

# DH-HAC-HUM3201BP-P

## 2MP Starlight HDCVI Pinhole Camera



### HDCVI

- Starlight, 120dB true WDR, 3DNR
- Max 30fp@1080P
- HD and SD output switchable
- 2.8mm fixed lens
- Audio in interface
- DC12V



### System Overview

Experience full HD 1080P video with the simplicity of using existing cabling infrastructure. The starlight HDCVI pinhole camera presents high quality image with rich details even under extreme lowlight environment and supports 120dB true WDR. It offers multi-language OSD and HD/SD switchable output. The compact design and high image performance makes the pinhole camera an ideal choice for invisible monitoring applications such as ATM.

### Functions

#### Elaborate Design

For better adapting the applications for invisible monitoring, the pinhole camera is designed with micro-sized compact case, which minimizes the interference against on-going activities. Taking aesthetics requirements into consideration, the body of the camera is all-black.

#### 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 HCVR, 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.

#### 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.

#### Starlight

With the adoption of high performance sensor, the camera is able to provide incomparable performance even under extreme lowlight environment. The starlight feature allows more details to be captured and accurate color to be recognized at night or in scenes with limited illumination.

#### Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide amazing usable video.

#### Multi-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 not only HCVRs but also most 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 and privacy mask. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

#### Protection

Supporting  $\pm 25\%$  input voltage tolerance, this camera suits the unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

#### Broadcast-quality Audio

Audio information is used as supplementary evidence in video surveillance applications. The HDCVI camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

## Technical Specification

### Camera

Image Sensor	1/2.8 inch CMOS
Effective Pixels	1920 (H) × 1080 (V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3s–1/100000s NTSC: 1/4s–1/100000s
S/N Ratio	>65 dB
Minimum Illumination	Color: 0.004LuxLux/F2.4 Black & White: 0.0004LuxLux/F2.4

### Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm
Max. Aperture	F2.4
Angle of View	117.9° × 103° × 59° (diagonal x horizontal x vertical)
Iris Type	Fixed iris
Close Focus Distance	0.5 m (1.6 ft)
DORI Distance	D: 42.1 m (138.1ft); O: 16.8 m (55.1 ft); R: 8.4 m (27.6 ft); I: 4.2 m (13.8 ft)

### Video

Frame Rate	CVI: PAL: 1080P@25fps, 720P@25/50fps NTSC: 1080P@30fps, 720P@30/60fps AHD: PAL: 1080P@25fps, 720P@25fps NTSC: 1080P@30fps, 720P@30fps TVI: PAL: 1080P@25fps, 720P@25ps NTSC: 1080P@30fps, 720P@30ps CVBS: PAL: 960 × 576H NTSC: 960 × 480H
Resolution	1080P (1920 × 1080); 720P (1280 × 720); 960H (704 × 576/704 × 480)
Day/Night	Auto switch by ICR
BLC	BLC/HLC/WDR
WDR	120 dB
White Balance	Auto; manual
Gain Control	Auto; manual
Noise Reduction	3D NR
Smart IR	Yes
Electronic Defog	Yes
Digital Zoom	4 ×
Mirror	Off/On
Privacy Masking	Off/On

### Certifications

Certifications	CE (EN55032, EN55024, EN50130-4, EN60950-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
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### Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Audio Input	One channel, RCA sound pick-up port

### Power

Power Supply	12V ±30% DC
Power Consumption	Max 2.11W

### Environmental

Operating Temperature	-30°C to +60°C (-22°F to 140°F); <95% (non-condensation)
Storage Temperature	-30°C to +60°C (-22°F to 140°F); <95% (non-condensation)
Protection Grade	NA

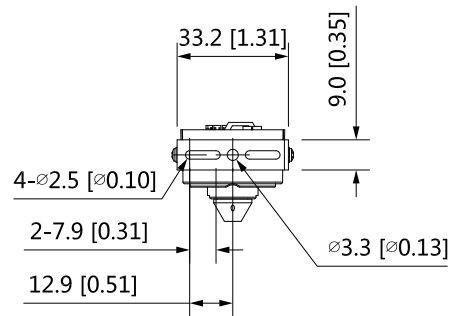
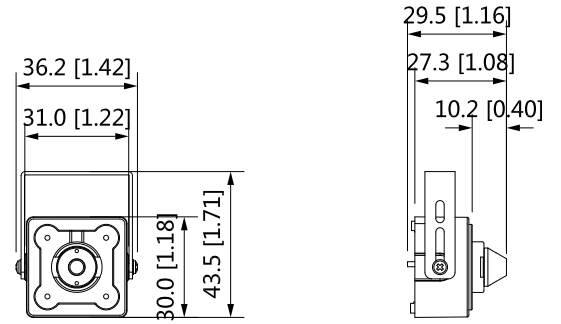
### Construction

Casing	Metal throughout the whole casing
Camera Dimensions	43.5 mm × 36.2 mm × 29.5 mm (1.71" × 1.43" × 1.16")
Net Weight	0.04 kg (0.09 lb)
Gross Weight	0.14 kg (0.31 lb)

**Ordering Information**

Type	Part Number	Description
2MP Camera	DH-HAC-HUM3201BP-0280P-S2	2MP Starlight HDCVI Pinhole Camera
	DH-HAC-HUM3201BN-0280P-S2	
	HAC-HUM3201BP-0280P-S2	
	HAC-HUM3201BN-0280P-S2	
Accessories	PFM321	12V 1A Power Adapter
	PFM320D-015	12V 1.5A Power Adapter
	PFM320	12V 2A Power Adapter

**Dimensions (mm[inch])**



**Accessories**

Optional:



PFM321  
12V 1A Power Adapter



PFM320  
12V 2A Power Adapter



PFM320D-015  
Power Adapter

