8°; V: 54.4°; D: 122.1° 3.6 mm: H: 84.2°; V: 45.3°; D: 98.9° |
| Iris Control | Fixed |
| Close Focus Distance | 2.8 mm: 1.1 m (3.61 ft) 3.6 mm: 1.6 m (5.25 ft) |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---------------|--------|-----------------------|----------------------|----------------------|---------------------|
| | 2.8 mm | 45.6 m (149.61 ft) | 18.2 m (59.71 ft) | 9.1 m (29.86 ft) | 4.6 m (15.09 ft) |
| | 3.6 mm | 55.6 m (182.41 ft) | 22.2 m (72.83 ft) | 11.1 m (36.42 ft) | 5.6 m (18.37 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: PAL: 1080p@25 fps; NTSC: 1080p@30 fps; AHD: PAL: 1080p@25 fps; NTSC: 1080p@30 fps; TVI: PAL: 1080p@25 fps; NTSC: 1080p@30 fps; CVBS: PAL: 960H; NTSC: 960H |
| Resolution | 1080p (1920 × 1080); 960H (960 × 576/960 × 480) |
| Day/Night | Auto(ICR)/Color/B/W |
| BLC | BLC; HLC; WDR |
| WDR | 130 dB |
| White Balance | Auto;Area white balance |
| Gain Control | Auto/Manual |

| | |
|-------------------|-------------------------------|
| 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; CE-EMC: EN 55032; EN 55035; |
|----------------|--|

Audio

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|--------------|-----|
| Built-in Mic | Yes |
|--------------|-----|

Port

| | |
|--------------|--|
| Video Output | Video output choices of CVI/TVI/AHD/CVBS by one BNC port |
|--------------|--|

Power

| | |
|-------------------|----------------------------|
| Power Supply | 12 VDC ± 30% |
| Power Consumption | Max 5.6 W (12 VDC, LED on) |

Environment

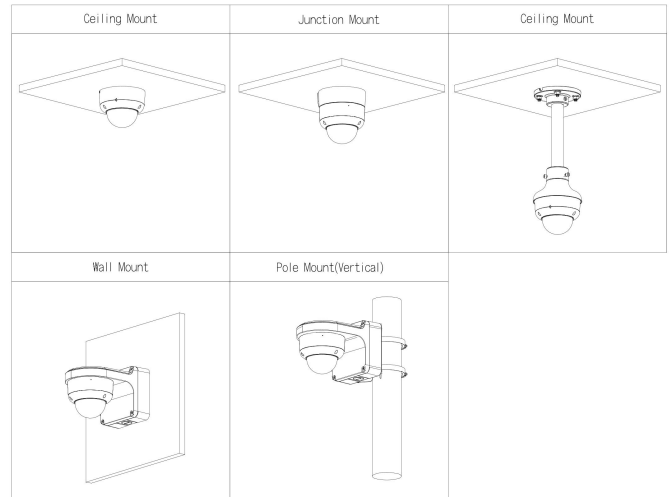
| | |
|-----------------------|--------------------------------------|
| Operating Temperature | –40 °C to +60 °C (–40 °F to +140 °F) |
| Operating Humidity | <95% (RH), non-condensing |
| Storage Temperature | –40 °C to +60 °C (–40 °F to +140 °F) |
| Storage Humidity | <95% (RH), non-condensing |
| Protection | IP67;IK10 |
| Anti-corrosion Level | Basic Protection |

Structure

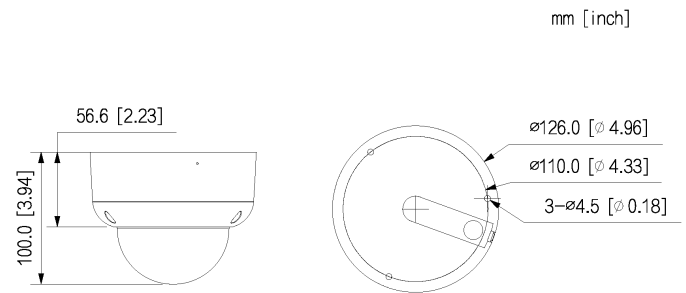
| | |
|--------------------|--|
| Casing Material | Metal |
| Product Dimensions | Φ126.0 mm × 100.0 mm (Φ4.96" × 3.94") |
| Net Weight | 0.59 kg (1.30 lb) |
| Gross Weight | 0.76 kg (1.68 lb) |
| Installation | Wall mount; ceiling mount; vertical pole mount |

Ordering Information

| Type | Model | Description |
|------------------------|-------------------------|---|
| HDCVI CAMERA | DH-HAC-HDBW1239RAP-IL-A | 2MP Smart Dual Light HDCVI Vandal-proof Dome Camera, PAL |
| | DH-HAC-HDBW1239RAN-IL-A | 2MP Smart Dual Light HDCVI Vandal-proof Dome Camera, NTSC |
| Accessories (Optional) | DH-PFB220C | Ceiling Mount Bracket |
| | DH-PFA109 | Mount adapter |
| | DH-PFA151 | Corner mount bracket |
| | DH-PFB305W | Wall mount bracket |
| | DH-PFA150 | Pole Mount Bracket |
| | DH-PFA156 | Pole Mount Bracket |
| | DH-PFB206W | Wall Mount Bracket |
| | DH-PFA197R | Junction box |
| | DH-PFB5204C | In-ceiling Mount Bracket |
| | DH-PFM800-E | 1 Channel Passive HDCVI Balun |
| | DH-PFM321-EN | DC12V1A power adapter |
| | DH-PFM321D-EN | DC12V 1A power adapter |
| | DH-PFM320D-EN | DC12V2A power adapter |
| | PFM904 | Integrated Mount Tester |



Dimensions (mm[inch])



Accessories

Optional:

