

DH-HAC-T1A21-U

2MP IR HDCVI Fixed-focal Eyeball Camera



- Max. 30 fps@1080p
- Smart IR Illumination
- 25 m illumination distance.
- Quick-to-install eyeball saves installation time.
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.



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.

Easy Installation

HDCVI eyeball comes with a quick-to-install pedestal, which makes it easier to install than conventional eyeballs and reduces cost on time and labor.

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.

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.

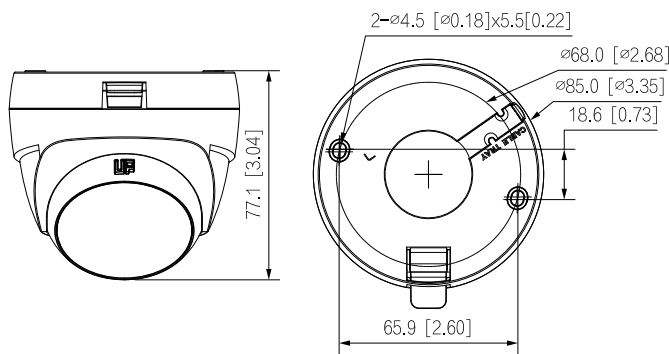
Simplicity

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.

Technical Specification					
Camera					
Image Sensor		2 MP CMOS			
Max. Resolution		1920 (H) × 1080 (V)			
Scanning System		Progressive			
Electronic Shutter Speed		PAL: 1/25 s–1/100,000 s; NTSC: 1/30 s–1/100,000 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		25 m (82.02 ft)			
Illuminator On/Off Control		Auto/Manual			
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		2.8 mm; 3.6 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°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 0.5 m (1.64 ft) 3.6 mm: 0.8 m (2.62 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)
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			
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			
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		Φ85.0 mm × 77.1 mm (Φ3.35" × 3.04")			
Net Weight		0.11 kg (0.24 lb)			
Gross Weight		0.12 kg (0.26 lb)			
Installation		Wall mount; ceiling mount			

Ordering Information		
Type	Model	Description
2MP Camera	DH-HAC-T1A21P-U	2MP IR HDCVI Fixed-focal Eyeball Camera, PAL
	DH-HAC-T1A21N-U	2MP IR HDCVI Fixed-focal Eyeball Camera, NTSC
Accessories (Optional)	PFA12C	Plastic Junction Box
	PFM800-E	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Dimensions (mm[inch])



Accessories

Optional:



PFA12C
Plastic Junction Box



PFM800-E
Passive HDCVI Balun



PFM321D
12V 1A Power Adapter



PFM904
Integrated Mount Tester

Junction Mount	Wall Mount
