

DH-HAC-HDBW2241F-A

2MP Starlight HDCVI Fixed IR Dome Camera



- * The parameters and datasheets below can only be applied to 2241-S2 series.
- · Max 30 fps@1080p
- · Starlight, 130 dB true WDR, 3D NR
- · 3.6 mm fixed lens (2.8 mm optional)
- · CVI/CVBS/AHD/TVI switchable
- · Super Adapt
- · Built-in mic
- · Max. IR length 30 m, Smart IR
- · IP67,IK10, DC12 V















System Overview

Pro Series is a perfect choice for SMB solutions and projects where both high reliability and flexibility are required. All cameras are equipped with Starlight feature, 120dB true WDR and 3DNR, and are able to provide clear images and rich details even under tough lighting conditions.

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.

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 XVRs.

* DIP Switch is available for some models of HDCVI cameras.

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.

Protection (IP67, IK10, 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.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J). Wide voltage: The camera allows $\pm 30\%$ (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.

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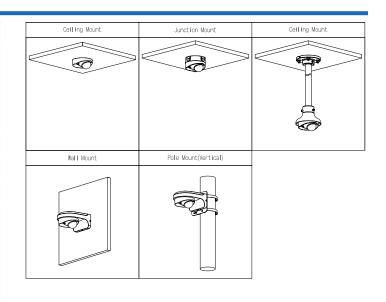
Technical Specification						White Balance	Auto; manual
Camera						Gain Control	Auto; manual
Image Sensor		2MP CMOS				Noise Reduction	3D NR
Max. Resolution		1920 (H) × 1080 (V)				Smart IR	Yes
Pixel		2MP				Mirror	Off/On
Scanning System		Progressive				Privacy Masking	Off/On (8 area, rectangle)
Electronic Shutter Speed		PAL: 1/25 s-1/100,000 s NTSC: 1/30 s-1/100,000 s				Certifications	
S/N Ratio		> 65 dB				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)
Min. Illumination		0.001 Lux/F1.6, 30 IRE, 0 Lux IR on					
Illumination Distance		30 m (98.4 ft)				Port	
Illuminator On/Off Control		Auto; manual				Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNo
Illuminator Number		8 (IR light)				video Odtput	port (DIP Switch)
Pan/Tilt/Rotation Range		Pan: -30°-30°				Audio Input	One channel built-in mic
		Tilt: 0°–80° Rotation: 0°–360°				Power	
Lens						Power Supply	12 V ±30% DC
Lens Type		Fixed lens				Power Consumption	Max 2.7 W (12 V DC, IR on)
Mount Type		M12				Environment	
Focal Length		2.8mm; 3.6m	m			Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F); < 95% (non-condensation)
Max. Aperture		F1.6 2.8 mm: H: 10)9°: V: 58°: D:	127°		Storage Temperature	$-40~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (–40 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$); < 95% (non-condensation)
Field of View		3.6 mm: H:86				Protection Grade	IP67; IK10
Iris Type		Fixed iris				Structure	
Close Focus Distance		2.8 mm: 0.7 m (2.3 ft) 3.6 mm: 1.1 m (3.6 ft)				Casing	Metal throughout the whole casing
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Camera Dimensions	Ф106 mm × 50.3 mm (Ф4.17" × 1.98")
	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)	Net Weight	0.33 Kg (0.73 lb)
	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)	Gross Weight	0.44 Kg (0.97 lb)
Video		(1/0.2 11)	(70.511)	(33.111)	(17.711)		

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)	
Day/Night	Auto switch by ICR	
BLC	BLC/WDR/HLC	
WDR	130 dB	

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Ordering Information							
Туре	Model	Description					
2M Camera	DH-HAC- HDBW2241FP-A	$2\mbox{MP}$ Starlight HDCVI Fixed IR Dome Camera, PAL					
zivi Camera	DH-HAC- HDBW2241FN-A	2MP Starlight HDCVI Fixed IR Dome Camera, NTSC					
	PFA139	Junction Box					
	PFB204W	Wall Mount Bracket					
	PFA152-E	Pole Mount Bracket					
Accessories	PFA106	Adapter Plate of Mini Dome & Eyeball Camera					
(Optional)	PFB220C	Ceiling Mount Bracket of Mini Dome & Eyeball Camera					
	PFM800-E	Passive HDCVI Balun					
	PFM321D	12V 1A Power Adapter					
	PFM904	Integrated Mount Tester					



Ø106 [Ø4.17]

Ø91 [Ø3.58]

8-ø4.5 [ø0.18]

Dimensions (mm[inch])

Accessories

Optional:



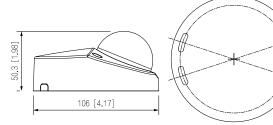
PFA139 Junction Box



PFB204W Wall Mount Bracket



PFA152-E Pole Mount Bracket





PFA106 Adapter Plate of Mini Dome & Eyeball Camera



PFB220C Ceiling Mount Bracket of Mini Dome & Eyeball Camera



PFM800-E Passive HDCVI Balun



PFM321D 12 V 1A Power Adapter



PFM904 Integrated Mount Tester