

DH-HAC-B1A29N

2MP Full-color HDCVI Bullet Camera





- · 24/7 color imaging
- · 20 m illumination distance
- · Max. 30 fps@1080p
- · CVI/CVBS/AHD/TVI switchable
- · Fixed lens (2.8 mm; 3.6 mm optional)
- · IP67, 12V±30% DC













System Overview

Experience 2MP full HD color video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The full-color starlight HDCVI camera presents a high quality color image with rich details even in total dark conditions. It offers various fixed lens models with a multi-language OSD and HD/SD switchable output. It adopts one powerful warm white LED illuminators, covering an effective range up to 20 m (65.61 ft). The LEDs switch on automatically in darkness to capture detail-packed full-color images 24/7, ensuring anthentic identification of objects. It is an ideal choice for applications such as schools, retail centers and parking lots.

Functions

Full-color

The camera adopts F1.6 large aperture lens and 1/2.8" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera can present 24/7 colored image that provides color details to accurately identify people or objects in low light conditions.

Warm Supplemental lights

With one warm supplemental LED lights, the camera is able to provide a coloful and vivid image even in total dark. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposureing of the objects in the image center. Also, the sensitivity and intensity of the LED lights can be remotely controlled by OSD menu.

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. Dual-way data transmission allows the HDCVI camera to interact with the XVR, such as sending control signal or triggering alarm.

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

Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 700 m for 2MP HD video via coaxial cable, and up to 300 m via UTP cable.*

*Actual results verified by real-scene testing in Dahua'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 replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

Multiple-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820 (UTC controller). This feature makes the camera to be compatible with most end users' existing HD/SD DVRs.

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 mostunstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Lite Series | DH-HAC-B1A29N

| Technical Specification | | | | | | | | | | |
|--|----------------------------|---------|-------------------|------------------|-----------|----------|----------------------|-------------------------|--|--|
| Image Sensor | Technical Specification | | | | | | Noise Reduction | 2D NR | | |
| Effective Pixels 1920 (#1) × 1080 (V), 2MP | Camera | | | | | | Smart Light | Yes | | |
| Scanning System Progressive Certifications | Image Sensor | | 1/2.8 inch CMOS | | | | Mirror | Off/On | | |
| Electronic Shutter Speed | Effective Pixels | | 1920 (H) × 10 | 080 (V), 2MP | | | Privacy Masking | Off/On (8 area, rectan | gle) | |
| S/N Ratio > 65 dB POrt Minimum Illumination 0.01 Lux/F1.6, 0 Lux white light on Video Output Wideo output choices of CVI/TVI/AHD/CVBS by on BNC port Illumination Distance Distance up to 20 m (65.61 ft) Audio Interface N/A Illuminator On/Off Control Auto; manual Pan/Tilt/Rotation Range Pan: 0"-360" Tilt: 0"-90" Rotation: 0"-360" Lens Lens Type Fixed-focal Protection Grade | Scanning System | | Progressive | | | | Certifications | | | |
| Minimum Illumination O.01 Lux/F1.6, 0 Lux white light on Illumination Distance Distance up to 20 m (65.61 ft) Audio Interface N/A Audio Interface N/A Power Illuminator On/Off Control Auto; manual Power Supply Power Supply Power Consumption Max 3.1W (12V DC, white light on) Environment Condensation Derating Temperature Condensation Audio Interface N/A Power Power Supply Power Consumption Max 3.1W (12V DC, white light on) Environment Operating Temperature Operating Temperature -40°C to +60°C (-40°F to 140°F); <95% (non-condensation) Focal Length Max. Aperture File File File File Structure Casing Metal front cover + plastic main body + plastic by (diagonal x horizontal x vertical); 3.6 mm: 126.6° x 86.9° x 46.3° (diagonal x horizontal x vertical) Iris Type Fixed iris Conservation Casing Metal front cover + plastic main body + plastic by (diagonal x horizontal x vertical) Camera Dimensions 161.3 mm x 69.7 mm x 70.0 mm (6.35° x 2.75° | Electronic Shutter Speed | | | | | | Certifications | | The state of the s | |
| Illumination Distance Distance up to 20 m (65.61 ft) Audio Interface N/A Power Pam: 0"-360" Tilt: 0"-90" Rotation: 0"-360" Total Core Interface Max. Aperture Field of View Lens Lens Lens Lens Doral 2.8 mm: 126.2" × 106" × 56.5" (diagonal × horizontal × vertical) Iris Type Fixed iris Lens Lens Doral Doral Lens Doral | S/N Ratio | | > 65 dB | | | | Port | | | |
| Illuminator On/Off Control Auto; manual Power | Minimum Illumination | | 0.01 Lux/F1. | 6, 0 Lux white | light on | | Video Output | | of CVI/TVI/AHD/CVBS by one | |
| Illuminator Number 1 Pan/Tilt/Rotation Range Pan: 0"-360" Tilt: 0"-90" Rotation: 0"-360" Power Consumption Max 3.1W (12V DC, white light on) Environment Lens Environment | Illumination D | istance | Distance up | to 20 m (65.61 | . ft) | | Audio Interface | N/A | | |
| Pan/Tilt/Rotation Range | Illuminator On/Off Control | | Auto; manual | | | | Power | | | |
| Pan/Tilt/Rotation Range Tilt: 0°-90° Rotation: 0°-360° Lens Lens Type Fixed-focal Mount Type M12 Focal Length Max. Aperture Field of View Field of View Lens Fixed iris Lens Decay Fixed so, and a second s | Illuminator Nu | ımber | 1 | | | | Power Supply | 12V ±30% DC | | |
| Lens Type Fixed-focal Operating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Mount Type M12 Storage Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Focal Length 2.8 mm; 3.6 mm Protection Grade IP67 Max. Aperture F1.6 Structure 2.8 mm; 126.2° × 106° × 56.5° (diagonal × horizontal × vertical); 3.6 mm; 103.6° × 86.9° × 46.3° (diagonal × horizontal × vertical) Iris Type Fixed iris Close Focus Distance 2.8 mm; 0.7 m (2.29 ft); 3.6 mm; 1.2 m (3.94 ft) DORI 2.8 mm 43.9 m (7.57 m) 8.8 m (4.4 m) (19.87 ft) (19.87 ft | Pan/Tilt/Rotation Range | | | | | | Power Consumption | Max 3.1W (12V DC, wh | nite light on) | |
| Lens Type Fixed-focal Mount Type M12 Storage Temperature —40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Focal Length 2.8 mm; 3.6 mm Protection Grade IP67 Max. Aperture F1.6 Structure Casing Metal front cover + plastic main body + plastic by diagonal x horizontal x vertical); 3.6 mm: 103.6° x 86.9° x 46.3° (diagonal x horizontal x vertical) Iris Type Fixed iris Close Focus Distance 2.8 mm: 0.7 m (2.29 ft); 3.6 mm: 1.2 m (3.94 ft) Lens Detect Observe Recognize Identify DORI 2.8 mm (17.5 m 8.8 m 4.4 m (17.5 m) 8.8 m (| | | Rotation: 0°–360° | | | | Environment | Environment | | |
| Mount Type M12 Focal Length 2.8 mm; 3.6 mm Protection Grade IP67 Max. Aperture F1.6 Structure 2.8 mm; 126.2° × 106° × 56.5° (diagonal × horizontal × vertical); 3.6 mm: 103.6° × 86.9° × 46.3° (diagonal × horizontal × vertical) Iris Type Fixed iris Casing Metal front cover + plastic main body + plastic by Camera Dimensions 161.3 mm × 69.7 mm × 70.0 mm (6.35" × 2.75" × 0.20 kg (0.44 lb) Close Focus Distance 2.8 mm; 0.7 m (2.29 ft); 3.6 mm; 1.2 m (3.94 ft) DORI 2.8 mm 43.9 m (4.4 a.2 ft) (2.8 8.8 m (4.4 m (4.4 2.5 ft)) (3.8 8.8 m (4. | | | Fixed-focal | | | | Operating Temperatur | Α | to 140°F); <95% (non- | |
| Max. Aperture F1.6 Structure Casing Metal front cover + plastic main body + plastic by (diagonal × horizontal × vertical); 3.6 mm: 103.6° × 86.9° × 46.3° (diagonal × horizontal × vertical) Iris Type Fixed iris Close Focus Distance Detect Detect Detect Detect Doserve Recognize Identify DORI 2.8 mm 43.9 m 17.5 m 8.8 m 4.4 m (104.4.0.3 ft) (108.97 ft) (109.97 f | Mount Type | | M12 | | | | Storage Temperature | | to 140°F); <95% (non- | |
| Field of View 2.8 mm: 126.2° × 106° × 56.5° (diagonal × horizontal × vertical); 3.6 mm: 103.6° × 86.9° × 46.3° (diagonal × horizontal × vertical) Iris Type Fixed iris Camera Dimensions 161.3 mm × 69.7 mm × 70.0 mm (6.35" × 2.75" × Net Weight 0.20 kg (0.44 lb) Fixed iris Close Focus Distance 2.8 mm: 0.7 m (2.29 ft); 3.6 mm: 1.2 m (3.94 ft) Lens Detect Observe Recognize Identify DORI 2.8 mm 43.9 m 17.5 m 8.8 m 4.4 m (144.03 ft) (19.9.7 ft) (14.4.25 ft) | Focal Length | | 2.8 mm; 3.6 | mm | | | Protection Grade | IP67 | | |
| Field of View (diagonal × horizontal × vertical); 3.6 mm: 103.6° × 86.9° × 46.3° (diagonal × horizontal × vertical) Iris Type Fixed iris Camera Dimensions 161.3 mm × 69.7 mm × 70.0 mm (6.35" × 2.75" × Net Weight 0.20 kg (0.44 lb) Gross Weight 0.28 kg (0.62 lb) Close Focus Distance 2.8 mm: 0.7 m (2.29 ft); 3.6 mm: 1.2 m (3.94 ft) Lens Detect Observe Recognize Identify DORI 2.8 mm 43.9 m 17.5 m 8.8 m 4.4 m (14.4.03 ft) (19.9.7 | Max. Aperture | | F1.6 | | | | Structure | Structure | | |
| Signature Sign | Field of View | | | | | | Casing | Metal front cover + pla | astic main body + plastic bracke | |
| Close Focus Distance 2.8 mm: 0.7 m (2.29 ft); 3.6 mm: 1.2 m (3.94 ft) Lens Detect Observe Recognize Identify DORI 2.8 mm 43.9 m 17.5 m 8.8 m 4.4 m (14.4.0.2 ft) (19.9.27 ft) (| | | 3.6 mm: 103 | .6° × 86.9° × 40 | 6.3° | | Camera Dimensions | 161.3 mm × 69.7 mm × | < 70.0 mm (6.35" × 2.75" × 2.75' | |
| Close Focus Distance 3.6 mm: 1.2 m (3.94 ft) Lens Detect Observe Recognize Identify DORI 2.8 mm (3.94 ft) (57.41 ft) (38.97 ft) (14.42 ft) | Iris Type | | Fixed iris | | | | Net Weight | 0.20 kg (0.44 lb) | | |
| DORI 2.8 mm 43.9 m 17.5 m 8.8 m 4.4 m (14.4.02 ft) (12.8.7 ft) (14.4.2 ft) | Close Focus Distance | | · · · | | | | Gross Weight | 0.28 kg (0.62 lb) | | |
| 2.8 mm (144.02 ft) (57.41 ft) (29.97 ft) (14.42 ft) | | Lens | | | Recognize | Identify | | | | |
| | | 2.8 mm | | | | | | | | |

Video

| Frame Rate | CVI: PAL: 1080p@25 fps; 720p@25 fps; NTSC: 1080p@30 fps; 720p@30 fps; AHD: PAL: 1080p@25 fps; NTSC: 1080p@30 fps TVI: PAL: 1080p@25 fps; NTSC: 1080p@30 fps CVBS: PAL: 960H; NTSC: 960H |
|---------------|---|
| Resolution | 1080p (1920 × 1080); 720p (1280 × 720); 960H (960 × 576/960 × 480) |
| BLC | BLC/DWDR |
| WDR | DWDR |
| White Balance | Auto; manual |
| Gain Control | Auto; manual |

55.2 m (181.1 ft)

3.6 mm

22.1 m (72.5 ft)

11.0 m (36.1 ft)

5.5 m (18.0 ft)

| Ordering Information | | | | | | |
|----------------------|---------------------------------|---|--|--|--|--|
| Туре | Part Number | Description | | | | |
| | DH-HAC-HFW1209CP- LED 2.8 mm | | | | | |
| | DH-HAC-HFW1209CN- LED 2.8 mm | 2MP Full-color HDCVI Bullet Camera | | | | |
| | DH-HAC-HFW1209CP- LED 3.6 mm | | | | | |
| 2MP Camera | DH-HAC-HFW1209CN- LED 3.6 mm | | | | | |
| ZIMP Camera | | ZIVIF Tull-Color FIDE VI Bullet Calliera | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | PFA134 | Junction Box | | | | |
| | PFA130-E | IP66 Junction Box | | | | |
| | PFA152-E | Pole Mount Bracket | | | | |
| Accessories | PFM321D | 12V 1A Power Adapter | | | | |
| | PFM904 | Integrated Mount Tester | | | | |
| | PFM820 | UTC controller (Only 1080P and below are available) | | | | |
| | PFM800-E | Passive HDCVI Balun | | | | |

| Junction Mount | Junction Mount |
|----------------------|----------------|
| PFA134 | PFA130-E |
| | |
| | |
| Pole Mount(Vertical) | |
| PFA130-E+PFA152-E | |
| | |

Accessories

Optional:



PFA134 Junction Box



PFA130-E IP66 Junction Box



PFA152-E Pole Mount Bracket



PFM321D 12V 1A Power Adapter

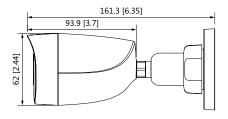


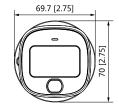
PFM904 Integrated Mount Tester

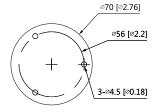


PFM820 UTC controller (Only 1080P and below are available)

Dimensions (mm[inch])









Passive HDCVI Balun