DH-HAC-HDW1239TLQ-IL-A

2MP Smart Dual Light HDCVI Fixed-focal Eyeball Camera

* The parameters and datasheets below can only be applied to1239-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
- Smart Light+
- 30 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, 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

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.

Smart Light+

Equipped with advanced LEDs and beam processing technology, the camera effectively reduces interference of stray light, ensuring concentrated illumination within the lens's field of view. This allows the camera to easily produce clear images that reveal the fine details of targets even in low light conditions.

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.

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: The camera passed a series of rigorous dust and immersion 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.

Wide voltage: The camera has ±30% input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

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	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (Multi-core light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

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

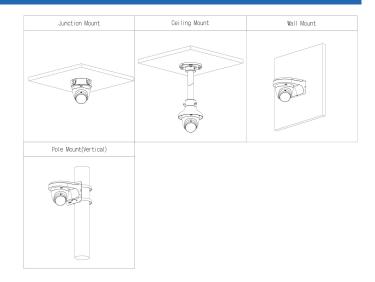|	
Video Frame Rate	CVI: PAL: 1080p@25 fps; NTSC: 1080p@30 fps; AHD: PAL: 1080p@25 fps; NTSC: 1080p@30 fps; TVI: PAL: 1080p@25 fps; NTSC: 1080p@30 fps; CVBS: PAL: 960H; NTSC: 960H
Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; HLC; WDR
WDR	130 dB
White 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

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 3.96 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
Anti-corrosion Level	Basic Protection

Structure

Casing Material	Dome (metal + plastic) + plastic enclosure
Product Dimensions	Φ97.1 mm × 94.2 mm (Φ3.82" × 3.71")
Net Weight	0.22 kg (0.49 lb)
Gross Weight	0.31 kg (0.68 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
HDCVI CAMERA	DH-HAC-HDW1239TLQP-IL-A	2MP Smart Dual Light HDCVI Fixed-focal Eyeball Camera, PAL
	DH-HAC-HDW1239TLQN-IL-A	2MP Smart Dual Light HDCVI Fixed-focal Eyeball Camera, NTSC
Accessories (Optional)	DH-PFB220C	Ceiling Mount Bracket
	DH-PFA106	Mount Adapter
	DH-PFA151	Corner mount bracket
	DH-PFB305W	Wall mount bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFB205W-E	Wall Mount Bracket
	DH-PFA152-E	Pole Mount Bracket
	DH-PFA13G	Junction box
	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

Accessories

Optional:

DH-PFB220C	DH-PFA106	DH-PFA151
Ceiling Mount Bracket	Mount Adapter	Corner mount bracket
DH-PFB305W	DH-PFA150	DH-PFB205W-E
Wall mount bracket	Pole Mount Bracket	Wall Mount Bracket
DH-PFA152-E	DH-PFA13G	DH-PFM800-E
Pole Mount Bracket	Junction box	1 Channel Passive HDCVI Balun
DH-PFM321-EN	DH-PFM321D-EN	DH-PFM320D-EN
DC12V1A power adapter	DC12V 1A power adapter	DC12V2A power adapter
PFM904		
Integrated Mount Tester		

Junction Mount	Ceiling Mount	Wall Mount

Pole Mount(Vertical)

Dimensions (mm[inch])

mm [inch]

94.2 [3.71]

∅97.1 [∅3.82]

3-∅4.5 [∅0.18]×17.1 [0.68]

∅70.0 [∅2.76]