

DH-HAC-HFW2802TU-Z-A

4K Starlight HDCVI Motorized Vari-focal IR Bullet Camera



System Overview

The Pro Series contains a series of highly reliable and flexible cameras, making it a great choice for SMB solutions and projects. It has Starlight technology, up to 130 dB true WDR and 3DNR, and produces vivid images in rich detail even under difficult lighting conditions.

Functions

Starlight

With its large image sensor and large aperture, the camera delivers high performance and quality, even in low-light conditions. The starlight feature allows the camera to capture highly detailed images in accurate color, recognizing targets even at night or in scenes with limited light.

Broadcast-quality Audio

Audio signal transmission over coaxial cables is supported by the HDCVI camera. It adopts a unique audio processing and transmission technology that restores source audio and eliminates noise, ensuring the quality and reliability of the audio information that is collected. This becomes important for video surveillance applications that use audio information as a type of supplementary evidence.

Wide Dynamic Range

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

Super Adapt

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

- * The parameters and datasheets below can only be applied to 2802-S2 series.
- Max. 15 fps@4K.
- · Starlight, 120 dB true WDR, 3D NR.
- · Smart IR Illumination.
- 80 m illumination distance.
- · Super Adapt.
- · Built-in MIC.
- · Auto focus, 2.7 mm-13.5 mm motorized lens.
- · CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.















Smart IR Illumination

With its IR illumination, the camera provides optimal performance in low light conditions, ensuring uniformity in the brightness of B/W images. Through its smart IR technology, the camera also compensates for the distance of targets by adjusting the intensity of its IR LEDs, preventing overexposure of images as targets move closer to the camera.

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals (video, audio*, data and power) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms. HDCVI technology also supports PoC, which makes the camera easy and quick to install.

* Audio input is available for select HDCVI camera models.

Long Distance Transmission

HDCVI technology provides long distance transmission in real time without transmission loss. It supports transmission distances up to 700 m for 2-MP/5-MP/8-MP HD videos through coaxial cables, and up to 300 m through UTP cables. The results were obtained and verified through rigorous testing in Dahua's test laboratory.

Advanced 3DNR

Dahua's advanced 3DNR technology reduces image noise with little to no impact on image sharpness, especially in poor lighting conditions. It detects the noise, and compares the sequential frames to effectively reduce the noise. It also makes efficient use of bandwidth, saving on storage space.

Protection (IP67, Wide Voltage)

IP67: The camera passed a series of rigorous dust and immersion tests. Its enclosure is both dust-proof and waterproof, and can function normally while being immersed in 1 m deep water for up to 30 minutes. Wide voltage: The camera has ±30% input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

Technical Specification							Noise Reduction	3D NR
Camera							Illumination Mode	Smart IR
Image Sensor		4K CMOS					Defog	Electronic defog
Max. Resolution		3840 (H) × 2160 (V)					Digital Zoom	4×
Scanning System		Progressive					Mirror	Yes
Electronic Shutter Speed		PAL: 1/3 s–1/100000 s NTSC: 1/4 s–1/100000 s					Privacy Masking	Off/On (8 areas, rectangle)
Min. Illumination		0.001 lux@F1.5 (Color, 30 IRE) 0.0001 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)					Certification CE-LVD: EN 62368-1;	
S/N Ratio		>65dB					Certifications	CE-EMC: EN 55032; EN 55035; FCC: 47 CFR FCC Part 15, Subpart B; UL: UL62368-1 + CAN/CSA C22.2 No. 62368-1-14
Illumination Distance		80 m (262.47 ft)					Port	
Illuminator On/Off Control		Auto					Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port (DIP Switch)
Illuminator Number		4 (IR light)					Audio Input	One channel built-in MIC
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°					Power	
Lens							Power Supply	12 VDC ± 30% (It is recommended to use a power adapte to supply the power for one camera)
Lens Type		Motorized Vari-focal					Power Consumption	Max 10.9 W (12 VDC, IR on)
Auto Focus		Yes					Environment	
Lens Mount		ф14					Operating Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Focal Length		2.7 mm–13.5 mm					Operating Humidity	<95% (RH), non-condensing
Max. Aperture		F1.5					Storage Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Field of View		H: 113°-47°; V: 60°-26°; D: 133°-53°					Storage Humidity	<95% (RH), non-condensing
Iris Control		Fixed					Protection	IP67
Close Focus Distance		1.2 m (3.94 ft)					Structure	
DORI Distance	Lens	Detect	Observe	Recognize	Identify		Casing Material	Metal
	2.7 mm	83.4 m (273.62 ft)	33.4 m (109.58 ft)	16.7 m (54.79 ft)	8.3 m (27.23 ft)		Product Dimensions	244.1 mm × 90.4 mm × 90.4 mm (9.61" × 3.56" × 3.56")
	13.5 mm	189.6 m (622.05 ft)	75.8 m (248.69 ft)	37.9 m (124.34 ft)	19.0 m (62.34 ft)		Net Weight	0.79 kg (1.74 lb)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system						Gross Weight	1.1 kg (2.43 lb)
	(EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent						Installation	Wall mount; ceiling mount; vertical pole mount
	function distances, refer to installation and commissioning manual/ project design tool.							

Video

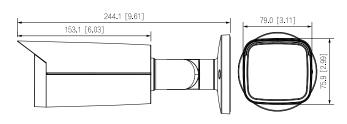
Video Frame Rate	CVI: PAL: 4K@15 fps; 5M@25 fps; 4M@25 fps NTSC: 4K@15 fps; 5M@25 fps; 4M@30 fps AHD: PAL: 4K@15 fps; NTSC: 4K@15 fps TVI: PAL: 4K@15 fps; NTSC: 4K@15 fps CVBS: PAL: 960H; NTSC: 960H			
Resolution	4K (3840 × 2160); 5M (2880 × 1620); 4M (2560 × 1440); 960H (960 × 576/960 × 480)			
Day/Night	Auto(ICR)/Color/B/W			
BLC	BLC; HLC; WDR; HLC-Pro			
WDR	120 dB			
White Balance	Auto; Area white balance			
Gain Control	Auto/Manual			

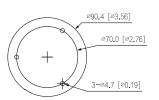
Pro Series | DH-HAC-HFW2802TU-Z-A

Ordering Information							
Туре	Part Number	Description					
4K Camera	DH-HAC-HFW2802TUP- Z-A	4K Starlight HDCVI Motorized Vari-focal IR Bullet Camera, PAL					
4K Calliera	DH-HAC-HFW2802TUN- Z-A	4K Starlight HDCVI Motorized Vari-focal IR Bullet Camera, NTSC					
	PFA135	Junction Box					
	PFA130-E	Water-proof Junction Box					
Accessories	PFA152-E	Pole Mount Bracket					
(Optional)	PFM800-4K	1-CH Passive Video Balun					
	PFM320D	12V 2A Power Adapter					
	PFM904	Integrated Mount Tester					

Ceiling Mount Junction Mount Pole Mount(Vertical)

Dimensions (mm[inch])





Accessories

Optional:



PFA135 Junction Box



PFA130-E Water-proof Junction Box



PFA152-E Pole Mount Bracket



PFM800-4K 1-CH Passive Video Balun



PFM320D 12V 2A Power Adapter



PFM904 Integrated Mount Tester