

# DH-HAC-HDBW2402R-Z-DP

4MP Starlight+ HDCVI IR Dome Camera

# HDCVI



- · Starlight+, 120dB true WDR, 3DNR
- · Max. 30fps@4MP
- · HD/SD output switchable
- · Audio in interface
- · 3.7-11mm motorized lens
- · Max. IR length 30m, Smart IR
- · IP67, IK10, AC24V/DC12V±30%

















#### **System Overview**

Experience 4 megapixel video with the simplicity of reusing existing coaxial infrastructure. The 4MP starlight HDCVI camera presents a high quality image with rich details even under extreme low-light conditions. The camera also features broadcast-quality audio to provide enhanced supplementary evidence collection. It offers various motorized/fixed lens models with 120dB true WDR and HD/SD switchable output. The higher resolution and starlight feature makes the 4MP HDCVI camera an ideal choice for mid to large-size businesses and projects where both highly reliable surveillance and construction flexibility are needed.

#### **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 real-time transmission at long distance without any loss. It supports up to 700m transmission for 4MP HD video via coaxial cable, and up to 300m 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.

#### Starlight

With the adoption of large sized 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.

#### **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.

#### Multiple-formats

The camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats in the market. A DIP switch located on the cable allows you to quickly toggle formats, further simplifying installation and debugging. This feature makes the camera compatible with not only XVRs, but also most existing HD/SD DVRs.

#### 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.

#### **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.

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  $\pm 30\%$  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	1/1.8" CMOS		
Effective Pixels	2560(H)×1440(V), 4MP		
Scanning System	Progressive		
Electronic Shutter Speed	PAL: 1/25s~1/100,000s NTSC: 1/30s~1/100,000s		
Minimum Illumination	0.002Lux/F1.9, 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	3.7-11mm		
Max Aperture	F1.9		
Angle of View	H: 114.3°~47.2° V: 61.7°~26.8°		
Focus Control	Auto / Manual		
Close Focus Distance	1500mm 59.06"		

#### **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	Distance		
	Definition	Wide	Tele	
Detect	25px/m (8px/ft)	58m(189ft)	131m(429ft)	
Observe	63px/m (19px/ft)	23m(75ft)	52m(172ft)	
Recognize	125px/m (38px/ft)	12m(38ft)	26m(86ft)	
Identify	250px/m (76px/ft)	6m(19ft)	13m(43ft)	

## Pan / Tilt / Rotation

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

### Video

Resolution	4MP (2560×1440)
Frame Rate	25/30fps@4MP, 25/30fps@1080P
Video Output	1-channel BNC high definition video output / CVBS video output (DIP switch)
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	1ch in
Eelectrical	
Power Supply	AC 24V±30% / DC 12V±30%
Power Output	DC 12V / Max. 2W
Power Consumption	Max. 11.8W (12V DC, IR on)
Environmental	
Operating Conditions	-30°C $^{\sim}$ +60°C (-22°F $^{\sim}$ +140°F) / Less than 95% RH * 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	Ф122mm×88.9mm (Ф4.8"×3.5")
Net Weight	0.48kg (1.05lb)

0.65kg (1.43lb)

Gross Weight

# Pro Series | DH-HAC-HDBW2402R-Z-DP

Ordering Information				
Туре	Part Number	Description		
4440.0	DH-HAC-HDBW2402RP-Z-DP 3.7~11mm	4MP Starlight HDCVI IR Dome Camera, PAL		
4MP Camera	DH-HAC-HDBW2402RN-Z-DP 3.7~11mm	4MP Starlight HDCVI IR Dome Camera, NTSC		
Accessories	PFA137	Junction box (For use alone)		
	PFB200C	Inceiling mount (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)		
	FPA200W	Rain shade (For use with PFB203W wall mount or with PFB203W wall mount and PFA152-E pole mount)		
	PFA106	Adapter Plate of Mini Dome & Eyeball Camera		
	PFB220C	Ceiling Mount Bracket of Mini Dome & Eyeball Camera		
	PFM800-4K	Passive Video Balun		
	PFM800B-4K	Passive Video Balun		
	PFM320	12V 2A Power Adapter		
	PFM300	12V 2A Power Adapter		

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#### Optional:



PFA137 Junction box



PFA152-E Pole mount



Ceiling mount bracket







Inceiling mount



PFA200W Rain shade



PFM800K-4K



Passive Video Balun



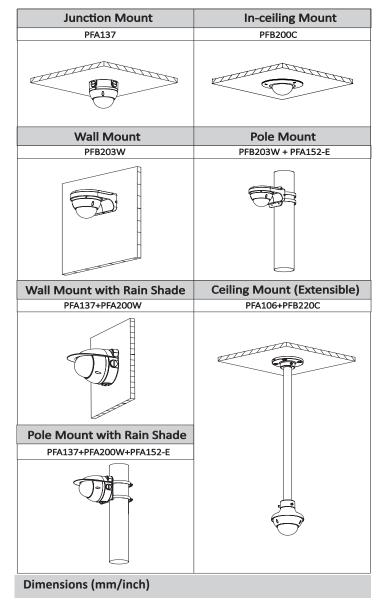
PFB203W

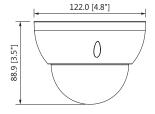
PFA106

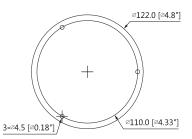
Adapter plate

Junction box

Passive Videol Balun









12V 2A Power Adapter

