

4K HDCVI Vari-focal Eyeball Camera



System Overview

Experience the superior clarity of Dahua's Ultra 4K HDCVI cameras for vast coverage and superior image details. Dahua Ultra 4K HDCVI series leverages existing coax infrastructures to deliver forensic-level images seamlessly and over long distances. The 4K HDCVI camera uses next-generation ISP chip technology developed by Dahua to deliver stunning video. This home-grown ISP features the latest image processing algorithms and is optimized for security camera operations. With total control of the ISP features and production, Dahua can offer the latest security systems at a cost-effective price.

Functions

Three Signals over One Coaxial Cable

HDCVI technology simultaneously transmits video, audio 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.

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology captures details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

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 security 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 security without the hassles of configuring a network.

- 1/1.8-in. 8MP Progressive Scan CMOS Sensor
- 4K (3840 x 2160) at 15 fps Maximum Resolution
- 3.7 mm to 11 mm Motorized Optical Zoom Lens
- Starlight Technology for Ultra Low-light Applications
- True Wide Dynamic Range (120 dB) and 2D/3D Noise Reduction
- HD or SD Output, Switchable
- Maximum IR Length 60 m (197 ft), Smart IR
- Built-in Microphone
- Dual Power Input, 24 VAC or 12 VDC Power Supply
- IP67 Ingress Protection
- Five-year Warranty*



Broadcast-quality Audio

Audio information is used as supplementary evidence in video security applications. This HDCVI camera transmits audio signals over the coaxial cable, eliminating the need for separate audio wiring. In addition, the camera uses unique audio processing and transmission technology that eliminates noise to best duplicate source audio, guaranteeing highquality and highly effective audio information.

Multiple-format Support

The camera supports multiple video formats including, HDCVI, CVBS, AHD, and TVI. The camera can switch between these four formats via the OSD menu or the switch located on the video output cable, making the camera compatible with not only HDCVI DVRs but also most existing HD/SD DVRs.

True Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. 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.

Protection

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 4KV lightning rating provides effective protection for both the camera and its structure against lightning, and its IP67 ingress protection make it the choice for installation in even the most unforgiving environments.

Pro Series | A82AH5V

Technical Specification		
Camera		
Image Sensor	1/1.8-in CMOS Sensor	
Effective Pixels	3840 (H) x 2160 (V), 8MP	
Scanning System	Progressive	
Electronic Shutter Speed	1/3 s to 1/100,000 s	
Minimum Illumination	Color: 0.005 Lux at F1.5, 30 IRE 0 Lux with IR on	
S/N Ratio	More than 65 dB	
IR Distance	Up to 60.0 m (196.85 ft)	
IR On/Off Control	Auto, Manual	
IR LEDs	Two (2)	
Lens		
Lens Type	Motorized Lens, Fixed Iris	
Mount Type	Board-in	
Focal Length	3.7 mm to 11 mm	
Maximum Aperture	F1.5	
Angle of View	Horizontal: 112° to 46°	
Focus Control	Auto, Manual	
Close Focus Distance	200 mm (7.87 in.)	

Pan / Tilt / Rotation

Pan: 0° to 360°
Tilt: 0° to 78°
Rotation: 0° to 360°

DORI Distances¹

	Detect	Observe	Recognize	ldentify
	(8 ppf)	(19 ppf)	(38 ppf)	(76 ppf)
Wide-angle	83 m	33 m	17 m	8 m
	(273 ft)	(109 ft)	(54 ft)	(27 ft)
Telephoto	190 m	76 m	38 m	19 m
	(624 ft)	(250 ft)	(125 ft)	(62 ft)

Video

Maximum Resolution	8 MP (3840 x 2160)	
Frame Rate	HDCVI	8MP at 15 fps, 6MP at 20 fps, or 4MP at 30 fps
	TVI	5MP at 20 fps 4MP at 30 fps
	AHD	5MP at 20 fps 4MP at 30 fps
	CVBS	960H
Video Output	One (1) BNC HDCVI 4K Ultra High-definition Channel or, One (1) BNC CVBS Channel, switchable	

1. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4, the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.

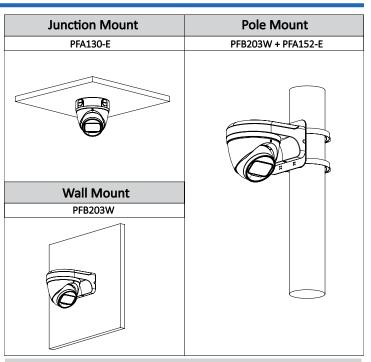
Lasametatoris. 2. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

Video Transmission ²	RG-59/U Co	bax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft) 4K: 500 m (1640.42 ft)	
	RG-6/U Coax		720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft) 4K: 700 m (2296.59 ft)	
	CAT 6 UTP (balun required)		720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft) 4K: 300 m (984.25 ft)	
Day/Night			Auto (ICR), Manual	
OSD Menu			Multi-language	
BLC Mode			BLC, HLC, True WDR	
WDR			120 dB	
Gain Control			AGC	
Noise Reduction			2D/3D	
White Balance			Auto, Manual	
Smart IR			Auto, Manual	
Certifications				
CE				
Satety			L60950-1 AN/CSA C22.2 No.60950-1	
			CFR 47 Part 15 subpart B, I C63.4-2014	
Interface				
Audio			: One (1) Channel, RCA Jack, and in Microphone	
Electrical				
Power Supply		24 VA	24 VAC ± 30% or 12 VDC ± 30%	
Power Consumption		Maxir	Maximum 12 W (IR on)	
Environmental				
Operating Conditions		30° C to +60° C (22° F to +140° F) Less than 90% RH *Initiate start up above30° C (22° F)		
Storage (onditions		–30° C to +60° C (–22° F to +140° F) Less than 90% RH		
Ingress Protection		IP67	IP67	
Construction				
Casing A		Alumi	Aluminium	
Dimensions		ø122.	ø122.0 mm x 107.0 mm (ø4.80 in. x 4.20 in.)	
Net Weight 0.63		0.63	3 kg (1.39 lb)	
Gross Weight 0.83		0.83	kg (1.83 lb)	

Pro Series | A82AH5V

Ordering Information

ordering mormation		
Туре	Part Number	Description
4K HDCVI Camera	A82AH5V	8MP Starlight HDCVI IR Vari-focal Eyeball Camera, True WDR
Accessories, optional	PFA106	Mount Adapter (For use with PFB305W wall mount)
	PFA130-E	Junction Box
	PFA151	Corner Mount (For use with PFA106 and PFB305W)
	PFA152-E	Pole Mount (For use with PFA130-E junction box)
	PFB203W	Wall Mount (For use alone or with PFA152-E pole mount)
	PFB220C	Ceiling Mont (For use with PFA106)
	PFB305W	Wall Mount (For use with PFA106)
	DH-PFM320D-US	12 VDC, 2 A Power Adapter
	DH-PFM321D-US	12 VDC, 1 A Power Adapter
Audio Accessories,	HAP100	Pinhole Pickup
optional		



Dimensions (mm/in.)

Accessories

Optional:



PFA130-E Junction Box





DH-PFM320D-US 12 VDC, 2 A Power Adapter



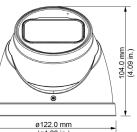
HAP100 Pinhole Pickup

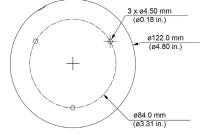


DH-PFM321D-US

12 VDC, 1 A Power Adapter







ø122.0 mm (ø4.80 in.)

