dahua TECHNOLOGY

4 MP HDCVI Eyeball Camera
4 MP HDCVI WDR IR Eyeball Camera

HDCVI

- 120 dB True WDR and 3DNR
- Max. 4 MP Resolution in Real-time
- HD and SD Dual-output
- 3.6 mm Fixed Lens
- Max. IR Length 50 m (164 ft) with Smart IR
- IP67, DC12V

Pro Series | 4Mp | WDR | 50m 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 four 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 50 m (164 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 multi-sensor camera allows for ±25% 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.

Technical Specification

Camera

Image Sensor	1/3-in. CMOS
Effective Pixels	2688(H) × 1520(V), 4.1 MP
Scanning System	Progressive
Electronic Shutter Speed	1/3 s to 1/300,000 s
Minimum Illumination	0.01 Lux at F1.5 0 Lux (IR on)
S/N Ratio	More than 65 dB
IR Distance	Up to 50.0 m (164.04 ft)
IR On/Off Control	Auto / Manual
IR LEDs	One (1)

Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	3.6 mm
Max Aperture	F1.5
Angle of View	Horizontal: 79°
Close Focus Distance	1500.0 mm (59.06 in.)

Pan / Tilt / Rotation

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

Video

Resolution	4 MP (2560 × 1440)	
Frame Rate	4 MP at 25 fps, 1080p @ 25/30 fps, 720p at 25/30/50/60 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

Certifications	FCC (CFR 47 FCC Part 15 SubpartB) ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)

Electrical

Power Supply	12V DC ±25%
Power Consumption	Max 5.3 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

Construction

Casing	Aluminium
Dimensions	Φ106.0 mm × 93.70 mm (Φ4.17 in. × 3.69 in.)
Net Weight	0.44 kg (0.97 lb)
Gross Weight	0.58 kg (1.28 lbs)

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
4MP Camera	A42AG23	4 MP HDCVI WDR IR Eyeball Camera, 3.6 mm
Accessories	PFA139	Junction box (For use alone)
	PFB204W	Wall mount (For use alone or with PFA152 pole mount)
	PFA152	Pole mount (For use with PFB204W wall mount)

Accessories

Optional:

PFA139
Junction box

PFB204W
Wall mount

PFA152
Pole mount

Junction Mount	Pole Mount
PFA139	PFB204W + PFA152

Wall Mount
PFB204W

Dimensions (mm/inch)

93.7 [3.69"]

Φ106 [Φ4.17"]

Φ69 [Φ2.72"]

4-Φ4.5 [Φ0.18"]