

# DH-HAC-HFW2241T-Z-A-DP

2MP Starlight HDCVI IR Bullet Camera

# HDCVI



- · Starlight, 120dB true WDR, 3DNR
- · Max. 30fps@1080P
- · HD/SD switchable
- · Audio in interface, built-in mic
- · 2.7-13.5mm motorized lens
- · Max. IR length 80m, Smart IR
- · IP67, AC24V/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 makes the camera an ideal choice 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 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.\*

\*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.

#### **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.

#### **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.

#### 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  $\pm 30\%$  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 80m (262feet)		
IR On/Off Control	Auto / Manual		
IR LEDs	4		
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		

## **DORI** Distance

Close Focus 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.

200mm

7.87"

	DORI	Distance	
	Definition	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° ~ 90° 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)
Dav/Night	Auto (ICR) / Manual

C	OSD Menu	Multi-language
В	LC Mode	BLC / HLC / WDR
٧	VDR	120dB
G	Gain Control	AGC
N	loise Reduction	2D/3D
٧	Vhite Balance	Auto / Manual
S	mart IR	Auto / Manual
C	Certifications	
С	Sertifications	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)
li	nterface	
А	audio Interface	1ch in & Built-in Mic
Е	Eelectrical	
Р	ower Supply	AC 24V±30% / DC 12V±30%
Р	ower Consumption	Max. 11.1W (12V DC, IR on)
Е	Environmental	
O	perating Conditions	-30°C $^{\sim}$ +60°C (-22°F $^{\sim}$ +140°F) / Less than 95% RH * Start up should be done at above-30°C (-22°F)
S	torage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH
	ngress Protection & Vandal desistance	IP67
C	Construction	
С	Casing	Aluminium
D	imensions	244.1mm×90.4mm×90.4mm (9.61"×3.56"×3.56")
N	let Weight	0.8kg (1.76lb)

1.05kg (2.31lb)

**Gross Weight** 

# Pro Series | DH-HAC-HFW2241T-Z-A-DP

Ordering Information				
Туре	Part Number	Description		
2MP Camera	DH-HAC-HFW2241TP-Z-A-DP 2.7~13.5mm	2MP Starlight HDCVI IR Bullet Camera, PAL		
ZIVIP Camera	DH-HAC-HFW2241TN-Z-A-DP 2.7~13.5mm	2MP Starlight HDCVI IR Bullet Camera, NTSC		
	PFA130-E	Junction box (For use alone or with PFA152-E pole mount)		
	PFA152-E	Pole mount (For use with PFA130-E junction box)		
Accessories	PFA151	Corner mount braket (For use with PFA130-E junction box)		
	PFM800-E	Passive HDCVI Balun		
	PFM321	12V 1A Power Adapter		
	PFM320	12V 2A Power Adapter		
	PFM300	12V 2A Power Adapter		

## Accessories

# Optional:



PFA130-E Junction box



PFA152-E Pole mount



PFA151 Corner mount braket



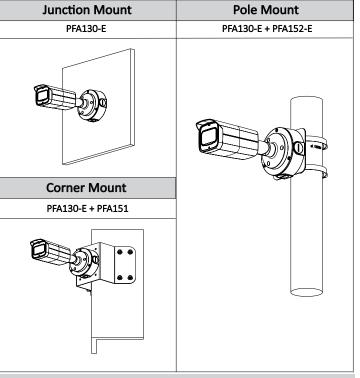
PFM800-E Passive HDCVI Balun



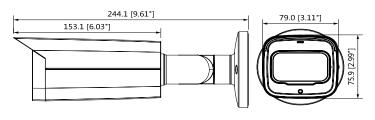
PFM321 12V 1A Power Adapter

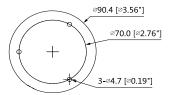


PFM320 12V 2A Power Adapter



# Dimensions (mm/inch)







PFM300 12V 2A Power Adapter

