dahua TECHNOLOGY

DH-HAC-HDBW2241R-Z-POC
2MP Starlight HDCVI POC IR Dome Camera

HDCVI

· Starlight, 120dB true WDR, 3DNR
· Max. 30fps@1080P
· HD/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 | PoC DC 12V | Vandal-proof | IP67

System Overview

Experience 1080P full HD video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The Starlight HDCVI camera with 120dB true WDR presents a high quality image with rich details even in extreme low-light conditions. 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 installation time and costs, 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.

* POC function is available only in HDCVI mode.

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 an IK10 vandal resistance rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in).
Supporting ±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.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Effective Pixels	1920(H)×1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3s~1/100000s NTSC: 1/4s~1/100000s
Minimum Illumination	0.004Lux/F1.6, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 40m (131feet)
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	F1.6
Angle of View	H: 108.7°~28.7°
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.

	DORI Definition	Distance	
		Wide	Tele
Detect	25px/m (8px/ft)	44m(144ft)	153m(502ft)
Observe	63px/m (19px/ft)	18m(59ft)	61m(200ft)
Recognize	125px/m (38px/ft)	9m(30ft)	31m(102ft)
Identify	250px/m (76px/ft)	5m(16ft)	15m(49ft)

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
Video Output	1-channel BNC high definition video output / CVBS video output
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 ±30%
Power Consumption	Max. 6.7W (12V DC, IR on)
Power Output	12V DC, Max.2W

Environmental

Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH *-30°C ~ +45°C (-22°F ~ +113°F) With 2W power output. * Start up should be done at above-30°C (-22°F)
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67 & IK10

Construction

Casing	Aluminium
Dimensions	Φ122mm×88.9mm (Φ4.8"×3.5")
Net Weight	0.46kg (1.01lb)
Gross Weight	0.56kg (1.23lb)

Ordering Information

Type	Part Number	Description
2MP Camera	DH-HAC-HDBW2241RP-Z-POC	2MP Starlight HDCVI POC IR Dome Camera, PAL
	DH-HAC-HDBW2241RN-Z-POC	2MP Starlight HDCVI POC IR Dome Camera, NTSC
Accessories	PFA137	Junction box (For use alone)
	PFB200C	Inceiling mount (For use alone)
	PFB203W	Junction box (For use alone or with PFA152-E pole mount)
	PFA152-E	Pole mount (For use with PFA137 junction box)
	PFA200W	Rain Shade of Dome Camera
	PFA106	Adapter Plate of Mini Dome & Eyeball Camera
	PFB220C	Ceiling Mount Bracket of Mini Dome & Eyeball Camera
	PFM811-4CH	POC transmitter (PSE end)
	PFM321	12V 1A Power Adapter
	PFM320	12V 2A Power Adapter
	PFM300	12V 2A Power Adapter

Accessories

Optional:

PFA137
Junction box

PFB200C
Inceiling mount

PFB203W
Junction box

PFA152-E
Pole mount

PFA200W
Rain shade

PFA106
Adapter plate

PFB220C
Ceiling mount bracket

PFM811-4CH
POC transmitter
(PSE end)

PFM321
12V 1A Power Adapter

PFM320
12V 2A Power Adapter

PFM300
12V 2A Power Adapter

Junction Mount	In-ceiling Mount
PFA137	PFB200C

Wall Mount	Pole Mount
PFB203W	PFB203W + PFA152-E

Wall Mount with Rain Shade	Ceiling Mount (Extensible)
PFA137+PFA200W	PFA106+PFB220C

Pole Mount with Rain Shade	
PFA137+PFA200W+PFA152-E	

Dimensions (mm/inch)

122.0 [4.8"]

88.9 [3.5"]

⌀122.0 [⌀4.8"]

3-⌀4.5 [⌀0.18"]

⌀110.0 [⌀4.33"]