

# DH-HAC-HDW2241TMQ-A-POC

## 2 MP Starlight HDCVI Fixed IR Quick-to-install Eyeball Camera



\* The parameters and datasheets below can only be applied to 2241-S2-POC series.

- Max 30 fps@1080p
- Quick-to-install eyeball saves installation time
- Starlight, 130 dB true WDR, 3D NR
- 3.6 mm fixed lens (2.8 mm, 6 mm optional)
- CVI/CVBS/AHD/TVI switchable
- Super Adapt
- Built-in mic
- Max. IR length 60 m, Smart IR
- IP67, PoC (only CVI)/12V±30% DC



### System Overview

Built for convenience, the PoC Series features highly reliable cameras that are powered directly by recorders on the same coaxial cable\* that its videos are transmitted over. HDCVI PoC technology greatly reduces material and installation cost, making it an ideal choice for customers who are on a tight budget and are working with scenes that require complex deployment.

\*We recommend choosing RG59 or RG6 cable for PoC transmission.

### 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.

#### 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.

#### Easy Installation

HDCVI quick-to-install eyeball adopts quick-to-install pedestal, which can achieve easier installation than conventional eyeball. Quick-to-install camera reduces time and labor costs.

#### Protection (IP67, 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.

Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

#### 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.

Technical Specification						Day/Night	Auto switch by ICR
Camera						BLC	BLC/WDR/HLC
Image Sensor		2 MP CMOS				WDR	130 dB
Max. Resolution		1920 (H) × 1080 (V)				White Balance	Auto/Area WB
Pixel		2 MP				Gain Control	Auto; manual
Scanning System		Progressive				Noise Reduction	3D NR
Electronic Shutter Speed		PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s				Smart IR	Yes
S/N Ratio		> 65 dB				Mirror	Off/On
Min. Illumination		0.001 Lux/F1.6, 30 IRE, 0 Lux IR on				Privacy Masking	Off/On (8 area, rectangle)
Illumination Distance		60 m (196.9 ft)				Certifications	
Illuminator On/Off Control		Auto; manual				Certifications	CE (EN55032, EN55024, EN50130-4, EN62368-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
Illuminator Number		2 (IR light)				Port	
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°				Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Lens						Audio Input	One channel built-in mic
Lens Type		Fixed lens				Power	
Mount Type		M12				Power Supply	POC (only CVI)/12V±30% DC
Focal Length		2.8 mm; 3.6 mm; 6 mm				Power Consumption	Max 5.1W (12V DC, IR on) PoC (AF)
Max. Aperture		F1.6				Environment	
Field of View		2.8 mm: H: 109°; V: 58°; D: 127° 3.6 mm: H: 86°; V: 46°; D: 101° 6 mm: H: 54°; V: 29°; D: 63°				Operating Temperature	–40 °C to +60 °C (–40 °F to 140 °F); < 95% (non-condensation)
Iris Type		Fixed iris				Storage Temperature	–40 °C to +60 °C (–40 °F to 140 °F); < 95% (non-condensation)
Close Focus Distance		2.8 mm: 0.7 m (2.3 ft) 3.6 mm: 1.1 m (3.6 ft) 6 mm: 2.8 m (9.2 ft)				Protection Grade	IP67
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Casing	Metal dome+metal cover+plastic decorative ring
	2.8 mm	42.2 m (138.5 ft)	16.9 m (55.4 ft)	8.4 m (27.6 ft)	4.2 m (13.8 ft)	Camera Dimensions	Φ121.9 mm × 99.1 mm (Φ4.8" × 3.9")
	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)	Net Weight	0.45 kg (1.0 lb)
	6 mm	88.3 m (289.7 ft)	35.3 m (115.8 ft)	17.7 m (58.1 ft)	8.8 m (28.9 ft)	Gross Weight	0.62 kg (1.4 lb)
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)					

Ordering Information		
Type	Model	Description
2 MP Camera	DH-HAC-HDW2241TMQP-A-POC	2 MP Starlight HDCVI Fixed IR Quick-to-install Eyeball Camera, PAL
	DH-HAC-HDW2241TMQN-A-POC	2 MP Starlight HDCVI Fixed IR Quick-to-install Eyeball Camera, NTSC
Accessories (Optional)	PFA130-E	Water-proof Junction Box
	PFB205W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFB220C	Ceiling Mount Bracket of Mini Dome & Eyeball Camera
	PFA109	Mount Adapter
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Accessories

Optional:



PFA130-E  
Water-proof Junction Box



PFB205W  
Wall Mount Bracket



PFA152-E  
Pole Mount Bracket



PFB220C  
Ceiling Mount Bracket of  
Mini Dome & Eyeball  
Camera



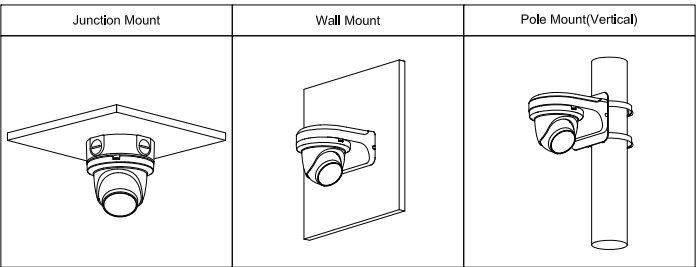
PFA109  
Mount Adapter



PFM321D  
12V 1A Power Adapter



PFM904  
Integrated Mount Tester



Dimensions (mm[inch])

