dahua TECHNOLOGY

2 MP HDCVI Vari-focal Dome Camera
2 MP HDCVI IR Dome Camera

HDCVI

- 2 MP at 30 fps Maximum Resolution
- HD and SD Switchable Output
- Supports Multiple Video Formats: HDCVI, CVBS, AHD and TVI
- 2.7 mm to 13.5 mm Vari-focal Lens
- Maximum IR Length 30 m (98 ft) with Smart IR
- IP67 Environmental Protection and IK10 Vandal Resistance
- Designed for Extreme Temperature Environments
- 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

Three Signals over a Single Coaxial Cable
HDCVI technology simultaneously transmits 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.

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 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. The camera complies with IK10 impact resistant rating to provide maximum durability against vandals, making it capable of withstanding the equivalent of 55 kg (120 lbs) of force.

With a built-in heater and 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.

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 F1.3 0 Lux (with IR on)
S/N Ratio	More than 65 dB
IR Distance	Up to 30 m (98.42 ft)
IR On/Off Control	Auto, Manual
IR LEDs	Two (2)

Lens

Lens Type	Vari-focal Lens / Fixed Iris
Mount Type	Board-in
Focal Length	2.7 mm to 13.5 mm
Max Aperture	F1.3
Horizontal Angle of View	104° to 27°
Focus Control	Manual
Close Focus Distance	200 mm (7.87 in.)

Pan / Tilt / Rotation

Range	Pan: 0° to 355° Tilt: 0° to 75° Rotation: 0° to 355°

Video

Resolution	2 MP (1920 x 1080)	
Frame Rate	2 MP 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 ±25%
Power Consumption	Maximum 3.4 W (12 VDC with IR on)

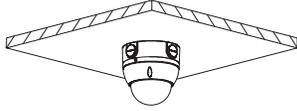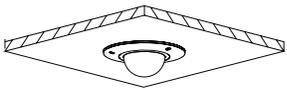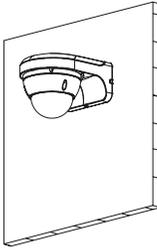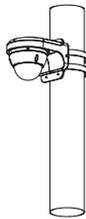### Environmental

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	ø122.0 mm × 88.90 mm (ø4.80 in. x 3.50 in.)
Net Weight	0.40 kg (0.88 lb)
Gross Weight	0.55 kg (1.21 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	A21BM0V	2 MP HDCVI IR Dome Camera
Accessories, optional	PFM321	12 VDC, 1 A Power Adapter
	PFA137	Junction box (For use alone)
	PFA152	Pole mount (Use with PFB203W wall mount)
	PFB200C	In-ceiling Mount
	PFB203W	Wall mount (Use alone or with PFA152 pole mount)
	PFM800	Passive HDCVI Balun
	PFM801	Passive HDCVI Balun with Power
	PFM810	PoC Transceiver
	PFM820	UTC Controller

Accessories

Optional:

PFA137
Junction Box

PFB203W
Wall Mount

PFA152
Pole Mount

PFB200C
In-ceiling Mount

PFM800
Passive HDCVI Balun

PFM801
Passive HDCVI Balun with Power

PFM810
PoC Transceiver

PFM820
UTC Controller

PFM321
Power Adapter

Junction Mount	Inceiling Mount
PFA137	PFB200C

Wall Mount	Pole Mount
PFB203W	PFB203W + PFA152

Dimensions (mm/inch)

122.0 mm
(4.80 in.)

88.90 mm
(ø3.50 in.)

ø122.0 mm
(ø4.80 in.)

3 x ø4.50 mm
(ø0.18 in.)

ø110.0 mm
(ø4.33 in.)