

# DH-HAC-HDW1230EM-A

2MP Starlight HDCVI IR Eyeball Camera





- · Starlight
- · Max. 30fps@1080P
- · HD and SD output switchable
- · Built-in mic
- · 3.6mm fixed lens (2.8mm, 6mm optional)
- · Max. IR length 50m, Smart IR
- · IP67, DC12V

















#### **System Overview**

Experience 1080P full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The 1080P starlight HDCVI camera presents a high quality image with rich details even under extreme low-light conditions. Also, the Lite series features compact design and friendly price. It offers various motorized vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

#### **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 XVR, 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 800m(1080P)/1200m(720P) transmission via coaxial cable, and up to 300m(1080P)/450m(720P) 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 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.

#### **Smart IR**

The camera is designed with IR LED 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.

#### **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.

#### 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 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, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

#### **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.

With working temperature range of-40  $^{\circ}$ C to +60  $^{\circ}$ C (-40  $^{\circ}$ F to +140  $^{\circ}$ F), the camera is designed for extreme temperature environments.

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.

# Lite Series | DH-HAC-HDW1230EM-A

Technical Specification			Video Ou	
Camera			Day/Nigh	
Image Sensor	1/2.8" CMOS		OSD Men	
Effective Pixels	1920(H)×1080(V), 2M	P	BLC Mod	
Scanning System	Progressive		WDR	
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000	S	Gain Con	
Minimum Illumination	0.005Lux/F1.6, 30IRE,	OLux IR on	Noise Re	
S/N Ratio	More than 65dB	More than 65dB		
IR Distance	Up to 50m (164feet)	Up to 50m (164feet)		
IR On/Off Control	Auto / Manual	Auto / Manual		
IR LEDs	1	1		
Lens			Certificat	
Lens Type	Fixed lens / Fixed iris	Fixed lens / Fixed iris		
Mount Type	Board-in	Board-in		
Focal Length	3.6mm (2.8mm, 6mm	3.6mm (2.8mm, 6mm Optional)		
Max Aperture	F1.6	F1.6		
Angle of View	H: 86.9° (106.0°/52.9°	H: 86.9° (106.0°/52.9°)		
Focus Control	N/A	N/A		
Close Focus Distance	1200mm (600mm/244 47.2" (23.6"/94.5")	1200mm (600mm/2400mm) 47.2" (23.6"/94.5")		
DORI Distance			Storage C	
Note: The DORI distance is a "ge			Ingress P Resistand	
sensor specification and lab test	e right camera for your needs. The DORI distance is calculated based on ification and lab test result according to EN 62676-4 which defines the Detect, Observe, Recognize and Identify respectively.		Constru	
	DORI		Casing	
	Definition	Distance	Dimensio	
Detect	25px/m	2.8mm: 39m(127ft) 3.6mm: 55m(181ft)	Net Weig	
	(8px/ft)	6mm: 83m(272ft)	Gross We	
Ohserve	63px/m	2.8mm: 15m(51ft)		

Video Output	1-channel BNC high definition video output / CVBS video output (Can switch)
Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / DWDR
WDR	DWDR
Gain Control	AGC
Noise Reduction	2D
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	Built-in mic
Eelectrical	
Power Supply	12V DC ±30%
Power Consumption	Max 4.7W (12V DC, IR on)
Environmental	
Operating Conditions	-40°C $^{\sim}$ +60°C (-40°F $^{\sim}$ +140°F) / Less than 90% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C $^{\sim}$ +60°C (-40°F $^{\sim}$ +140°F) / Less than 90% RH
Ingress Protection & Vandal Resistance	IP67
Construction	
Casing	Aluminium
Dimensions	Ф106mm×93.7mm (Ф4.17"×3.69")
Net Weight	0.44kg (0.97lb)

0.62kg (1.37lb)

Pan: 0° ~ 360° Tilt: 0° ~ 78° Pan/Tilt/Rotation Rotation: 0° ~ 360°

(19px/ft)

125px/m

(38px/ft)

250ppm (76px/ft)

3.6mm: 22m(73ft) 6mm:33m(109ft)

2.8mm: 8m(25ft) 3.6mm: 11m(36ft) 6mm: 17m(54ft)

2.8mm: 4m(13ft)

3.6mm: 6m(18ft) 6mm: 8m(27ft)

### Video

Observe

Recognize

Identify

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P

Ordering Information					
Туре	Part Number	Description			
2MP Camera	DH-HAC-HDW1230EMP-A 2.8mm				
	DH-HAC-HDW1230EMP-A 3.6mm	2MP Starlight HDCVI IR Eyeball Camera, PAL			
	DH-HAC-HDW1230EMP-A 6mm				
	DH-HAC-HDW1230EMN-A 2.8mm	2MP Starlight HDCVI IR Eyeball Camera, NTSC			
	DH-HAC-HDW1230EMN-A 3.6mm				
	DH-HAC-HDW1230EMN-A 6mm				
Accessories	PFA130-E	Junction box (For use alone)			
	PFB204W	Wall mount (For use alone or with PFA152-E pole mount)			
	PFA152-E	Pole mount (For use with PFB204W wall mount)			
	PFM820	UTC Controller			
	PFM800-E	Passive HDCVI Balun			
	PFM800-4K	Passive Video Balun			
	PFM800B-4K	Passive Video Balun			
	PFM321	12V 1A Power Adapter			
	PFM320D-015	12V 1.5A Power Adapter			
	PFM300	12V 2A Power Adapter			

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## Optional:



PFA130-E Junction box



PFB204W Wall mount



PFA152-E Pole mount



PFM800-E Passive HDCVI Balun



PFM800-4K Passive Video Balun



PFM800B-4K Passive Video Balun



PFM321 12V 1A Power Adapter



PFM320D-015 Power Adapter

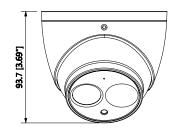


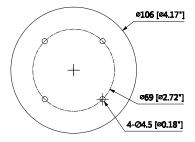
PFM300 Power Adapter



**Pole Mount Junction Mount** PFA130-E PFB204W + PFA152-E **Wall Mount** PFB204W

# Dimensions (mm/inch)







PFM820 UTC Controller