

# DH-HAC-HDW2241T-Z-POC

2MP Starlight HDCVI POC IR Eyeball Camera

## HDCVI



- Starlight, 120dB True WDR, 3DNR
- Max. 30fps@1080P
- HD/SD output switchable
- 2.7-13.5mm motorized lens
- Max. IR length 60m, Smart IR
- IP67, POC/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. This model is a PoC camera which can be powered by PoC XVR or PoC transmitter over a single coaxial cable with video, requiring no separate power supplies. PoC reduces installation time and costs, making it an ideal choice for applications with complex deployment but a tight budget.

### 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 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

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. PoC power supply supports transmission distance up to 400m for 1080P via coaxial cable.\*

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

#### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

#### Starlight

With the adoption of large sized 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.

### Multiple-formats

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.

\* POC function is available only in HDCVI mode.

### 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.

### 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.

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	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 60m (197feet)
IR On/Off Control	Auto / Manual
IR LEDs	2

#### Lens

Lens Type	Motorized lens / Fixed iris
Mount Type	Board-in
Focal Length	2.7-13.5mm
Max Aperture	F1.6
Angle of View	H: 108.7°~28.7°
Focus Control	Auto / Manual
Close Focus Distance	200mm 7.87"

#### 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	
		Wide	Tele
Detect	25px/m (8px/ft)	44m(144ft)	153m(502ft)
Observe	63px/m (19px/ft)	18m(59ft)	61m(200ft)
Recognize	125px/m (38px/ft)	9m(30ft)	31m(102ft)
Identify	250px/m (76px/ft)	4m(13ft)	15m(49ft)

#### Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 78° Rotation: 0° ~ 360°
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#### Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P
Video Output	1-channel BNC high definition video output / CVBS video output
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)
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#### Interface

Audio Interface	N/A
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#### Electrical

Power Supply	POC/12V DC ±30%
Power Consumption	Max. 7.4W (12V DC, IR on)
Power Output	12V DC, Max.2W

#### Environmental

Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH * -30°C ~ +45°C (-22°F ~ +113°F) With 2W power output. * Start up should be done at above -40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection & Vandal Resistance	IP67

#### Construction

Casing	Aluminium
Dimensions	Φ122mm×107mm (Φ4.8"×4.2")
Net Weight	0.6kg (1.32lb)
Gross Weight	0.80kg (1.76lb)

Ordering Information		
Type	Part Number	Description
2MP Camera	DH-HAC-HDW2241TP-Z-POC 2.7~13.5mm	2MP Starlight HDCVI POC IR Eyeball Camera, PAL
	DH-HAC-HDW2241TN-Z-POC 2.7~13.5mm	2MP Starlight HDCVI POC IR Eyeball Camera, NTSC
Accessories	PFA130-E	Junction box (For use alone)
	PFB203W	Wall mount (For use alone or with PFA152-E pole mount)
	PFA152-E	Pole mount (For use with PFB203W wall mount)
	PFM811-4CH	POC transmitter (PSE end)
	FM321	12V 1A Power Adapter
	FM320	12V 2A Power Adapter
	PFM300	12V 2A Power Adapter

**Accessories**

Optional:



PFA130-E  
Junction box



PFB203W  
Wall mount



PFA152-E  
Pole mount



PFM811-4CH  
POC transmitter  
(PSE end)



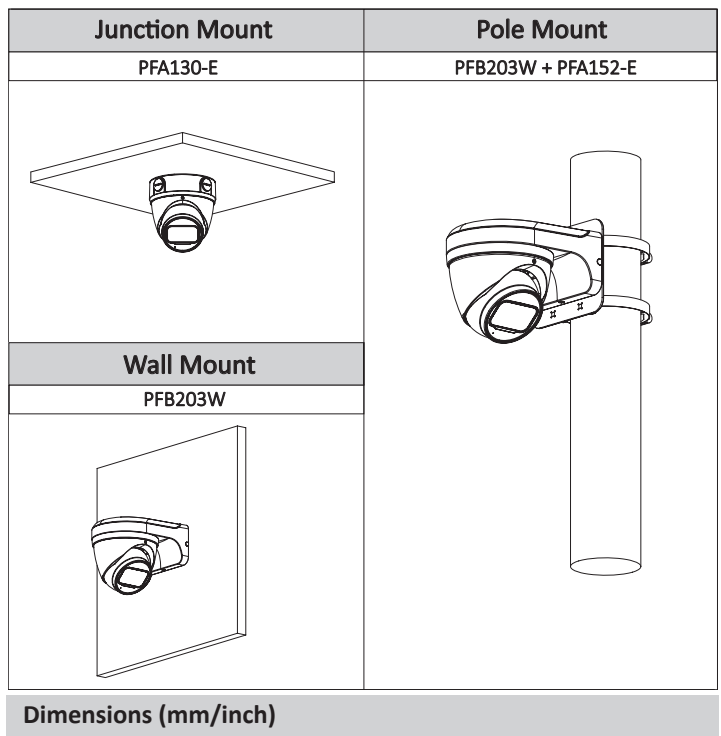
FM321  
12V 1A Power Adapter



FM320  
12V 2A Power Adapter



PFM300  
12V 2A Power Adapter



**Dimensions (mm/inch)**

