dahua TECHNOLOGY

2 MP HDCVI Fixed Mini Bullet Camera

HDCVI

- 1/2.9-in. Progressive-scan CMOS Sensor
- 1080p at 30 fps Maximum Resolution
- HD and SD Output, Switchable
- Supports Multiple Video Formats: HDCVI and Analog Formats
- 2.1 mm Fixed Lens
- IP67 Ingress Protection
- Five-year Warranty

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

System Overview

Experience the superior clarity of Full HD 1080p video while leveraging your existing coaxial infrastructure. The camera features a compact design and offers a high-quality image. The camera offers a multi-language on-screen display and HD and SD dual-output. The outstanding performance and low price make the camera an ideal choice for small businesses that value surveillance.

Functions

Three Signals over a Single Coaxial Cable

HDCVI technology simultaneously transmits three signals (video, power, 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. HDCVI along with PoC technology delivers power[1] to devices at the edge, simplifying installation.

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 surveillance 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 surveillance without the hassles of configuring a network.

Multi-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 via a UTC controller (PFM820), making the camera compatible with not only HDCVI DVRs but also most existing HD/SD DVRs.

Multi-language OSD

The OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detection and offers Chinese, English, French, German, Spanish, Italian, Japanese, Korean, Russian, Polish, and Portuguese variations.

Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67, making it suitable for indoor or outdoor environments.

With a working temperature range of −40 °C to +60 °C (−40 °F to +140 °F), the camera is designed for extreme temperature environments. Supporting ±25% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

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1. Requires PoC Transceivers for each channel and an external power supply for each transceiver.

*Warranty applies to products sold through an authorized Dahua Dealer.

Technical Specification

Camera

Image Sensor	1/2.9-in. CMOS Sensor
Effective Pixels	1920(H) x 1080(V), 2 MP
Scanning System	Progressive
Electronic Shutter Speed	1/30 s to 1/100,000 s
Minimum Illumination	Color: 0.02 lux at F2.0 B/W: 0.002 lux at F.20
S/N Ratio	More than 65 dB

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	2.1 mm
Maximum Aperture	F2.0
Horizontal Angle of View	117.80°
Close Focus Distance	400 mm (15.75 in.)

DORI Distance[2]

Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
34 m (113 ft)	14 m (45 ft)	7 m (23 ft)	3 m (11 ft)

Video

Resolution	1080p (1920 × 1080)	
Frame Rate	1080p at 30 fps 720p at 60 fps	
Video Output	One (1) BNC HDCVI High-definition Channel, or One (1) BNC CVBS Channel, switchable	
Video Transmission[3]	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 (electronic), Manual	
OSD Menu	Multi-language	
BLC Mode	BLC, HLC, DWDR	
WDR	Digital WDR	
Gain Control	AGC	
Noise Reduction	2D	
White Balance	Auto, Manual	

Certifications

Safety	No UL Certification
Electromagnetic Compatibility (EMC)	EN 55032 FCC CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014
Immunity	EN 50130-4 EN 55024

Electrical

Power Supply	12 VDC ± 25%
Power Consumption	Maximum 0.6 W

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	ø30.0 mm x 68.20 mm (ø1.18 in. x 2.69 in.)
Net Weight	0.07 kg (0.15 lb)
Gross Weight	0.11 kg (0.24 lb)

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2. 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.
3. 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
2 MP Camera	DH-HAC-1220GN-USA	2 MP HDCVI Bullet Camera, 2.1 mm
Accessories, Optional	PFM321	12 VDC, 1 A Power Adapter
	PFM800-E	Passive HDCVI Balun
	PFM800-4MP	4 MP Passive HDCVI Balun
	PFM801-4MP	4 MP Passive HDCVI Balun with Power
	PFM810	POC Transceiver
	PFM820	UTC Controller

Dimensions (mm/inch)

68.20 mm (2.69 in.)
61.50 mm (2.42 in.)
35.70 mm (1.40 in.)
30.0 mm (1.18 in.)
30.0 mm (1.18 in.)
35.70 mm (1.40 in.)

Accessories

Optional:

PFM321
Power Adapter

PFM800-E
Passive HDCVI Balun

PFM800-4MP
Passive HDCVI Balun

PFM801-4MP
Passive HDCVI Balun
with Power

PFM810
POC Transceiver

PFM820
UTC Controller