

DH-HAC-T1A21

2MP HDCVI Fixed-focal Eyeball Camera



Series Overview

The Cooper Series offers simple and highly cost-effective HDCVI solutions. It provides 24/7 reliable monitoring with high-quality image performance, saving cost on both material and labor force. It is also designed and built to the specific standards of Dahua.

Functions

Smart IR Illumination

With its IR illumination, the camera provides optimal performance in low light conditions, ensuring uniformity in the brightness of B/W images. Through its smart IR technology, the camera also compensates for the distance of targets by adjusting the intensity of its IR LEDs, preventing overexposure of images as targets move closer to the camera.

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals (video, audio*, data and power) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms. HDCVI technology also supports PoC, which makes the camera easy and quick to install.

* Audio input is available for select HDCVI camera models.

- · Max. 30 fps@1080p.
- · Smart IR Illumination.
- · 20 m illumination distance.
- · 3.6 mm fixed lens (2.8 mm,6 mm optional).
- · CVI/CVBS/AHD/TVI switchable.
- · 12 VDC.













Long Distance Transmission

HDCVI technology provides long distance transmission in real time without transmission loss. It supports transmission distances up to 700 m for 2-MP/5-MP/8-MP HD videos through coaxial cables, and up to 300 m through UTP cables. The results were obtained and verified through rigorous testing in Dahua's test laboratory.

Simplicity

HDCVI technology inherits the simplicity of traditional analog surveillance systems, making it a great mechanism for protecting your valuables. HDCVI can be upgraded from the traditional analog system without replacing the existing coaxial cabling. Its plug and play design enables it to produce high-definition videos during surveillance without the hassle of configuring a network.

Cooper Series | DH-HAC-T1A21

Technical Specification						
Camera						
Image Sensor		2 MP CMOS				
Max. Resolution		1920 (H) × 1080 (V)				
Scanning System		Progressive				
Electronic Shutter Speed		PAL: 1/25 s-1/100000 s NTSC: 1/30 s-1/100000 s				
Min. Illumination		0.02 lux@F2.0 (Color, 30 IRE) 0.002 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)				
S/N Ratio		>65 dB				
Illumination Distance		20 m (65.62 ft)				
Illuminator On/Off Control		Auto				
Illuminator Number		1 (IR light)				
Angle Adjustment		Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°				
Lens						
Lens Type		Fixed-focal				
Lens Mount		M12				
Focal Length	Focal Length		2.8 mm; 3.6 mm; 6 mm			
Max. Apertu	re	F2.0				
Field of View		2.8 mm: H: 100°; V: 54°; D: 117° 3.6 mm: H:80°; V: 43°; D: 94° 6 mm: H: 43°; V: 24°; D: 50°				
Iris Control	Iris Control		Fixed			
Close Focus Distance		2.8 mm: 0.5 m (1.64 ft) 3.6 mm: 0.8 m (2.62 ft) 6 mm: 2.8 m (9.19 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	2.8 mm	44.7 m (146.65 ft)	17.9 m (58.73 ft)	8.9 m (29.20 ft)	4.5 m (14.76 ft)	
	3.6 mm	55.0 m (180.45 ft)	22.0 m (72.18 ft)	11.0 m (36.09 ft)	5.5 m (18.04 ft)	
	6 mm	102.9 m (337.60 ft)	41.1 m (134.84 ft)	20.6 m (67.59 ft)	10.3 m (33.79 ft)	

Noise Reduction 2D NR Illumination Mode Smart IR Certification Certifications CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035; FCC: 47 CFR FCC Part 15, Subpart B Port Video Output Video output choices of CVI/TVI/AHD/CVBS by one BNC port Power Power Supply 12 VDC ± 30% Power Consumption Max 2.3 W (12 VDC, IR on) Environment Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions	Gain Control	Auto	
Certification Certifications CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035; FCC: 47 CFR FCC Part 15, Subpart B Port Video Output Video output choices of CVI/TVI/AHD/CVBS by one BNC port Power Power Supply 12 VDC ± 30% Power Consumption Max 2.3 W (12 VDC, IR on) Environment Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions Ф85.4 mm × 68.8 mm (Ф3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Noise Reduction	2D NR	
CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035; FCC: 47 CFR FCC Part 15, Subpart B Port Video Output Video output choices of CVI/TVI/AHD/CVBS by one BNC port Power Supply 12 VDC ± 30% Power Consumption Environment Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions Ф85.4 mm × 68.8 mm (Ф3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Illumination Mode	Smart IR	
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Video Output Video output choices of CVI/TVI/AHD/CVBS by one BNC port Power Power Supply 12 VDC ± 30% Power Consumption Max 2.3 W (12 VDC, IR on) Environment Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions 0.98 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Certifications	CE-EMC: EN 55032; EN 55035;	
Power Power Supply 12 VDC ± 30% Power Consumption Max 2.3 W (12 VDC, IR on) Environment Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions	Port		
Power Supply 12 VDC ± 30% Power Consumption Max 2.3 W (12 VDC, IR on) Environment -40 °C to +60 °C (-40 °F to +140 °F) Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing	Video Output		
Power Consumption Max 2.3 W (12 VDC, IR on) Environment -40 °C to +60 °C (-40 °F to +140 °F) Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing	Power		
Environment Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions	Power Supply	12 VDC ± 30%	
Operating Temperature -40 °C to +60 °C (-40 °F to +140 °F) Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions Ф85.4 mm × 68.8 mm (Ф3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Power Consumption	Max 2.3 W (12 VDC, IR on)	
Operating Humidity <95% (RH), non-condensing Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions Φ85.4 mm × 68.8 mm (Φ3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Environment		
Storage Temperature -40 °C to +60 °C (-40 °F to +140 °F) Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions	Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	
Storage Humidity <95% (RH), non-condensing Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions	Operating Humidity	<95% (RH), non-condensing	
Anti-corrosion Level Basic Protection Structure Casing Material Plastic Product Dimensions	Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	
Structure Casing Material Plastic Product Dimensions Φ85.4 mm × 68.8 mm (Φ3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Storage Humidity	<95% (RH), non-condensing	
Casing Material Plastic Product Dimensions Φ85.4 mm × 68.8 mm (Φ3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Anti-corrosion Level	Basic Protection	
Product Dimensions Φ85.4 mm × 68.8 mm (Φ3.36" × 2.71") Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Structure		
Net Weight 0.09 kg (0.20 lb) Gross Weight 0.13 kg (0.29 lb)	Casing Material	Plastic	
Gross Weight 0.13 kg (0.29 lb)	Product Dimensions	Φ85.4 mm × 68.8 mm (Φ3.36" × 2.71")	
	Net Weight	0.09 kg (0.20 lb)	
Installation Wall mount; ceiling mount; vertical pole mount	Gross Weight	0.13 kg (0.29 lb)	
	Installation	Wall mount; ceiling mount; vertical pole mount	

DWDR

Auto

WDR

White Balance

Video

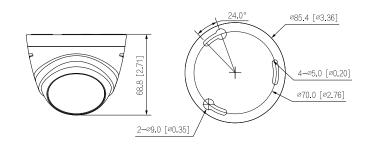
Video Frame Rate	CVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps AHD: PAL: 1080p@25 fps NTSC: 1080p@30 fps TVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps CVBS: PAL: 960H; NTSC: 960H
Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; DWDR

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Ordering Information				
Туре	Model	Description		
2MP Camera	DH-HAC-T1A21P	2MP HDCVI Fixed-focal Eyeball Camera, PAL		
	DH-HAC-T1A21N	2MP HDCVI Fixed-focal Eyeball Camera, NTSC		
Accessories (Optional)	PFA135	Junction Box		
	PFA152-E	Pole Mount Bracket		
	PFB205W-E	Wall Mount Bracket		
	PFA106	Mount Adapter		
	PFB220C	Ceiling Mount Bracket		
	PFM321D	12V 1A Power Adapter		
	PFM800-E	1 Channel Passive HDCVI Balun		
	PFM904	Integrated Mount Tester		

Junction Mount Wall Mount Pole Mount(Vertical)

Dimensions (mm[inch])



Accessories

Optional:



PFA135 Junction





PFA106 Mount Adapter



PFA152-E Pole Mount Bracket



PFB220C Ceiling Mount Bracket



PFB205W-E Wall Mount Bracket



PFM321D 12V 1A Power Adapter



PFM800-E 1 Channel Passive HDCVI Balun



Integrated Mount Tester