HDCVI Starlight Bullet Camera

2MP Starlight HDCVI IR Bullet Camera

- Starlight, 120 dB True WDR, 3DNR
- Max. 30 fps at 1080p
- HD and SD Dual-output
- 2.7 to 12 mm Motorized Lens
- Max. IR Length 100 m (328 ft), Smart IR
- IP67, IK10, 24 VAC / 12 VDC

System Overview

Experience the superior clarity of Full HD 1080p video while leveraging your existing coaxial infrastructure. The camera features 120 dB True WDR for applications under complex dynamic range and presents high quality images with clear details and accurate color rendition. The camera offers a multi-language on-screen display and HD and SD dual-output. The outstanding performance and easy installation make the camera an ideal choice for mid- to large-size businesses and for projects where highly reliable surveillance and construction flexibility are valued.

Functions

Four Signals over a Single Coaxial Cable

HDCVI technology simultaneously transmits four signals (audio, video, power, and data)[1] over a single coaxial cable. Dual-way data transmission allows the HDCVI camera to communicate with an HCVR to send control signals or to trigger alarms. Moreover, HDCVI technology supports PoC for construction flexibility.

Long Distance Transmission

HDCVI technology guarantees real-time transmission over long distances without loss of video quality. HDCVI cameras provide the same resolution as most IP network camera systems using existing RG-59, RG-6, or CAT 6 UTP cabling.

Simplicity

HDCVI technology seamlessly integrates traditional analog surveillance systems with upgraded, high-quality HD video, making it the best choice to protect security investments. The plug and play approach enables full HD video surveillance without the hassles of configuring a network.

1. Audio input is available for certain HDCVI cameras.

Starlight

With the adoption of a 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.

Wide Dynamic Range

For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Multi-interfaces

The camera is designed with multi-interfaces for transmitting/receiving various signals. It supports HDCVI and CVBS video outputs simultaneously with two BNC connectors, and a tester interface for debugging. It also supports audio input interface as well as alarm input/output for connecting external devices.

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 100 m (328 ft).

Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67, making it suitable for indoor or outdoor environments. The camera complies with IK10 impact resistant rating to provide maximum durability against vandals, making it capable of withstanding the equivalent of 55 kg (120 lbs) of force.

Supporting ±25% 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-in. CMOS
Effective Pixels	1945(H) × 1097(V), 2.1 MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1.3 s to 1/30000 s NTSC: 1 s to 1/30000 s
Minimum Illumination	0.005 Lux at F1.4 0 Lux with IR on
S/N Ratio	More than 65 dB
IR Distance	Up to 100 m (328 feet)
IR On/Off Control	Auto, Manual
IR LEDs	4

Lens

Lens Type	Motorized Lens / Auto Iris
Mount Type	Board-in
Focal Length	2.7 mm to 12 mm
Max Aperture	F1.4
Angle of View	H: 95° to 36°
Focus Control	Auto / Manual
Close Focus Distance	300 mm (11.81 in.)

Pan / Tilt / Rotation

Range	Pan: 0° to 360° Tilt: 0° to 90° Rotation: 0° to 360°

Video

Resolution	1080p (1920 × 1080)	
Frame Rate	25/30 fps at 1080p 25/30/50/60 fps at 720p	
Video Output	One (1) BNC HDCVI High-definition Channel and, One (1) BNC CVBS Channel, plus One (1) CVBS Tester Channel	
Video Transmission[2]	RG-59/U Coax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft)
	RG-6/U Coax	720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft)
	CAT 6 UTP (balun required)	720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft)
Day/Night	Auto (ICR), Manual	
OSD Menu	Multi-language	
BLC Mode	BLC, HLC, WDR	
WDR	120 dB	
Gain Control	AGC	
Noise Reduction	2D, 3D	
White Balance	Auto, Manual	
Smart IR	Auto, Manual	

Certifications

Safety	CE: EN55032, EN55024, EN50130-4) UL: UL60950-1+CAN/CSA C22.2 No.60950-)
Electromagnetic Compatibility (EMC)	FCC CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014)

Interface

Audio Interface	One (1) Channel In
Alarm Interface	One (1) Alarm Channel In One (1) Alarm Channel Out

Electrical

Power Supply	24 VAC ±25% / 12 VDC ±25%
Power Consumption	Max 16.6 W (12V DC, IR on)

Environmental

Operating Conditions	-30°C to +60°C (-22°F to +140°F), Less than 90% RH Initiate start up above -30°C (-22°F)
Storage Conditions	-30°C to +60°C (-22°F to +140°F), Less than 90% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Aluminium
Dimensions	273.20 mm × 95.0 mm × 95.0 mm (10.76 in. × 3.74 in. × 3.74 in.)
Net Weight	1.16 kg (2.56 lb)
Gross Weight	1.52 kg (3.35 lb)

2. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

Ordering Information

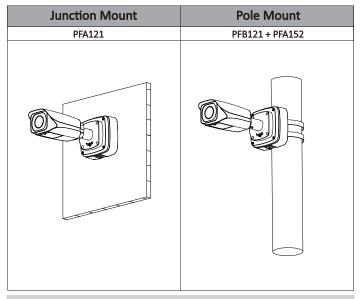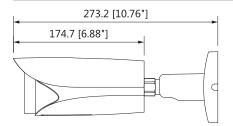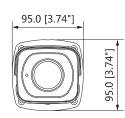| Type	Part Number	Description
2 MP Camera	DH-HAC-HFW32A1EN-Z	2 MP Starlight HDCVI IR Bullet Camera, NTSC
Accessories	PFA121	Junction box (for use alone or with PFA152 pole mount)
	PFA152	Pole mount (for use with PFA121 junction box)

Accessories

Optional:

PFA121
Junction box

PFA152
Pole mount

Junction Mount	Pole Mount
PFA121	PFB121 + PFA152

Dimensions (mm/inch)

273.2 [10.76"]
174.7 [6.88"]
95.0 [3.74"]
95.0 [3.74"]