Dahua
TECHNOLOGY

2 MP HDCVI Fixed Dome Camera
2 MP HDCVI IR Dome Camera

HDCVI

- Maximum 1080p at 30 fps Resolution
- HD and SD Switchable Output
- Supports Multiple Video Formats: HDCVI, CVBS, AHD and TVI
- 2.8 mm or 3.6 mm Fixed Lens Options
- Maximum IR Length 30 m (98 ft) with Smart IR
- IP67 Environmental Protection
- IK10 Vandal Resistance
- Five-year Warranty

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

System Overview

Experience the superior clarity of Full HD 1080p video while leveraging your existing coaxial infrastructure. The camera features Smart IR technology to deliver clear images in near total darkness. 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

Four Signals over a Single Coaxial Cable
HDCVI technology simultaneously transmits four signals (audio, video, power, and data)[1] 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. Moreover, HDCVI technology supports PoC for construction flexibility.

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.

Smart IR
With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30 m (98 ft).

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 HCVRs 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. Audio input is available for certain HDCVI cameras.

Technical Specification

Camera

Image Sensor	1/2.9-in. CMOS
Effective Pixels	1920(H) x 1280(V), 2 MP
Scanning System	Progressive
Electronic Shutter Speed	1/30 s to 1/100000 s
Minimum Illumination	Color: 0.02 Lux at F2.0 0 Lux (with IR on)
S/N Ratio	More than 65 dB
IR Distance	Up to 30 m (98 ft)
IR On/Off Control	Auto, Manual
IR LEDs	12

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	A21BL02: 2.8 mm A21BL03: 3.6 mm
Max Aperture	F2.0
Angle of View	A21BL02: 106° A21BL03: 82.8°
Close Focus Distance	A21BL02: 500 m (19.7 in.) A21BL03: 800 m (31.5 in.)

Pan / Tilt / Rotation

Range	Pan: 0° to 355° Tilt: 0° to 65° Rotation: 0° to 355°

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 One (1) BNC CVBS, AHD or TVI Channel, switchable	
Video Transmission²	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 ±25%
Power Consumption	Max 2.6 W (12 VDC with IR on)

Environmental

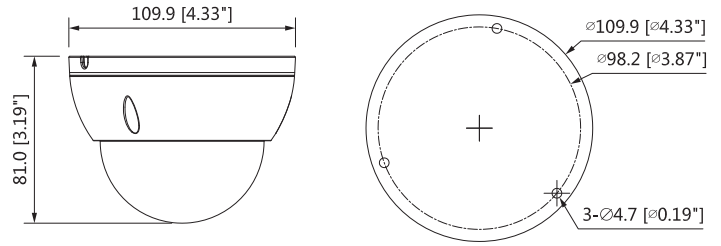|	
Operating Conditions	-40° C to +60° C (-40° F to +140° F), Less than 95% RH Initiate startup above -40° C (-40° F)
Storage Conditions	-40° C to +60° C (-40° F to +140° F), Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Aluminium
Dimensions	ø109.90 mm × 81.0 mm (ø4.33 in. x 3.19 in.)
Net Weight	0.31 kg (0.68 lb)
Gross Weight	0.41 kg (0.90 lb)

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
2 MP Camera	A21BL02	2 MP HDCVI IR Dome Camera, 2.8 mm
	A21BL03	2 MP HDCVI IR Dome Camera, 3.6 mm
Accessories	PFA136	Junction box (For use alone)
	PFB203W	Wall mount (For use alone or with PFA152 pole mount)
	PFA152	Pole mount (For use with PFB203W wall mount)
	PFM820	UTC Controller

Dimensions (mm/inch)

109.9 [4.33"]
81.0 [3.19"]
∅109.9 [∅4.33"]
∅98.2 [∅3.87"]
3-∅4.7 [∅0.19"]

Accessories

Optional:

PFA136 Junction box

PFB203W Wall mount

PFA152 Pole mount

PFM820 UTC Controller

Junction Mount	Pole Mount
PFA136	PFB203W + PFA152

Wall Mount
PFB203W