DH-HAC-HFW1801R-Z-A

4K Starlight HDCVI Motorized Vari-focal IR Bullet Camera



* The parameters and datasheets below can only be applied to1801-S2 series.

- Max. 15 fps@4K.
- 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.



System Overview

The Lite Series is a great choice for consumers looking for high quality monitoring products at a reasonable price. Its low cost and high performance make it ideal for residential areas and SMB solutions. This series is equipped with a wide range of technologies, such as full-color and starlight, providing various solutions for different scenarios.

Functions

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.

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.

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.

Super Adapt

With its intelligent algorithm, the camera automatically adjusts its parameters to provide optimal performance and vivid images.

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.

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.

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.

Technical Specification

Camera

Pixel	8 MP
Image Sensor	4K CMOS
Max. Resolution	3840 (H) × 2160 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100000 s NTSC: 1/30 s–1/100000 s
Min. Illumination	0.01 lux@F1.5 (Color, 30 IRE) 0.001 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	80 m (262.47 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Motorized Vari-focal
Auto Focus	Yes
Lens Mount	ϕ14
Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.5
Field of View	Horizontal: 114°–32° Vertical: 58°–17° Diagonal: 138°–36°
Iris Control	Fixed
Close Focus Distance	0.8m

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	85.3 m (279.86 ft)	34.1 m (111.88 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)
	T	280.0 m (918.64 ft)	112.0 m (367.45 ft)	56.0 m (183.73 ft)	28.0 m (91.87 ft)

Video

Video Frame Rate	CVI: PAL: 4K@15 fps; 5M@25 fps; 4M@25 fps; 1080p@25 fps NTSC: 4K@15 fps; 5M@25 fps; 4M@30 fps; 1080p@30 fps TVI: PAL: 4K@15 fps NTSC: 4K@15 fps AHD: PAL: 4K@15 fps NTSC: 4K@15 fps CVBS: PAL: 960H NTSC: 960H
Resolution	4K (3840 x 2160); 5M (2880 x 1620); 4M (2560 x 1440); 1080p (1920 x 1080); 960H (960 x 576/960 x 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
Noise Reduction	3D NR
Motion Detection	Yes
Illumination Mode	Smart IR
Defog	Electronic defog
Digital Zoom	4×
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Certification

Certifications	CE-LVD: EN 62368-1; 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

Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Audio Input	One channel built-in MIC (-A)

Power

Power Supply	12 VDC ± 30% (It is recommended to use a power adapter to supply the power for one camera)
Power Consumption	Max 10.6W (12 VDC, IR on)

Environment

Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Protection	IP67

Structure

Casing Material	Metal
Product Dimensions	90.4 mm × 90.1mm ×209.6 mm (3.56" × 3.55" × 8.25")
Net Weight	0.55 kg (1.21 lb)
Gross Weight	0.72 kg (1.59 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Part Number	Description
4K Camera	DH-HAC-HFW1801RP-Z-A	4K HDCVI IR Bullet Camera, PAL
	DH-HAC-HFW1801RN-Z-A	4K HDCVI IR Bullet Camera, NTSC
Accessories (Optional)	PFA130-E	Water-proof Junction Box
	PFA152-E	Pole Mount Bracket
	PFM800-4K	1-CH Passive Video Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Accessories

Optional:



PFA130-E
Water-proof
Junction Box



PFA152-E
Pole Mount
Bracket



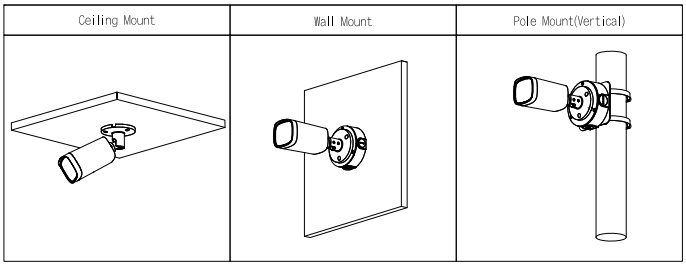
PFM800-4K
1-CH Passive
Video Balun



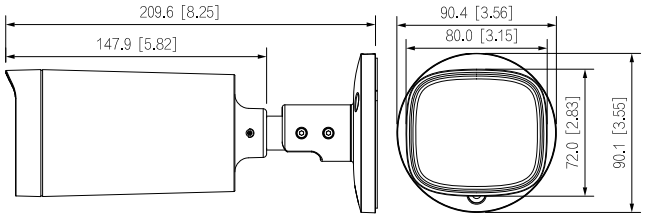
PFM321D
12V 1A Power
Adapter

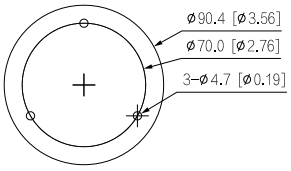


PFM904
Integrated Mount
Tester



Dimensions (mm[inch])





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