

DH-HAC-HDW2241T-A

2MP Starlight HDCVI IR Eyeball Camera



- · Starlight, 120dB true WDR, 3DNR
- · Max. 30fps@1080P
- · HD/SD output switchable
- · Audio in interface, built-in mic
- · 3.6mm fixed lens (2.8mm, 6mm optional)
- · Max. IR length 50m, Smart IR
- · IP67, DC12V±30%

















System Overview

low-light conditions. It offers various motorized/fixed lens models with quaranteeing the quality and effectiveness of collected audio information. a multi-language OSD and HD/SD switchable output. Its superior image performance and starlight feature makes the camera an ideal choice Multiple-formats for mid to large-size businesses and projects where both highly reliable surveillance and construction flexibility are needed.

Functions

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as Embedded with industry leading wide dynamic range (WDR) technology, sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

* Audio input is available for some models of HDCVI cameras.

Long Distance Transmission

coaxial cable, and up to 300m via UTP cable.*

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

HDCVI technology inherits the born feature of simplicity from traditional **Protection** analog surveillance system, making itself a best choice for investment The camera's outstanding reliability is unsurpassed due to its rugged design. log system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle &upporting ±30% input voltage tolerance, this camera suits even the most configuring a network.

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 Experience 1080P full HD video and the simplicity of reusing existing applications. The HDCVI camera supports audio signal transmission over coaxial infrastructure with HDCVI. The Starlight HDCVI camera with 120dB coaxial cable. In addition, it adopts unique audio processing and transmission true WDR presents a high quality image with rich details even in extreme technology that best restores source audio and eliminates noise,

The camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats in the market. A DIP switch located on the cable allows you to quickly toggle formats, further simplifying installation and debugging. This feature makes the camera compatible with not only XVRs, but also most existing HD/SD DVRs.

Wide Dynamic Range

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

HDCVI technology guarantees long-distance and real-time transmission 3DNR is noise reduction technology that detects and eliminates random without any loss. It supports up to 800m for 1080P Full HD video vigoises 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.

protection. HDCVI system can seamlessly upgrade the traditional ana-The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments.

> unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Pro Series | DH-HAC-HDW22411T-A

Technical Specification	on	
Camera		
Image Sensor	1/2.8" CMOS	
Effective Pixels	1920(H)×1080(V), 2MP	
Scanning System	Progressive	
Electronic Shutter Speed	PAL: 1/4s~1/100,000s NTSC: 1/3s~1/100,000s	
Minimum Illumination	0.004Lux/F1.6, 30IRE, 0Lux IR on	
S/N Ratio	More than 65dB	
IR Distance	Up to 50m (164feet)	
IR On/Off Control	Auto / Manual	
IR LEDs	2	
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	H: 86.9° (110°/52.8°)	
Focus Control	Auto / Manual	
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 Distance	

	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° ~ 78° Rotation: 0° ~ 360°
-------------------	---

Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P

Video Output	1-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

	CE (EN55032, EN55024, EN50130-4)
Certifications	FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)
	UL (UL60950-1+CAN/CSA C22.2 No.60950-1)

Interface

Audio Interface	1ch in & Built-in Mic	

Eelectrical

Power Supply	12V DC ±30%
Power Consumption	Max. 5.3W (12V DC, IR on)

Environmental

Operating Conditions	-40°C $^{\sim}$ +60°C (-40°F $^{\sim}$ +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	Ф106mm×99.2mm (Ф4.17"×3.9")
Net Weight	0.50kg (1.10lb)
Gross Weight	0.62kg (1.34lb)

Pro Series | DH-HAC-HDW2241T-A

Ordering Information		
Туре	Part Number	Description
	DH-HAC-HDW2241TP-A 2.8mm	
	DH-HAC-HDW2241TP-A 3.6mm	2MP Starlight HDCVI IR Eyeball Camera, PAL
2MP Camera	DH-HAC-HDW2241TP-A 6mm	
ZIVIP Camera	DH-HAC-HDW2241TN-A 2.8mm	
	DH-HAC-HDW2241TN-A 3.6mm	2MP Starlight HDCVI IR Eyeball Camera, NTSC
	DH-HAC-HDW2241TN-A 6mm	
	PFA130-E	Junction box (For use alone)
	PFB204W	Wall mount (For use alone or with PFA152-E pole mount)
Accessories	PFA152-E	Pole mount (For use with PFB204W wall mount)
710003301103	PFM800-E	Passive HDCVI Balun
	FM321	12V 1A Power Adapter
	FM320	12V 2A Power Adapter
	PFM300	12V 2A Power Adapter

Junction Moon to	Pole Mount
PFA130-E	PFB204W + PFA152-E
Wall Mount	
PFB204W	
Dimensions (mm/inch)	

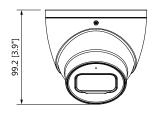
Accessories

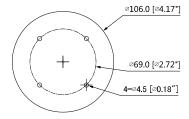
Optional:



PFA130-E Junction box

PFB204W Wall mount PFA152-E Pole mount





PFM800-E Passive HDCVI Balun PFM321

12V 1A Power Adapter

PFM320 12V 2A Power Adapter

PFM300 12V 2A Power Adapter

