

2 MP HDCVI Fixed Dual-sensor Camera

2 MP Mobile Dual-sensor HDCVI IR Camera



HDCVI

- 1/2.7-in Progressive-scan CMOS Sensor
- Maximum 1080p at 30 fps Resolution
- Dual-sensor; 2.8 mm (front) and 2.1 mm (rear) Fixed Lenses
- Aviation Connector for HDCVI Output
- HD and SD Video Output, switchable
- Built-in Microphone
- Maximum IR Distance 3 m (9 ft) with Smart IR
- Five-year Warranty*



System Overview

Dahua Mobile Solutions offers a Full HD in real-time mobile video surveillance solution that provides reliable security via an analog infrastructure. The Mobile Solution camera is designed with a shock-proof and a compact case, providing an easy and discrete installation. The HDCVI technology ensures the camera operates reliably and delivers high-quality images in most mobile applications.

Functions

Design for Mobile Surveillance

The compact black housing and black front face blends in with most vehicle interiors and minimizes interference with other installed devices. The design also minimizes vibration and shock from normal driving situations. The compact design allows for quick and easy installation with 3M double-sided tape eliminating the need to damage assets with traditional installation methods.

Dual Sensors

The DH-HAC-HMW3200LN-FR HDCVI camera uses two (2) sensors, ideal for applications that require simultaneous rear- and front-facing surveillance. The camera provides separate HDCVI high-definition video outputs for each video channel. This camera takes the place of multiple cameras, offering instant return on investment for your security dollars.

Four Signals over a Single Coaxial Cable

HDCVI technology simultaneously transmits video, audio, power, and data over a single coaxial cable. Dual-way data transmission allows the HDCVI camera to communicate with an HCVR to send control signals or to trigger alarms. HDCVI along with PoC technology delivers power¹ to devices at the edge, simplifying installation.

Audio

The camera is designed with a built-in microphone for to pickup audio and transmit the signal over the aviation connector cable. Dahua's HDCVI audio compression technology ensures synchronization of audio and video to provide complete visual and audible evidence to resolve incidents.

Multi-format Support

The camera supports multiple video formats including, HDCVI, CVBS, AHD, and TVI. The camera can switch between these four formats via a UTC controller (PFM820), making the camera compatible with not only HDCVI DVRs but also most existing HD/SD DVRs.

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 and is certified to the EN50155 standard. Plus, the mobile camera uses an M12 aviation connector for stable connection to an MCVR.

Simplicity

HDCVI technology seamlessly integrates traditional analog surveillance systems with upgraded, high-quality HD video, making it the best choice to protect security investments. The plug and play approach enables full HD video surveillance without the hassles of configuring a network.

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 3 m (9 ft).

Protection

With a working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Supporting ±25% input voltage tolerance, this camera suits even the most unstable power supply conditions.

1. Requires PoC Transceivers for each channel and an external power supply for each transceiver.

Technical Specification

Camera

Image Sensor	1/2.7-in. CMOS
Effective Pixels	1920(H) x 1080(V), 2.0 MP
Scanning System	Progressive
Electronic Shutter Speed	1/30 s to 1/100000 s
Minimum Illumination	Color: 0.02 lux at F2.0 0 lux (with IR on)
S/N Ratio	More than 65 dB
IR Distance (Interior Camera)	Up to 3.0 m (9.84 ft)
IR Control	Auto, Color, B/W
IR LEDs	One (1)

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	Front Camera: 2.8 mm Rear Camera: 2.1 mm
Max Aperture	F2.0
Angle of View, Horizontal	Front Camera: 116° Rear Camera: 139°
Focus Control	Front Camera: 400 mm (15.75 in.) Rear Camera: 300 mm (11.81 in.)

DORI² Distance

Sensor	Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
Front	37.3 m (122.40 ft)	14.90 m (48.90 ft)	7.50 m (24.60 ft)	3.70 m (12.10 ft)
Rear	35.50 m (116.5 ft)	14.20 m (46.60 ft)	7.10 m (23.30 ft)	3.50 m (11.50 ft)

Pan / Tilt / Rotation

Range	Pan: 0° to 30° Tilt: 0° to 30° Rotation: 0° to 360°
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Video

Resolution	1080p (1920 x 1080)
Frame Rate	1080p at 30 fps 720p at 30/60 fps
Video Output	Two (2) BNC HDCVI High-definition Channels, M12 A-coded Aviation Connector
Video Transmission ³	RG-59/U Coax 720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft)
	RG-6/U Coax 720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft)
	CAT 6 UTP (balun required) 720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft)
Day/Night	Front: Color; Rear: Electronic
OSD Menu	Multi-language
BLC Mode	BLC, HLC, DWDR
WDR	Digital WDR
Gain Control	AGC
Noise Reduction	2D
White Balance	Auto, Manual
Smart IR	Auto, Manual

Certifications

Safety	EN55032, EN55024, EN50130-4 UL60950-1+CAN/CSA C22.2 No.60950-1
Electromagnetic Compatibility (EMC)	FCC CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014
Railway Applications	EN50155 (EN50121-3-2, IEC 61373)

Interface

Audio	Built-in Microphone (audio output on both HDCVI video output channels)
Aviation Connector	<ul style="list-style-type: none"> • 1 Red: Power • 2 White: Video Ground • 3 Black: Power Ground • 4 Yellow: Video

Electrical

Power Supply	12 VDC ±25%
Power Consumption	Maximum 2.4 W (12 VDC, IR On)

Environmental

Operating Conditions	-40° C to +60° C (-40° F to +140° F), Less than 90% RH Initiate startup above -40° C (-40° F)
Storage Conditions	-40° C to +60° C (-40° F to +140° F), Less than 90% RH

Construction

Casing	Plastic
Dimensions	115.80 mm x 99.50 mm x 50.20 mm (4.56 in. x 3.92 in. x 1.98 in.)
Weight	0.13 kg (0.287 lb)

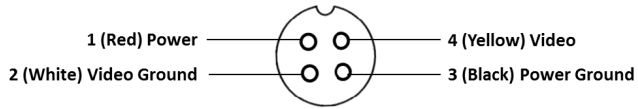
2. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4, the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.

3. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

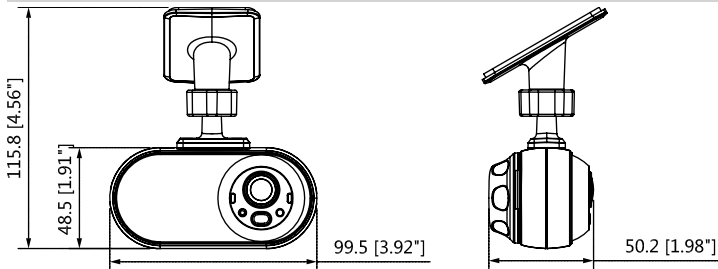
Ordering Information

Type	Part Number	Description
2 MP Camera	DH-HAC-HMW3200LN-FR	2 MP Mobile HDCVI IR Dual-sensor Camera
Accessory, optional	PFM820	UTC Controller to switch video output format

Aviation Connector



Dimensions (mm/inch)



Installation

