DH-HAC-T2A21-A

2MP HDCVI Fixed-focal Eyeball Camera

· Max. 30 fps@1080p.

· Smart IR Illumination.

· 20 m illumination distance.

· Built-in Mic.

· 3.6 mm fixed lens (2.8 mm,6 mm optional).

· CVI/CVBS/AHD/TVI switchable.

· IP67, 12 VDC.

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.

Broadcast-quality Audio

Audio signal transmission over coaxial cables is supported by the HDCVI camera. It adopts a unique audio processing and transmission technology that restores source audio and eliminates noise, ensuring the quality and reliability of the audio information that is collected. This becomes important for video surveillance applications that use audio information as a type of supplementary evidence.

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.

Protection (IP67, Wide Voltage)

IP67: The camera passed a series of rigorous dust and immersion tests. Its enclosure is both dust-proof and waterproof, and can function normally while being immersed in 1 m deep water for up to 30 minutes. Wide voltage: The camera has ±30% input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

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	2 (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; 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 (337.60 ft)	41.1 m (134.84 ft)	20.6 m (67.59 ft)	10.3 m (33.79 ft)

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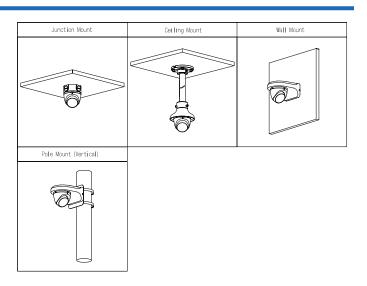
Video Frame Rate	CVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps AHD: PAL: 1080p@25 fps NTSC: 1080p@30 fps TVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps CVBS: PAL: 960H; NTSC: 960H
Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; DWDR

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
Audio Input	One channel built-in Mic

Power

Power Supply	12 VDC ± 30%
Power Consumption	Max 2.8 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
Protection	IP67
Anti-corrosion Level	Basic Protection

Structure

Casing Material	Metal
Product Dimensions	Φ94.0 mm × 78.0 mm (Φ3.70" × 3.07")
Net Weight	0.27 kg (0.60 lb)
Gross Weight	0.35 kg (0.77 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
2MP Camera	DH-HAC-T2A21P-A	2MP HDCVI Fixed-focal Eyeball Camera, PAL
	DH-HAC-T2A21N-A	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   Ceiling Mount   Wall Mount   Pole Mount (Vertical)

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

Dimensions (mm[inch])

78.0 [3.07]

⌀94.0 [⌀3.70]
⌀68.5 [⌀2.70]
4-4.5 [⌀0.18]