DH-HAC-HDW2241M-E2

2MP Starlight HDCVI IR Dual-lens Camera

HDCVI

- Starlight, 120dB true WDR, 3DNR
- One-way power supply for dual-way video outputs
- Broadcast-quality audio
- HD/SD output switchable
- Single view: max. 30fps@1080P
- 3.6mm fixed lens (2.8mm, 6mm optional)
- Max. IR length 30m, Smart IR
- IP67, DC12V±30%

System Overview

Experience 1080P full HD video and the simplicity of reusing existing coaxial infrastructure with HDCVI, the Starlight HDCVI camera with 120dB true WDR presents a high quality image with rich details even in extreme low-light conditions. It offers various motorized/fixed lens models with a multi-language OSD and HD/SD switchable output. Its superior image performance and starlight feature as well as the dual-lens deign make the camera an ideal choice for some special application scenarios such as corridor turn, hallway, wall corner, entrance, etc.

Functions

Excellent Versatility

Designed with junction box, the camera is in a friendly installation mode to shorten the mounting process and save accessories and labor cost. Besides, the particular structure makes the camera suitable for the applications of various scenes.

Dual-lens Feature

The camera equipped with double lens adopts one-way power supply for dual-way video outputs to save cost and time. Dual-eyeball design makes it possible to monitor two directions via one camera, achieving wider horizon.

Starlight

With the adoption of high performance sensor, 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

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 800m for 1080P Full HD video via coaxial cable, and up to 300m via UTP cable.*

*Actual results verified by real-scene testing in Dahua's test laboratory.

Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments.

With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments.

Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Technical Specification

Camera

Image Sensor	2×1/2.8" CMOS
Effective Pixels	Single view: 1920(H)×1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/4s~1/100000s NTSC: 1/3s~1/100000s
Minimum Illumination	0.004Lux/F1.6, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 30m (98feet)
IR On/Off Control	Auto / Manual
IR LEDs	2×12

Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	3.6mm (2.8mm, 6mm Optional)
Max Aperture	F1.6
Angle of View	Single view(H): 86.9° (110°/52.8°)
Focus Control	N/A
Close Focus Distance	1200mm (500mm, 2200mm) 47.2'' (19.7"/ 86.6")

DORI Distance

*Note: The DORI distance is a “general proximity” of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

	DORI Definition	Distance
Detect	25px/m (8px/ft)	2.8mm: 39m(128ft) 3.6mm: 55m(180ft) 6mm:83m(272ft)
Observe	63px/m (19px/ft)	2.8mm: 15m(49ft) 3.6mm:22m(27ft) 6mm:33m(108ft)
Recognize	125px/m (38px/ft)	2.8mm: 8m(26ft) 3.6mm: 11m(36ft) 6mm: 17m(56ft)
Identify	250px/m (76px/ft)	2.8mm: 4m(13ft) 3.6mm: 6m(20ft) 6mm: 8m(26ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°

Video

Resolution	Single view: 1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P
Video Output	2-channel BNC high definition video output / CVBS video output (DIP switch)
Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / WDR
WDR	120dB
Gain Control	AGC
Noise Reduction	2D / 3D
White Balance	Auto / Manual
Smart IR	Auto / Manual

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)

Interface

Audio Interface	1

Eelectrical

Power Supply	1×12V DC ±30%
Power Consumption	Max. 9.2W (12V DC, IR on)

Environmental

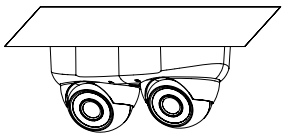
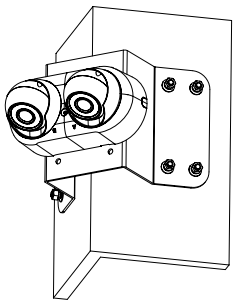
Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67

Construction

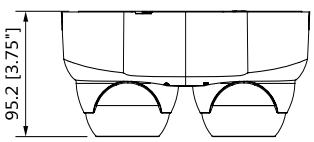
Casing	Aluminium
Dimensions	201mm×101mm×95mm (7.91"×3.98"×3.74")
Net Weight	0.68kg (1.50lb)
Gross Weight	1.05kg (2.31lb)

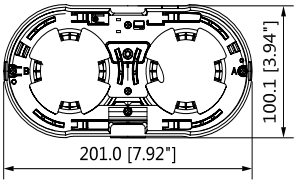
Ordering Information

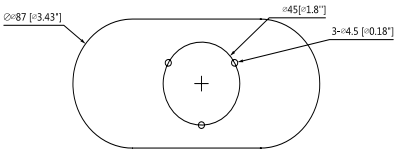
Type	Part Number	Description
2MP Camera	DH-HAC-HDW2241MP-E2 2.8mm	2MP Starlight HDCVI IR Dual-lens Camera, PAL
	DH-HAC-HDW2241MP-E2 3.6mm	
	DH-HAC-HDW2241MP-E2 6mm	
	DH-HAC-HDW2241MN-E2 2.8mm	2MP Starlight HDCVI IR Dual-lens Camera, NTSC
	DH-HAC-HDW2241MN-E2 3.6mm	
	DH-HAC-HDW2241MN-E2 6mm	
Accessories	PFA151	Corner Mount Bracket
	PFM800-E	Passive HDCVI Balun
	PFM800-4K	Passive Video Balun
	PFM800B-4K	Passive Video Balun
	PFM321	12V 1A Power Adapter
	PFM320	12V 2A Power Adapter
	PFM300	12V 2A Power Adapter

Ceiling Mount	Corner Mount
	PFA151
	

Dimensions (mm/inch)







Accessories

Optional:

PFA151
Corner Mount Bracket

PFM800-E
Passive HDCVI Balun

PFM800-4K
Passive Video Balun

PFM800B-4K
Passive Video Balun

PFM321
12V 1A Power Adapter

PFM320D-015
Power Adapter

PFM300
12V 2A Power Adapter

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