

# DH-HAC-HFW2241T-Z-A

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, 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 ±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				OSD Menu	Multi-language
Camera				BLC Mode	BLC / HLC / WDR
Image Sensor	1/2.8" CMOS			WDR	120dB
Effective Pixels	1920(H)×1080(V), 2MP			Gain Control	AGC
Scanning System	Progressive			Noise Reduction	2D/3D
Electronic Shutter Speed	PAL: 1/4s~1/100,000s NTSC: 1/3s~1/100,000s			White Balance	Auto / Manual
Minimum Illumination	0.004Lux/F1.6, 30IRE, 0Lux IR on			Smart IR	Auto / Manual
S/N Ratio	More than 65dB			Certifications	
IR Distance	Up to 80m (262feet)			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)
IR On/Off Control	Auto / Manual			Interface	
IR LEDs	4			Audio Interface	1ch in & Built-in Mic
Lens				Electrical	
Lens Type	Motorized lens / Fixed iris			Power Supply	12V DC ±30%
Mount Type	Board-in			Power Consumption	Max. 8.2W (12V DC, IR on)
Focal Length	2.7-13.5mm			Environmental	
Max Aperture	F1.6			Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH * Start up should be done at above -30°C (-22°F)
Angle of View	H: 108.7°~28.7°			Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH
Focus Control	Auto / Manual			Ingress Protection & Vandal Resistance	IP67
Close Focus Distance	200mm 7.87"			Construction	
DORI Distance				Casing	Aluminium
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.				Dimensions	244.1mm×90.4mm×90.4mm (9.61"×3.56"×3.56")
	DORI Definition	Distance		Net Weight	0.76kg (1.68lb)
		Wide	Tele	Gross Weight	1.02kg (2.25lb)
Detect	25px/m (8px/ft)	44m(144ft)	153m(502ft)	Pan / Tilt / Rotation	
Observe	63px/m (19px/ft)	18m(59ft)	61m(200ft)	Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°
Recognize	125px/m (38px/ft)	9m(30ft)	31m(102ft)	Video	
Identify	250px/m (76px/ft)	4m(13ft)	15m(49ft)	Resolution	1080P (1920×1080)
Pan / Tilt / Rotation				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
Day/Night					

