a)hua TECHNOLOGY

DH-HAC-HDBW2231R-Z-POC

2MP Starlight HDCVI PoC IR Dome Camera

HDCVI

· Starlight, 120dB true WDR, 3DNR
· Max 30fps@1080P
· HD and SD output switchable
· 2.7-13.5mm motorized lens
· Max. IR length 30m, Smart IR
· IP67, IK10, POC/DC12V

| Pro Series | 1080p FULL HD | Starlight | WDR | 30m IR | DC 12V | IP67 | Vandal-proof |

System Overview

Experience full HD 1080P video with the simplicity of using existing coaxial infrastructure. The starlight HDCVI camera presents high quality image with rich details even under extreme lowlight environment and supports 120dB true WDR. This model is a PoC camera which can be powered by PoC XVR or PoC transmitter over a single coaxial cable with video, requiring no separate power supplies. PoC reduces time and cost for users, making it an ideal choice for applications with complex deployment but a tight budget.

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. 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.

Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 800m for 1080P Full HD video via coaxial cable, and up to 300m via UTP cable. PoC power supply supports transmission distance up to 400m for 1080P via coaxial 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.

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 usable video.

Advanced 3DNR

3DNR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. Dahua's advanced 3DNR technology allows remarkable noise reduction with little impact to sharpness, especially under limited lighting condition. Besides, the advanced 3DNR effectively decreases the band width and saves the storage space.

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. Please note that PoC can be supported only in the HDCVI video format.

Smart IR

The camera is designed with array LED IR illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity 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.

Large Aperture Lens

The camera adopts high-end F1.3 large aperture lens. With higher amount of absorbed light, the camera presents an impressive lowlight performance.

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 55kg (120lbs) of force.
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.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Effective Pixels	1937(H)×1097(V), 2.1MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/4s~1/100000s NTSC: 1/3s~1/100000s
Minimum Illumination	0.005Lux/F1.3, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 30m (98feet)
IR On/Off Control	Auto / Manual
IR LEDs	2

Lens

Lens Type	Motorized lens / Fixed iris
Mount Type	Board-in
Focal Length	2.7-13.5mm
Max Aperture	F1.3
Angle of View	H: 102°~29°
Focus Control	Auto / Manual
Close Focus Distance	200mm 7.87''

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.

		Distance	
		Wide	Tele
Detect	25px/m (8px/ft)	47m(153ft)	153m(502ft)
Observe	63px/m (19px/ft)	19m(61ft)	61m(201ft)
Recognize	125px/m (38px/ft)	9m(31ft)	31m(100ft)
Identify	250ppm (76px/ft)	5m(15ft)	15m(50ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 355° Tilt: 0° ~ 75° Rotation: 0° ~ 355°

Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30fps@720P
Video Output	1-channel BNC high definition video output / CVBS video output (Can switch)

Day/Night

Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / WDR
WDR	120dB
Gain Control	AGC
Noise Reduction	2D / 3D
White Balance	Auto / Manual
Smart IR	Auto / Manual

Certifications

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

Interface

Audio Interface	N/A

Eelectrical

Power Supply	POC/12V DC ±25%
Power Consumption	Max 8.8W (12V DC, IR on)
Power Output	12V DC, Max.2W

Environmental

Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH * Start up should be done at above -40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection &Vandal Resistance	IP67 & IK10

Construction

Casing	Aluminium
Dimensions	Φ122mm×88.9mm (Φ4.8"×3.5")
Net Weight	0.48kg (1.06lb)
Gross Weight	0.63kg (1.39lb)

Ordering Information

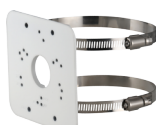| Type	Part Number	Description
2MP Camera	DH-HAC-HDBW2231RP-Z-POC 2.7~13.5mm	2MP Starlight HDCVI PoC IR Dome Camera, PAL
	DH-HAC-HDBW2231RN-Z-POC 2.7~13.5mm	2MP Starlight HDCVI PoC IR Dome Camera, NTSC
Accessories	PFA137	Junction box (For use alone)
	PFB203W	Wall mount (For use alone or with PFA152-E pole mount)
	PFA152-E	Pole mount (For use with PFB203W wall mount)
	PFB200C	In-ceiling mount (For use alone)
	PFA200W	Rain Shade (For use with PFB203W wall mount or with PFB203W wall mount and PFA152-E pole mount)
	PFM811-4CH	POC transmitter (PSE end)
	PFM321	12V 1A power adapter
	PFM320	12V 2A power adapter

Accessories

Optional:

PFA137 Junction box

PFB203W Wall mount

PFA152-E Pole mount

PFA200W Rain Shade

PFM811-4CH POC transmitter (PSE end)

PFM321 12V 1A Power Adapter

PFM320 12V 2A Power Adapter

Junction Mount	Inceiling Mount
PFA137	PFB200C
Wall Mount	Pole Mount
PFB203W	PFB203W + PFA152-E
Wall Mount with Rain Shade	Pole Mount with Rain Shade
PFB203W+PFA200W	PFB203W + PFA152-E+PFA200W

Dimensions (mm/inch)

122.0 [4.8"] 88.9 [3.5"] ⌀122.0 [⌀4.8"] 3-⌀4.5 [⌀0.18"] ⌀110.0 [⌀4.33"]