DAHUA TECHNOLOGY

DH-HAC-PT1509A-A-LED
5MP Full-color HDCVI Fixed-focal PT Camera

* The parameters and datasheets below can only be applied to PT1509-S2 series.
* In order to use the 5MP 16:9 HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000001.0.R.200908 or later version.

· Max. 25 fps@5MP (16:9 video output)

· 120 dB true WDR, 3D NR

· 24/7 color imaging

· Smart Area Lighting

· Pan & Tilt

· 40 m illumination distance

· Super Adapt

· Built-in Mic

· Quick-to-install structure saves installation time.

· 3.6 mm fixed lens (2.8 mm optional)

· IP66, 12 VDC.

| Lite Series | 5Mp | Full Color | Pan & Tilt | WDR | Smart Illumination |
| Smart Area Lighting | IP66 | Audio | Easy Installation | | |

Series Overview

The Lite Series is a great choice for consumers looking for high quality monitoring products at a reasonable price. Its low cost and high performance make it ideal for residential areas and SMB solutions. This series is equipped with a wide range of technologies, such as full-color and starlight, providing various solutions for different scenarios.

Functions

Full-color

With its advanced image processing algorithm and capability to absorb large quantities of light, the camera provides 24/7 color monitoring that collects clear and highly detailed information, significantly increasing the reliability of the human and vehicle images that are collected as evidence for intelligent analysis.

Smart Area Lighting

Automatically adjusts the intensity of the brightness and exposure for the left and right areas in the video based on the proportion and position of the targets to reveal more details in the image.
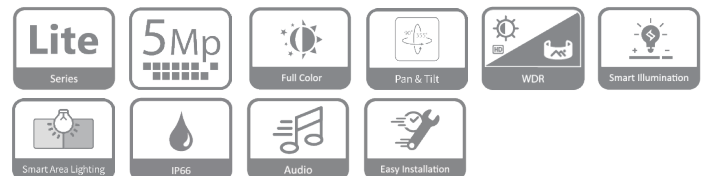
Pan & Tilt

Developed with a PT design, it has a dual shaft and dual motor. The motor can control the pan range from 0° to 355° and the tilt range from 0° to 90°, covering all the corners without any dead angles. This extends the monitoring area.

Wide Dynamic Range

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

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.

Smart Warm Light Illumination

In dark environments, the camera produces vivid images in rich color through its warm LED lights. With its smart light mode setting, it automatically adjusts its exposure time and light sensitivity to avoid the overexposure of objects in the center of the image.

Easy Installation

HDCVI PT camera comes with a quick-to-install design, which makes it easier to install than conventional camera and reduces cost on time and labor.

Super Adapt

With its intelligent algorithm, the camera automatically adjusts its parameters to provide optimal performance and vivid images.

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.

Technical Specification

Camera

Image Sensor	5 MP CMOS
Max. Resolution	2880 (H) × 1620 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100000 s NTSC: 1/30 s–1/100000 s
Min. Illumination	0.001 lux@F1.0 (Color, 30IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	40 m (131.23 ft)
Illuminator On/Off Control	Auto
Illuminator Number	4 (Warm light)
Angle Adjustment	Pan: 0°–355° Tilt: 0°–90°

Lens

Lens Type	Fixed-focal
Auto Focus	No
Lens Mount	M12
Focal Length	2.8 mm;3.6 mm
Max. Aperture	F1.0
Field of View	2.8 mm: H: 111°; V: 57°; D: 131° 3.6 mm: H: 89°; V: 47°; D: 104°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.5 m (4.92 ft) 3.6 mm: 2.2 m (7.22 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	66.0 m (216.54 ft)	26.4 m (86.61 ft)	13.2 m (43.31 ft)	6.6 m (21.65 ft)
	3.6 mm	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)

Video

Video Frame Rate	CVI: PAL: 5M@25 fps; 4M@25 fps; 1080p@25 fps NTSC: 5M@25 fps; 4M@30 fps; 1080p@30 fps AHD: PAL: 4M@25 fps NTSC: 4M@30 fps TVI: PAL: 4M@25 fps NTSC: 4M@30 fps CVBS: PAL: 960H NTSC: 960H
Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Color
BLC	BLC; HLC; WDR; HLC-Pro
WDR	120 dB
White Balance	Auto/Manual
Gain Control	Auto/Manual

Noise Reduction	3D NR
Illumination Mode	Smart Light
Defog	Electronic defog
Digital Zoom	4×
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

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
Audio Input	One channel built-in Mic

Power

Power Supply	12 VDC ± 30% (It is recommended to use a power adapter to supply the power for one camera)
Power Consumption	Max 7.7 W (12 VDC, LED 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	IP66
Anti-corrosion Level	Basic Protection

Structure

Casing Material	Plastic
Product Dimensions	92.9 mm × 91.3 mm × 130 mm (3.66" × 3.59" × 5.12")
Net Weight	0.40 kg (0.88 lb)
Gross Weight	0.64 kg (1.41 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

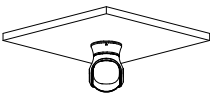| Type	Model	Description
2MP Camera	DH-HAC-PT1509AP-A-LED	5M Full-color HDCVI PT Camera, PAL
	DH-HAC-PT1509AN-A-LED	5M Full-color HDCVI PT Camera, NTSC
Accessories (Optional)	PFA12C	Plastic Junction Box
	PFM800-4K	1-CH Passive Video Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Accessories

Optional:

PFA12C
Plastic Junction Box
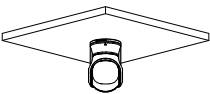
PFM800-4K
1-CH Passive Video Balun

PFM321D
12V 1A Power Adapter

PFM904
Integrated Mount Tester

Ceiling Mount	Ceiling Mount	Wall Mount

Pole Mount(Vertical)

Dimensions (mm[inch])