

2MP HDCVI Fixed Dome Camera

Starlight+ Technology and True Wide Dynamic Range



System Overview

Experience the superior clarity of Dahua's 2 MP HDCVI camera for vast coverage and superior image details. The 2 MP HDCVI series leverages existing coax infrastructures to deliver forensic-level images seamlessly and over long distances. The camera offers a 2.8 mm fixed lens, a multi-language On-screen Display, and HD/SD switchable output. The camera is ideal for hosting diverse applications — Starlight Technology and True Wide Dynamic Range allow the camera to operate in any lighting condition and the IP67 rating makes the camera suitable for the harshest environments.

Functions

Starlight+ Technology

For challenging low-light applications, Dahua's Starlight low light Technology offers best-in-class light sensitivity, capturing details in low light applications. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

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.

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.

• 1/2.8-in. 2 MP Progressive-scan CMOS Sensor

- 2 MP (1920 x 1080) at 30 fps Maximum Resolution
- 2.8 mm Fixed Lens
- Starlight+ Technology for Low-light Applications
- True Wide Dynamic Range (130 dB) and 3D Noise Reduction
- ArcticPro Series Camera Operational down to -40° C (-40° F)
- Supports Multiple Video Formats: HDCVI, CVBS, AHD and TVI
- HD or SD Output, Switchable
- Built-in Microphone
- Maximum IR Length 40 m (131.23 ft)
- IP67 Ingress Protection and IK10 Vandal Resistance
- Five-year Warranty*



Super Adapt

The Super Adapt function is a built-in algorithm that automatically adjusts the camera's optical settings as environmental conditions change to produce optimal video quality. This function helps to make initial configuration easy since it does not require setting the optical settings manually once the camera is installed.

Broadcast-quality Audio

Audio information is used as supplementary evidence in video surveillance 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 high-quality 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 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 optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Protection

The camera complies with an IK10 impact rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.). Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. The camera allows for $\pm 30\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications, and its 4KV lightning rating provides effective protection for both the camera and its structure against lightning.

Pro Series | A22DL62

42.20 m

(138.50 ft)

Technical Specificat	tion		
Camera			
Image Sensor	1/2.8-in. C	1/2.8-in. CMOS Sensor	
Effective Pixels	1920 (H) x	1080 (V), 2 MP	
Scanning System	Progressive	Progressive	
Electronic Shutter Speed	1/30 s to 1	1/30 s to 1/100,000 s	
Minimum Illumination		Color: 0.001 lux at F1.6, 30 IRE 0 lux at F1.6 with IR On	
S/N Ratio	More than	More than 65 dB	
IR Distance	Up to 40.0	Up to 40.0 m (131.23 ft)	
IR Control	Auto, Man	Auto, Manual	
IR LEDs	Three (3)	Three (3)	
Lens			
Lens Type	Fixed Lens	Fixed Lens	
Mount Type	M12	M12	
Focal Length	2.8 mm	2.8 mm	
Maximum Aperture	F1.6	F1.6	
Angle of View	Vertical: 58	Horizontal: 109° Vertical: 58° Diagonal: 127°	
Iris Type	Fixed Iris	Fixed Iris	
Close Focus Distance	700.0 mm	700.0 mm (27.56 in.)	
Installation Angle			
Range	Tilt: 0° to 6	Pan: 0° to 355° Tilt: 0° to 65° Rotation: 0° to 355°	
DORI Distances ¹			
Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)

Video				
Maximum Resolution 1080p (1920 x 1		1080p (1920 x 10	080), 960H (960 x 480)	
HDCVI		1080p at 30 fps		
Frame AHD Rate TVI	1080p at 30 fps			
	TVI	1080p at 30 fps		
	CVBS	960 x 480H at 30	fps	
Video Outpu	Video Output One (1) BNC, Tran AHD or TVI Chann		nsmits HDCVI High-definition signal or CVBS, nel, switchable	
		RG-59/U Coax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft)	
Video Transr	mission ²	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, True WDR	
WDR			130 dB	
Gain Control			Auto, Manual	
Noise Reduc	ction		3D	
White Balance			Auto, Manual	
Smart IR			Auto, Manual	
Mirror			On, Off	
Privacy Masking			Off/On (8 areas, rectangular)	
Certificati	ions			
CE			EN55032 EN55024 EN50130-4	
Safety			UL60950-1 CAN/CSA C22.2 No.60950-1	
Electromagn	netic Compa	tibility (EMC)	CFR 47 FCC Part 15 subpart B ANSI C63.4-2014	
Interface				
Video			One (1) Port, BNC HDCVI, TVI, AHD, CVBS selectable via DIP Switch	
Audio			Input: One (1) Built-in Microphone	
Electrical				
Power Supply			12 VDC ± 30%	
Power Consumption			Maximum 3.1 W (12 VDC, IR On)	
Environm	nental			
Operating Co	onditions		-40° C to +60° C (-40° F to +140° F) Less than 95% RH	
Storage Conditions			-40° C to +60° C (-40° F to +140° F) Less than 95% RH	
Ingress Protection			IP67	
Vandal Resistance			IK10	

 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.

16.90 m

(55.40 ft)

8.40 m

(27.6 ft)

4.2 m

(13.8 ft)

Identify classifications.
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.

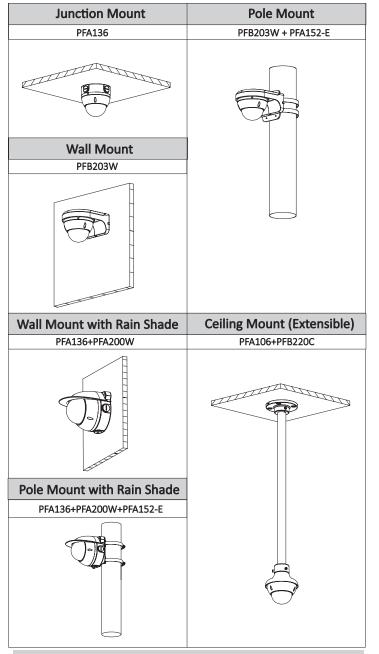
Pro Series | A22DL62

Construction

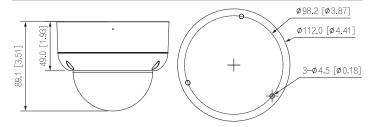
Casing	Metal
Dimensions	ø112.0 mm x 89.10 mm (ø3.87 in. x 3.51 in.)
Net Weight	0.33 kg (0.73 lb)
Gross Weight	0.47 kg (1.04 lb)

Ordering Information

Туре	Part Number	Description
2 MP Camera	A22DL62	2 MP Starlight+, 2.8 mm Fixed Lens Dome Camera, True WDR
Accessories, optional	PFA106	Mount Adapter (use with PFB305W and PFB220C)
	PFA136	Junction Box
	PFA151	Corner Mount Bracket (use with PFB305W wall mount)
	PFA152-E	Pole Mount (use with PFB203W wall mount)
	PFA200W	Sun/Rain Shield
	PFB203W	Wall Mount (use with PFA152-E pole mount)
	PFB220C	Ceiling Mount (use with PFA106 mount adapter)
	PFB305W	Wall Mount (use with PFA106 mount adapter)
	PFM800-E	Passive HDCVI Balun
	DH-PFM321D-US	12 VDC, 1 A Power Adapter



Dimensions (mm/inch)





PFA106

Accessories

Optional:





PFA136



PFA200W

Sun/Rain Shield

PFM800-E Passive HDCVI Balun

PFB203W Wall Mount



PFA151

Corner Mount

PFB305W Ceiling Mount Wall Mount



PFA152-E

Pole Mount

DH-PFM321D-US Power Adapter



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