

# 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.

- · 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.

<sup>\*</sup> Audio input is available for select HDCVI camera models.

# 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					
Lens Type		Fixed-focal				
Lens Mount		M12				
Focal Length		2.8 mm; 3.6 mm; 6 mm				
Max. Aperture		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		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	41.1 m	20.6 m	10.3 m	

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	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)	
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 TVI: PAL: 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				

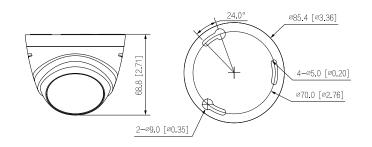
WDR	DWDR	
White Balance	Auto	
Gain Control	Auto	
Noise Reduction	2D NR	
Illumination Mode	Smart IR	
Certification		
Certifications	CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035; FCC: 47 CFR FCC Part 15, Subpart B	
Port		
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port	
Power		
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	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)	
Installation	Wall mount; ceiling mount; vertical pole mount	

# Cooper Series | DH-HAC-T1A21

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 Box



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



PFM904 Integrated Mount Tester