DH-HAC-HDBW2241F-M-A

2MP Mobile HDCVI IR Dome Camera

· Starlight, 120dB true WDR, 3DNR
· Max. 30fps@1080P
· Audio in interface, built-in mic
· HDCVI output (Aviation connector)
· 3.6mm fixed lens (2.8mm optional)
· Max. IR length 20m, Smart IR
· IP67, IK10, DC12V±30%
· IP6K9K, shock-proof

| EN50155 | 1080p FULL HD | Starlight | WDR | Audio | DC 12V | IP67 | Vandal-proof | Temperature |

System Overview

Experience a 1080P full HD mobile video surveillance solution with the simplicity of analog infrastructure. The mobile camera is designed with a shock-proof, compact case, which makes it convenient to install and adaptable to various applications. It offers a high quality image as well as a multi-language OSD. In addition, the camera employs the strengths of HDCVI to ensure real-time transmission.

Functions

Elaborate Design

For better adapting the applications for vehicles, the mobile camera is designed with compact case, which minimizes the inter-ference against on-going activities. Taking aesthetics requirements into consideration, the body and front face of the camera is all-black.

Shock-proof

Vibration is inevitable in mobile applications. In order to avoid image or connection failure, the hardware structure of the mobile camera is shock-proof with the certification of EN50155. Plus, the mobile camera adopts M12 aviation connector for stable connection with MCVR.

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.

4 Signals over 1 Coaxial Cable

HDCVI Mobile Camera supports 4 signals to be transmitted over 1 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.
* Audio input is available for some models of HDCVI cameras.

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.

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 not only HCVRs but also most end users' 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, 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: 1/4s~1/100000s NTSC: 1/3s~1/100000s
Minimum Illumination	0.004Lux/F1.6, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 20m (66feet)
IR On/Off Control	Auto / Manual
IR LEDs	8

Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	3.6mm (2.8mm Optional)
Max Aperture	F1.6
Angle of View	H: 86.9° (110°)
Focus Control	N/A
Close Focus Distance	1200mm (500mm) 47.2'' (19.7'')

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: 39m(128ft) 3.6mm: 55m(180ft)
Observe	63px/m (19px/ft)	2.8mm: 15m(49ft) 3.6mm: 22m(72ft)
Recognize	125px/m (38px/ft)	2.8mm: 8m(26ft) 3.6mm: 11m(36ft)
Identify	250ppm (76px/ft)	2.8mm: 4m(13ft) 3.6mm: 6m(20ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 60° Tilt: 0° ~ 90° Rotation: 0° ~ 360°

Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P
Video Output	1-channel BNC HDCVI high definition video output(Aviation connector)
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	ECE (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) EN50155 (EN50121-3-2, IEC61373) IP6K9K

Interface

Audio Interface	1ch in & Built-in Mic
Aviation Connector Interface	1-power 2-video ground 3-power ground 4-video

Eelectrical

Power Supply	12V DC ±30%
Power Consumption	Max. 3.6W

Environmental

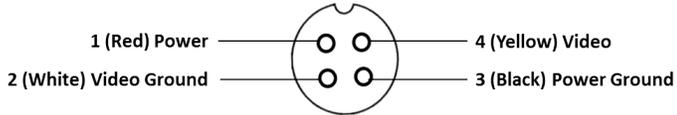|	
Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection & Vandal Resistance	IP67 & IK10

Construction

Casing	Aluminium
Dimensions	Φ106mm×50.3mm (Φ4.17"×1.98")
Net Weight	0.31kg (0.68lb)
Gross Weight	0.45kg (0.99lb)

Ordering Information

Type	Part Number	Description
2MP Camera	DH-HAC-HDBW2241FP-M-A 2.8mm	2MP Mobile HDCVI IR Dome Camera, PAL
	DH-HAC-HDBW2241FP-M-A 3.6mm	
	DH-HAC-HDBW2241FN-M-A 2.8mm	2MP Mobile HDCVI IR Dome Camera, NTSC
	DH-HAC-HDBW2241FN-M-A 3.6mm	

Aviation Connector

1 (Red) Power   4 (Yellow) Video

2 (White) Video Ground   3 (Black) Power Ground

Dimensions (mm/inch)

⌀106 [⌀4.17"]
⌀91 [⌀3.58"]
50.3 [1.98"]
106 [4.17"]
36°
⌀4.5 [⌀0.18"]