

# DH-HAC-B2A21

2MP HDCVI IR Bullet Camera





- · Max. 30fps@1080P
- · HD and SD output switchable
- · 3.6mm fixed lens (6mm optiona)
- · Max. IR length 20m, Smart IR
- · IP67, DC12V













## **System Overview**

Experience 1080P full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Cooper series 1080P HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

## **Functions**

#### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Cal-way data transmission allows the HDCVI camera to interact with the HCVI, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras

## **Long Distance Transmission**

HDCVI technology guarantees real-time transission at long distance without any loss. It supports up to 800 (2080P)/1200m(720P) transmission via coaxial cable, and up to 300 (1080P)/450m(720P) via UTP cable.\*

\*Actual results verified by real-scene testing in Datua's test laboratory.

## Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without relacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

#### Smart IR

The camera's designed with microcrystalline LED IR illumination for best lowlight to formance. Smart IR is a technology to ensure brightness uniformly in B/W image under low illumination. Dahua's unique Smart IR adjusts to the intensity of 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.

## Multi-formats

The capera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be witched over through OSD menu or by PFM820 (UTC controller). This feature makes the camera to be compatible with not only HCVRs but also wost end users' existing HD/SD DVRs.

#### Multi-language OSD

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 detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

## Protection

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

With working temperature range of 40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments.

Supporting  $\pm 30\%$  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.

# Cooper Series | DH-HAC-B2A21

Technical Specification		
Camera		
Image Sensor	1/2.7" CMOS	
Effective Pixels	1920(H)×1080(V), 2MP	
Scanning System	Progressive	
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000s	
Minimum Illumination	0.04Lux/F1.85, 30IRE, 0Lux IR on	
S/N Ratio	More than 65dB	
IR Distance	Up to 20m (66feet)	
IR On/Off Control	Auto / Manual	
Lens		
Lens Type	Fixed lens / Fixed iris	
Mount Type	Board-in	
Focal Length	3.6mm (6mm Optional)	
Max Aperture	F1.85	
Angle of View	H: 93° (54.7°)	
Focus Control	N/A	
Close Focus Distance	800mm (2000mm) 31.5" (78.74")	

## **DORI** Distance

Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

	DORI Definition	Distance
Detect	25px/m (8px/ft)	3 mm: 51m(167ft) 6 mm: 80m(262ft)
Observe	63px/m (19px/ft)	3.6mm: 20m(66ft) 6mm: 32m(105ft)
Recognize	125px/m (38px/ft)	3.6mm: 10m(33ft) 6mm: 16m(52ft)
Identify	250ppm (76pm)te)	3.6mm: 5m(17ft) 6mm: 8m(26ft)

## Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°
Video Resolution	
Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P
Video artput	1-channel BNC high definition video output / CVBS video output (Can switch)
Day/Night	Auto (ICR) / Manual

OSD Menu	Multi-language
BLC Mode	BLC / HLC / DWDR
WDR	DWDR
Gain Control	BLC / HLC / DWDR  DWDR  AGC  2D  Auto / Manual  Auto / Manual
Noise Reduction	2D
White Balance	Auto / Manual
Smart IR	Auto / Manual
Certifications	CE (EN55032 EN55024, EN50130-4) FCC (CFR-7 FCC Part 15 subpartB, ANSI C63.4-2014)
Interface	
Audio Interface	N/A
Eelectrical	
Audio Interface Eelectrical Power Supply	12V DC ±30%
Power Consumption	Max. 2.7W (12V DC, IR on)

## Environmental

Operations Conditions	-40°C $^{\sim}$ +60°C (-40°F $^{\sim}$ +140°F) / Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C $^{\sim}$ +60°C (-40°F $^{\sim}$ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67

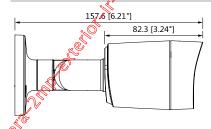
## Construction

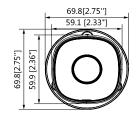
Casing	Aluminium
Dimensions	69.8mm×69.8mm×157.6mm (2.75"×2.75"×6.20")
Net Weight	0.25kg (0.55lb)
Gross Weight	0.30kg (0.66lb)

Ordering Information			
Туре	Part Number	Description	
2MP Camera	DH-HAC-B2A21P 3.6mm	2MP HDCVI IR Bullet Camera,	
	DH-HAC-B2A21P 6mm	PAL	
	DH-HAC-B2A21N 3.6mm	2MP HDCVI IR Bullet Camera, NTSC	
	DH-HAC-B2A21N 6mm		
Accessories	PFA134	Junction box (For use alone or with PFA152-E pole mount)	
	PFA152-E	Pole mount (For use with PFA134 junction box)	
	PFM800-E	Passive HDCVI Balun	
	PFM800-4K	Passive Video Balun	
	PFM800B-4K	Passive Video Balun	
	PFM321	12V 1A Power Adapter	
	PFM320D-015	12V 1.5A Power Adapter	
	PFM300	12V 2A Power Adapter	
	PFM820	UTC Controller	

# **Junction Mount Pole Mount** PFA134 PFB134 + PFA152-E

## Dimensions (mm/inch)





# **Accessories**

### Optional:



PFA134 Junction box



PFA152-E Pole mount



. . M800-E Passive HDCVI Baluro



PFM800B-4K Passive Video Balun



PFM321 12V 1A Power Adapter



PFM800-4K

Passive Video Balun

PFM320D-015 Power Adapter



PFM300 12V Nower Adapter



PFM820 UTC Controller

