dahua TECHNOLOGY

4 MP HDCVI Fixed Bullet Camera
4 MP HDCVI WDR IR Bullet Camera

HDCVI

- True Wide Dynamic Range (120 dB) and 3DNR
- Maximum 4 MP Resolution in Real-time
- HD and SD Dual-output
- 2.8 mm Fixed Lens
- Maximum IR Length 40 m (130 ft) with Smart IR
- IP67 Ingress Protection
- 12 VDC Power Supply

Pro Series | **4Mp** | **WDR** | **40m IR** | **DC 12V** | **IP67**

System Overview

Experience the superior clarity of real-time 4 MP 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

Three Signals over One Coaxial Cable

HDCVI technology simultaneously transmits three signals (video, power, and data) 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.

Multi-outputs

The camera supports HDCVI and CVBS signal outputs simultaneously with two BNC connectors. These output signals allow the camera to integrate with various devices, including analog matrix systems and monitors.

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 40 m (130 ft).

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.

Advanced 3DNR

3DNR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. Dahua's advanced 3DNR technology delivers remarkable noise reduction with little impact to sharpness, especially under limited lighting condition. 3DNR, in addition, effectively decreases the bandwidth and saves storage space.

Large Aperture Lens

The camera uses a high-end F1.5 large-aperture lens, allowing more absorbed light into the camera for impressive low-light performance.

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.

With a working temperature range of -30 °C to +60 °C (-22 °F to +140 °F), the camera is designed for extreme temperature environments. 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	1/3-in. CMOS
Effective Pixels	2688(H) x 1520(V), 4.1 MP
Scanning System	Progressive
Electronic Shutter Speed	1/3 s to 1/100,000 s
Minimum Illumination	0.01 Lux at F1.5, 0 Lux with IR on
S/N Ratio	More than 65 dB
IR Distance	Up to 40 m (130 ft)
IR On/Off Control	Auto, Manual
IR LEDs	Two (2)

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	2.8 mm
Max Aperture	F1.5
Angle of View	Horizontal: 79°
Close Focus Distance	900 mm (59.06 in.)

Pan / Tilt / Rotation

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

Video

Resolution	4 MP (2560 x 1440)	
Frame Rate	4 MP at 25 fps 1080p at 25/30 fps 720p at 25/30 fps	
Video Output	One (1) BNC HDCVI High-definition Channel and, One (1) BNC CVBS Channel	
Video Transmission[1]	RG-59/U Coax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft) 4 MP: 500 m (1640.42 ft)
	RG-6/U Coax	720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft) 4 MP: 700 m (2296.59 ft)
	CAT 6 UTP (balun required)	720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft) 4 MP: 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	UL60950-1+CAN/CSA C22.2 No.60950-1
Electromagnetic Compatibility (EMC)	FCC CFR 47 FCC Part 15 subpart B, ANSI C63.4-2014)

Electrical

Power Supply	12 VDC ±25%
Power Consumption	Max 5.9 W (12 VDC with IR on)

Environmental

Operating Conditions	-30° C to +60° C (-22° F to +140° F), Less than 90% RH * Start up should be done above -30° C (-22° F)
Storage Conditions	-30° C to +60° C (-22° F to +140° F), Less than 90% RH
Ingress Protection	IP67

Construction

Casing	Aluminium
Dimensions	180.0 mm x 70.0 mm x 70.0 mm (7.09 in. x 2.76 in. x 2.76 in.)
Net Weight	0.40 kg (0.89 lb)
Gross Weight	0.51 kg (1.12 lb)

1. 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
4 MP Camera	A42AB22	4 MP HDCVI WDR IR Bullet Camera, 2.8 mm
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)

180 [7.09"]
105.9 [4.17"]
70 [2.76"]
70 [2.76"]

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