

DH-HAC-HDW1220EM

2MP Value Starlight HDCVI IR Eyeball Camera



- * The parameters and datasheets below can only be applied to 1220-S2 series.
- · Value Starlight
- · Max 30fps@1080P
- · HD and SD output switchable
- · 3.6mm fixed lens (2.8mm, 6mm optional)
- · Max. IR length 50m, Smart IR
- · IP67, DC12V















System Overview

price. It offers various motorized vari-focal/fixed lens models with a closer to the camera. multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB Multi-formats 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 Multi-language OSD transmission allows the HDCVI camera to interact with the XVR, such as OSD menu provides multiple image adjustments and function settings 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)/1220m(720P) trans- Protection mission via coaxial cable, and up to 300m(1080P)/450m(720P) via UTP The camera's outstanding reliability is unsurpassed due to its rugged design. cable.*

*Actual results verified by real-scene testing in Dahua's test laboratory.

Simplicity

HDCVI technology inherits the born feature of simplicity from traditional Supporting ±30% input voltage tolerance, this camera suits even the most protection. HDCVI system can seamlessly upgrade the traditional ana-tection against the camera and its structure from the effects of lightning. log 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 array LED IR illumination for best lowlight Experience 1080P full HD video and the simplicity of using existing cabling performance. Smart IR is a technology to ensure brightness uniformity in infrastructure with HDCVI. The 1080P starlight HDCVI camera presents B/W image under low illumination. Dahua's unique Smart IR adjusts to the a high quality image with rich details even under extreme low-light intensity of camera's infrared LEDs to compensate for the distance of an conditions. Also, the Lite series features compact design and friendly object, and prevents IR LEDs from overexposing images as the object come

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.

sending control signal or triggering alarm. Moreover, HDCVI technology 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.

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 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments.

analog surveillance system, making itself a best choice for investment unstable power supply conditions. Its 4KV lightning rating provides pro-

Lite Series | DH-HAC-HDW1220EM

Technical Specification	
Camera	
Image Sensor	1/2.7" CMOS
Effective Pixels	1920(H)×1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000s
Minimum Illumination	0.008Lux/F1.85, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 50m (164feet)
IR On/Off Control	Auto / Manual
IR LEDs	1
Lens	
Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	3.6mm (2.8mm, 6mm Optional)
Max Aperture	F1.85
Angle of View	H: 87° (103°, 54.7°) V: 47° (59°, 31.3°)
Focus Control	N/A
Close Focus Distance	1000mm (500mm, 2000mm) 39.37"(19.69", 78.74")
DORI Distance	

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
Detect	25px/m (8px/ft)	2.8mm: 37m(122ft) 3.6mm: 53m(175ft) 6mm: 80m(262ft)
Observe	63px/m (19px/ft)	2.8mm: 15m(49ft) 3.6mm: 21m(70ft) 6mm: 32m(105ft)
Recognize	125px/m (38px/ft)	2.8mm: 8m(25ft) 3.6mm: 11m(35ft) 6mm: 16m(52ft)
Identify	250ppm (76px/ft)	2.8mm: 4m(12ft) 3.6mm: 5m(17ft) 6mm: 8m(26ft)

Pan / Tilt / Rotation

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

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P

1-channel BNC high definition video output / CVBS video output (Can switch)
Auto (ICR) / Manual
Multi-language
BLC / HLC / DWDR
DWDR
AGC
2D
Auto / Manual
Auto / Manual
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
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Eelectrical

Power Supply	12V DC ±30%
Power Consumption	Max 3.7W (12V DC, IR on)

Environmental

Operating Conditions	-40°C $^{\sim}$ +60°C (-40°F $^{\sim}$ +140°F) / Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67

Construction

Casing	Aluminium
Dimensions	Ф106mm×93.7mm (Ф4.17"×3.69")
Net Weight	0.44kg (0.97lb)
Gross Weight	0.62kg (1.37lb)

Lite Series | DH-HAC-HDW1220EM

Ordering In	formation		
Туре	Part Number	Description	
	DH-HAC-HDW1220EMP 2.8mm	2MP HDCVI IR Eyeball Camera, PAL	
	DH-HAC-HDW1220EMP 3.6mm		
2MP Camera	DH-HAC-HDW1220EMP 6mm		
Zivii Camera	DH-HAC-HDW1220EMN 2.8mm		
	DH-HAC-HDW1220EMN 3.6mm	2MP HDCVI IR Eyeball Camera, NTSC	
	DH-HAC-HDW1220EMN 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)	
	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	
	PFM820	UTC Controller	

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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



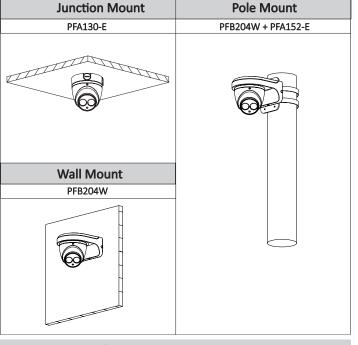
PFM321 12V 1A Power Adapter



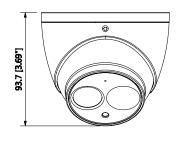
PFM320D-015 Power Adapter

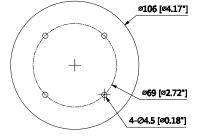


PFM300 Power Adapter



Dimensions (mm/inch)







PFM820 UTC Controller

