

DH-SD22204DB-GC

2MP 4x Starlight HDCVI PTZ Camera



- 1/2.8" 2Megapixel CMOS.
- Powerful 4x optical zoom.
- Starlight technology.
- 2D NR; 3D NR.
- Max. 25/30 fps@1080p, 25/30/50/60 fps@720p.
- IP66, IK10.



System Overview

With its powerful optical zoom, and accurate pan and tilt capabilities, the HDCVI PTZ camera series provides an all-in-one solution for large-scale monitoring. It harnesses the latest starlight technology, allowing it to produce highly detailed images even in low light conditions. These cameras offer smooth control and high-grade protection that enable them to meet the requirements of video surveillance in small and medium-sized scenes.

Functions

Starlight Technology

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

3DNR

Dahua's 3DNR technology reduces image noise with little to no impact on image sharpness, especially in poor lighting conditions. It detects the noise, and compares the sequential frames to effectively reduce the noise. It also makes efficient use of bandwidth, saving on storage space.

Long Distance Transmission

HDCVI technology provides long distance transmission in real time without transmission loss. It supports transmission distances up to 300m for 2MP HD videos through coaxial cables, and up to 200m through UTP cables.

*The results were obtained and verified through rigorous testing in Dahua's test laboratory.

3 Signals over 1 Coaxial Cable

HDCVI technology supports 3 signals (video, audio* and data) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms.

* Audio input is available for select HDCVI camera models.

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

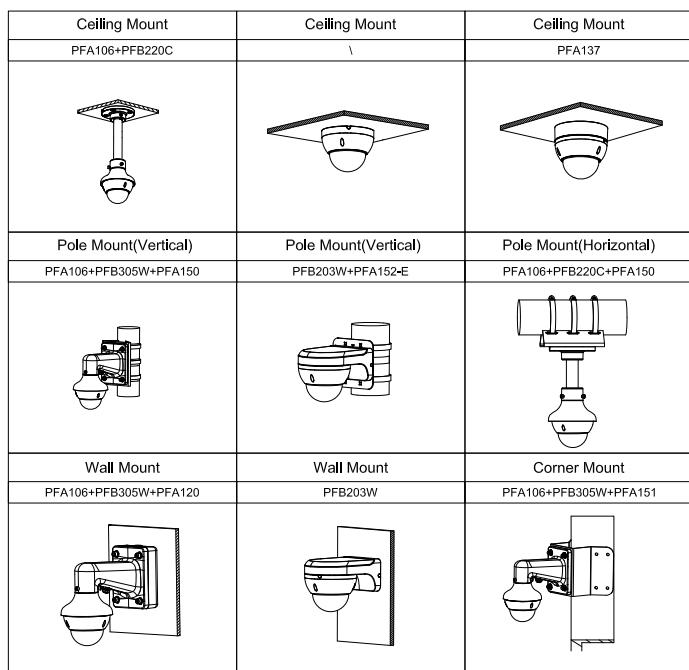
Protection (IP66, TVS 6000 V)

IP66, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

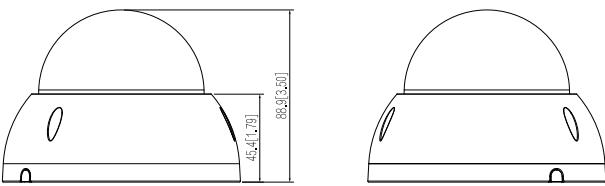
| Technical Specification | | | | |
|---|--|-----------------------|----------------------|----------------------|
| Camera | | | | |
| Image Sensor | 1/2.8" CMOS | | | |
| Pixel | 2 MP | | | |
| Max. Resolution | 1920 (H) × 1080 (V) | | | |
| ROM | 128 MB | | | |
| RAM | 256 MB | | | |
| Electronic Shutter Speed | 1/3 s~1/30,000 s | | | |
| Scanning System | Progressive | | | |
| Min. Illumination | 0.005lux@F1.6 (Color, 30 IRE); 0.0005lux@F1.6 (B/W, 30 IRE) | | | |
| Lens | | | | |
| Focal Length | 2.7 mm~11 mm | | | |
| Max. Aperture | F1.6~F3.0 | | | |
| Field of View | H: 99.1°~31.9° V: 53.4°~18.0° D: 117.7°~36.6° | | | |
| Optical Zoom | 4× | | | |
| Focus Control | Auto; semi-auto; manual | | | |
| Close Focus Distance | 1 m (3.28 ft) | | | |
| DORI Distance | Detect | Observe | Recognize | Identify |
| | 151.7 m (497.70 ft) | 59.9 m (196.52 ft) | 30.3 m (99.41 ft) | 15.2 m (49.87 ft) |
| *DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool. | | | | |
| PTZ | | | | |
| Pan/Tilt Range | Pan: 0° to 355°; Tilt: 0° to +90° (When the vertical field of view is between 0° and 10°, the device case will block part of the image) | | | |
| Manual Control Speed | Pan: 0.1°~100°/s Tilt: 0.1°~60°/s | | | |
| Preset Speed | Pan: 100°/s; Tilt: 60°/s | | | |
| Preset | 300 | | | |
| Tour | 8 (up to 32 presets per tour) | | | |
| Power-off Memory | Yes | | | |
| Idle Motion | Preset; Tour | | | |
| PTZ Protocol | DH-SD Pelco-P/D (Auto recognition) | | | |
| Video | | | | |
| Resolution | 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480) | | | |
| Video Frame Rate | 1080p (25/30 fps); 720p (25/30/50/60 fps) | | | |
| Day/Night | Yes | | | |
| BLC | Yes | | | |
| WDR | DWDR | | | |
| HLC | Yes | | | |
| White Balance | Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/Natural/Street lamp | | | |
| Gain Control | Auto/Manual | | | |
| Noise Reduction | 2D NR; 3D NR | | | |
| Defog | Electronic | | | |
| Digital Zoom | 16× | | | |
| Image Rotation | 180° | | | |
| S/N Ratio | ≥50 dB | | | |
| Function | | | | |
| CVI Product Output Mode | TVI;CVI;CVBS;AHD (CVBS is only used for debugging) | | | |
| Certification | | | | |
| Certifications | CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpart B, ANSI C63.4-2014 UL: UL60950-1+CAN/CSA C22.2, No.60950-1 | | | |
| Port | | | | |
| Analog Output | 1 channel (CVBS/CVI output, BNC) | | | |
| RS-485 | 1 (baud rate range: 1200 bps~9600 bps) | | | |
| Power | | | | |
| Power Supply | 12VDC,1.5 A ± 10% | | | |
| Power Consumption | Basic: 7 W Max.: 9 W (PTZ) | | | |
| Environment | | | | |
| Operating Temperature | -30 °C to +60 °C (-22 °F to +140 °F) | | | |
| Operating Humidity | ≤95% (RH) | | | |
| Protection | IP66; IK10; TVS 6000V lightning proof; surge protection; voltage transient protection | | | |
| Structure | | | | |
| Product Dimensions | 88.9 mm × Φ122.0 mm (3.50" × Φ4.80") | | | |
| Net Weight | 0.6 kg (1.32 lb) | | | |
| Gross Weight | 0.65 kg (1.43 lb) | | | |

Ordering Information

| Type | Model | Description |
|------------------------|------------------|---|
| 2MP HDCVI Camera | DH-SD22204DB-GC | 2MP 4x Starlight PTZ HDCVI Camera, PAL |
| | DH-SD22204DBN-GC | 2MP 4x Starlight PTZ HDCVI Camera, NTSC |
| | SD22204DB-GC | 2MP 4x Starlight PTZ HDCVI Camera, PAL |
| | SD22204DBN-GC | 2MP 4x Starlight PTZ HDCVI Camera, NTSC |
| Accessories (Optional) | DC12V/1.5A | Power Adapter |
| | PFA106 | Mount Adapter |
| | PFB220C | Ceiling Mount Bracket |
| | PFA137 | Junction Box |
| | PFB305W | Wall Mount Bracket |
| | PFA150 | Pole Mount Bracket |
| | PFB203W | Wall Mount Bracket |
| | PFA152-E | Pole Mount Bracket |
| | PFA120 | Junction Box |
| | PFA151 | Corner Mount Bracket |



Dimensions (mm [inch])



Accessories

Optional:



DC12V/1.5A Power Adapter



PFA106 Mount Adapter



PFB220C Ceiling Mount Bracket



PFA137 Junction Box



PFB305W Wall Mount Bracket



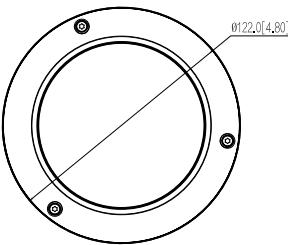
PFA150 Pole Mount Bracket



PFB203W Wall Mount Bracket



PFA152-E Pole Mount Bracket



PFA151 Corner Mount Bracket