

# DH-HAC-HDBW1231EA-A

## 2MP Starlight HDCVI IR Dome Camera



- Max 30 fps@1080p
- Starlight, 130 dB true WDR, 3D NR
- 3.6 mm fixed lens (2.8 mm optional)
- CVI/CVBS/AHD/TVI switchable
- Super Adapt
- Built-in mic
- Max. IR length 40m, Smart IR
- IP67, DC 12 V, IK10



### 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

#### Starlight

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.

#### 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.

#### Protection (IP67, IK10, 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.

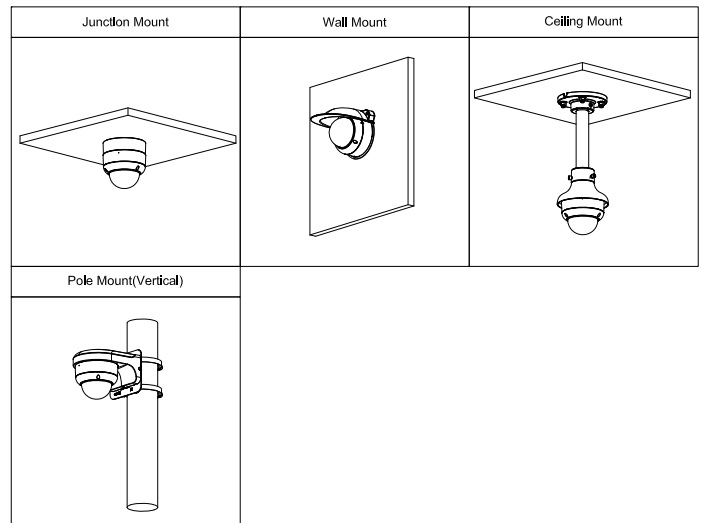
IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

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.

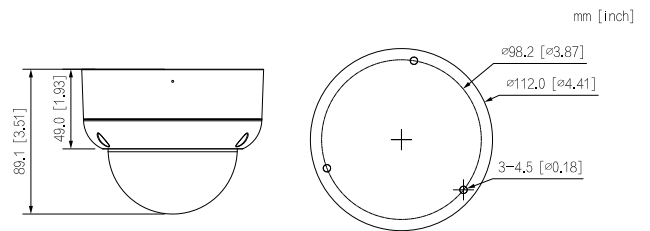
Technical Specification					
Camera					
Image Sensor	1/2.8" CMOS				
Max. Resolution	1920 (H) × 1080 (V)				
Pixel	2MP				
Scanning System	Progressive				
Electronic Shutter Speed	PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s				
S/N Ratio	> 65 dB				
Min. Illumination	0.002 Lux/F1.6, 30 IRE, 0 Lux IR on				
Illumination Distance	40 m (131.2 ft)				
Illuminator On/Off Control	Auto; manual				
Illuminator Number	3 (IR light)				
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–80° Rotation: 0°–355°				
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° 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) 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: 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: 960 × 576H; NTSC: 960 × 480H				
Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)				
Day/Night	Auto switch by ICR				
BLC	BLC/WDR/HLC				
WDR	130 dB				
White Balance	Auto; Area WB				
Gain Control	Auto; manual				
Noise Reduction	3D NR				
Smart IR	Yes				
Mirror	Off/On				
Privacy Masking	Off/On (8 area, rectangle)				
Certifications					
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)				
Port					
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port				
Audio Input	One channel built-in mic				
Power					
Power Supply	12 V ±30% DC				
Power Consumption	Max 3.07 W (12 V DC, IR 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, IK10				
Structure					
Casing	Plastic dome cover+mental upper casing+mental pedestal				
Camera Dimensions	Φ112.0 mm × 89.1 mm (Φ4.41" × 3.51")				
Net Weight	0.44 Kg (0.97 lb)				
Gross Weight	0.63 Kg (1.39lb)				

**Ordering Information**

Type	Model	Description
2M Camera	DH-HAC-HDBW1231EAP-A	2MP Starlight HDCVI IR Dome Camera, PAL
	DH-HAC-HDBW1231EAN-A	2MP Starlight HDCVI IR Dome Camera, NTSC
Accessories (Optional)	PFA136	Junction box
	PFA123	IP66 Junction box
	PFA106	Mount Adapter (For use with PFB220C)
	PFB220C	Ceiling Mount Bracket (For use with PFA106)
	PFB203W	Wall Mount Bracket (For use alone or with PFA152-E)
	PFA152-E	Pole Mount Bracket (For use with PFB203 W)
	PFM800-E	Passive HDCVI Balun
	PFM321	12 V 1 A Power Adapter
	PFM820	UTC Controller
	PFM904	Integrated Mount Tester



**Dimensions (mm[inch])**



**Accessories**

**Optional:**



PFA136  
Junction box



PFA123  
IP66 Junction box



PFA106  
Mount Adapter  
(For use with PFB220C)



PFB220C  
Ceiling Mount Bracket  
(For use with PFA106)



PFB203W  
Wall Mount Bracket  
(For use alone or with PFA152-E)



PFA152-E  
Pole Mount Bracket  
(For use with PFB203W)



PFM800-E  
Passive HDCVI Balun



PFM321  
12V 1A Power Adapter



PFM820  
UTC Controller



PFM904  
Integrated Mount Tester