dahua
TECHNOLOGY

1080p HDCVI Fixed Eyeball Camera
2.8 mm IR Eyeball Camera

HDCVI

- 1/2.7-in. 1080p Progressive-scan CMOS Sensor
- 1080p at 30 fps Maximum Resolution
- 2.8 mm Fixed Lens
- HD or SD Output, Switchable
- Maximum IR Length 30 m (98 ft), Smart IR
- IP67 Ingress Protection
- Five-year Warranty*

Lite Series | 1080p FULL HD | 30m IR | DC 12V | IP67 | Temperature

System Overview

The 1080p HDCVI camera leverages existing coax infrastructures to deliver forensic-level images seamlessly and over long distances. The camera uses next-generation ISP chip technology developed by Dahua to deliver stunning video and broadcast-quality audio. This home-grown ISP features the latest image processing algorithms and is optimized for security camera operations. With total control of the ISP features and production, Dahua can offer the latest security systems at a cost-effective price.

Functions

Three Signals over One Coaxial Cable
HDCVI technology simultaneously transmits video, audio and data over a single coaxial cable. Dual-way data transmission allows the HDCVI camera to communicate with an HCVR to send control signals or to trigger alarms.

Long Distance Transmission
HDCVI technology guarantees real-time transmission over long distances without loss of video quality. HDCVI cameras provide the same resolution as most IP network camera systems using existing RG-59, RG-6, or CAT 6 UTP cabling.

Simplicity
HDCVI technology seamlessly integrates traditional analog security systems with upgraded, high-quality HD video, making it the best choice to protect security investments. The plug and play approach enables full HD video security without the hassles of configuring a network.

Smart IR
The camera is designed with microcrystalline LED IR illumination for low-light performance. Smart IR is a technology to ensure brightness uniformity in black and white images under low illumination. Dahua's unique Smart IR adjusts to the intensity of the camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

Multiple-format Support
The camera supports multiple video formats including, HDCVI, CVBS, AHD, and TVI. The camera can switch between these four formats via the OSD menu or the switch located on the video output cable, making the camera compatible with not only HDCVI DVRs but also most existing HD/SD DVRs.

Environmental
With a built-in heater and a temperature range of −40° C to +60° C (−40° F to +140° F), the cameras are designed for extreme temperature environments. The cameras, subjected to rigorous dust and water immersion tests, are certified to the IP67 rating making them suitable for demanding outdoor applications.

Technical Specification

Camera

Image Sensor	1/2.7-in. CMOS
Effective Pixels	1920(H) x 1280(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	1/30 s to 1/100000 s
Minimum Illumination	Color: 0.02 Lux at F1.85 (30 IRE) 0 Lux with IR on
S/N Ratio	More than 65 dB
IR Distance	Up to 30 m (98.04 ft)
IR On/Off Control	Auto, Manual
IR LEDs	12

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	2.8 mm
Max Aperture	F1.85
Horizontal Angle of View	103°
Close Focus Distance	900 mm (35.43 in.)

DORI[1] Distance

Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
37 m (121 ft)	15 m (49 ft)	8 m (26 ft)	4 m (13 ft)

Installation Angle

Range	Pan: 0° to 360° Tilt: 0° to 78° Rotation: 0° to 360°

Video

Resolution	1080p (1920 x 1080)	
Frame Rate	1080p at 30 fps 720p at 30/60 fps	
Video Output	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS, AHD or TVI Channel, switchable	
Video Transmission[2]	RG-59/U Coax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft)
	RG-6/U Coax	720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft)
	CAT 6 UTP (balun required)	720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft)
Day/Night	Auto (ICR), Manual	
OSD Menu	Multi-language	
BLC Mode	BLC, HLC, DWDR	
WDR	Digital WDR	
Gain Control	AGC	
Noise Reduction	2D	
White Balance	Auto, Manual	
Smart IR	Auto, Manual	

Certifications

Safety	EN55032, EN55024, EN50130-4 UL60950-1+CAN/CSA C22.2 No.60950-1
Electromagnetic Compatibility (EMC)	FCC CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014

Electrical

Power Supply	12 VDC ±30%
Power Consumption	Maximum 3.3 W (12 VDC with IR on)

Environmental

Operating Conditions	−40° C to +60° C (−40° F to +140° F), Less than 90% RH Initiate startup above −40° C (−40° F)
Storage Conditions	−40° C to +60° C (−40° F to +140° F), Less than 90% RH
Ingress Protection	IP67

Construction

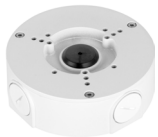|	
Casing	Aluminium
Dimensions	ø93.40 mm × 79.40 mm (ø3.68 in. x 3.13 in.)
Net Weight	0.27 kg (0.60 lb)
Gross Weight	0.34 kg (0.75 lb)

1. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4 , the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.
2. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

Ordering Information

Type	Part Number	Description
1080p HDCVI Camera	A211K02	1080p HDCVI 2.8 mm Eyeball Camera, Smart IR
Accessories, optional	PFA130-E	Waterproof Junction Box (For use alone)
	PFA13A-E	Junction Box (For use alone)
	PFA152-E	Pole Mount (For use with PFB204W wall mount)
	PFB204W	Wall Mount (For use alone or with PFA152-E pole mount)
	DH-PFM321D-US	12 VDC, 1 A Power Adapter
	DH-PFM800-4K	4K Passive HDCVI Balun

Camera Accessories

Optional:

PFA130-E
Waterproof
Junction Box

PFA13A-E
Junction Box

PFA152-E
Pole Mount

PFB204W
Wall Mount

DH-PFM321D-US
Power Adapter

DH-PFM800-4K
4K HDCVI Balun

Junction Mount	Pole Mount
PFA13A-E	PFB204W + PFA152-E

Wall Mount
PFB204W

Dimensions (mm/in.) - 1080p HDCVI Camera

79.40 mm (3.13 in.)

Ø93.40 mm (Ø3.68 in.)
Ø68.0 mm (Ø2.68 in.)
4 x Ø4.50 mm (Ø0. in.)