

4 MP HDCVI Dome Camera

4 MP WDR HDCVI IR Dome Camera

HDCVI



- True Wide Dynamic Range (120 dB) and 3DNR
- Maximum 4 MP Resolution in Real-time
- HD and SD Dual-output
- 3.6 mm Fixed Lens
- Maximum IR length 30 m (98 ft), Smart IR
- IP67 Ingress Protection, IK10 Vandalism Protection
- 12 VDC Power Supply















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 30 m (98 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 $\pm 25\%$ 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	n		
Camera			
Image Sensor	1/3-in. CMOS	1/3-in. CMOS	
Effective Pixels	2688(H) x 1520(V)	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	More than 65 dB	
IR Distance	Up to 30 m (98 ft)	Up to 30 m (98 ft)	
IR On/Off Control	Auto, Manual	Auto, Manual	
IR LEDs	12	12	
Lens			
Lens Type	Fixed lens, Fixed in	Fixed lens, Fixed iris	
Mount Type	Board-in	Board-in	
Focal Length	3.6 mm	3.6 mm	
Max Aperture	F1.5	F1.5	
Angle of View	Horizontal: 79°	Horizontal: 79°	
Close Focus Distance	1500.0 mm (59.06	1500.0 mm (59.06 in.)	
Pan / Tilt / Rotation			
Range	Pan: 0° to 355° Tilt: 0° to 65° Rotation: 0° to 355		
Video			
Resolution	4 MP (2560 x 1440	4 MP (2560 x 1440)	
Frame Rate	4 MP at 25 fps 1080p at 30 fps 720p at 30 fps	1080p at 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), Manua	Auto (ICR), Manual	
OSD Menu	Multi-language		
BLC Mode	BLC, HLC, WDR	BLC, HLC, WDR	
WDR	120 dB	120 dB	
Gain Control	AGC	AGC	
Noise Reduction	2D/3D	2D/3D	
White Balance	Auto, Manual	Auto, Manual	
Smart IR	Auto, Manual	Auto, Manual	

 $^{1. \} Transmission \ distance \ results \ verified \ by \ real-scene \ testing \ in \ Dahua's \ test \ laboratory. \ Actual \ transmission \ distances \ may \ vary \ due \ to \ external \ influences, \ cable \ quality, \ and \ wiring \ structures.$

Certification

Gross Weight

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	Maximum 4.4 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		
Vandal Resistance	IK10		
Construction			
Casing	Aluminium		
Dimensions	ø109.90 mm x 81.0 mm (ø4.33 in. x 3.19 in.)		
Net Weight	0.33 kg (0.73 lb)		

0.45 kg (0.99 lb)

Ordering Information			
Туре	Part Number	Description	
4 MP Camera	A42AL23	4 MP WDR HDCVI IR Dome Camera, 3.6 mm	
Accessories	PFA136	Junction box (For use alone)	
	PFB203W	Wall mount (For use alone or with PFA152 pole mount)	
	PFA152	Pole mount (For use with PFB203W wall mount)	

Dimensions (mm/inch) 109.9 [4.33"] 98.2 [03.87"] + 3-04.7 [00.19"]

Accessories

Optional:







PFA136 Junction box

PFB203W Wall mount

PFA152 Pole mount

Junction Mount	Pole Mount
PFA136	PFB203W + PFA152
Wall Mount	
PFB203W	

