

# Eight-channel Mobile HDCVI DVR

1080p H.264 Digital Video Recorder



- Supports HDCVI/Analog Video Input
- Dual-stream Recording
- H.264 Video Compression
- Eight-channel 1080p Real-time Recording
- Simultaneous VGA and TV Video Output Channels
- Supports Two (2) SATA HDDs and Three (3) USB Ports
- Aviation Connectors for Increased Signal Stability
- Multiple Network Monitoring Applications: Web Views, CMS, DSS
- Five-year Warranty\*



## System Overview

Dahua Mobile Solutions offers a durable mobile video surveillance solution that provides reliable security for transit agencies. The Mobile Solution HDCVI DVR (or MCVR) operates across different transportation networks. The MCVR simultaneously records 1080p Full HD real-time video from eight (8) analog/HDCVI cameras and provides two (2) simultaneous video output channels.

The MCVR supports real-time vehicle location tracking and monitoring. The MCVR can upload the GPS information along with recorded video to a 3G/4G/WiFi wireless network. The MCVR is also adaptable, allowing connections to various accessories, including card readers, fuel sensors, and emergency buttons.

The recorder is certified to the EN50155 standard and conforms to the ISO16750 standard for mobile use, and is ideally suited for use in all mobile applications, including city buses, school buses, taxis, police cars, trains, and trucks.

## Functions

### Anti-vibration

Using a shock-absorbing material and a newly-designed structure, the hard disk enclosure can withstand varying degrees of vibration, allowing normal operation in the most extreme mobile applications.

### Wide-range Power Supply

The MCVR accepts a wide voltage range (6 VDC to 36 VDC) to accommodate the voltage output from a vehicle battery. The voltage range protects the MCVR from fluctuating power output from the vehicle battery during operation.

### 3G/4G/WiFi

Embedded with an optional 3G/4G/WiFi module, the MCVR can register into a public network, connect with a VMS, and transmit video, audio, alarm, and GPS information through a wireless network.

### GPS

The MCVR offers an optional embedded GPS module that receives location information and uploads the vehicle's position to a VMS. The VMS can plot the position on a map so the position and the path of vehicle can be monitored.

### Multiple Ports

The MCVR supports CAN, RS232, RS485, and I/O ports to connect the recorder to accessories, such as card readers, fuel sensors, and emergency buttons. This information, along with video, audio, alarm, and location information can be uploaded to VMS.

**Technical Specification**

## System

|                  |                         |
|------------------|-------------------------|
| Main Processor   | Embedded Microprocessor |
| Operating System | Embedded LINUX          |

## Audio and Video

|             |  |
|-------------|--|
| Video Input | Eight (8) Channels, M12 A-coding Connectors<br>(Audio IN is disabled if an analog camera is connected) |
| Audio       | Input: Two (2) Channels<br>Output: Two (2) Channels  |

## Display

|                   |   |
|-------------------|---|
| Interface         | One (1) VGA Output Port<br>Two (2) TV Output Ports<br>(includes one aviation connector) |
| Resolution        | 1920 × 1080, 1280 × 1024, 1280 × 720, 1024 × 768,<br>800 × 600                          |
| Display Split     | 1/4/8/9   |
| Privacy Masking   | Four (4) Rectangular Zones (each camera)  |
| On-screen Display | Camera Title, Time, Video Loss, Camera Lock,<br>Motion Detection, Recording             |

## Recording

|                 |  |
|-----------------|--|
| Compression     | Video: H.264<br>Audio: G.711   |
| Resolution      | Eight (8) Channels at 1080p Real-time Recording  |
| Bit Rate        | 48 Kbps to 8192 Kbps   |
| Record Mode     | Manual, Schedule (Regular - Continuous, MD,<br>Alarm), Stop  |
| Record Interval | 1 minute to 120 minutes (default: 60 minutes)<br>Pre-record: 1 s to 30 s<br>Post-record: 10 s to 300 s |

## Video Detection and Alarm

|                 |   |
|-----------------|---|
| Trigger Events  | Recording, PTZ, Tour, Alarm, Email, FTP, Buzzer, and<br>Screen Tips           |
| Video Detection | Motion Detection, MD Zones: 396 (22 × 18),<br>Video Loss, and Camera Blank    |
| Alarm Input     | Seven (7) Channels (Two Channels Impulse Input)                               |
| Relay Output    | Two (2) Total Channels,<br>One (1) Digital Output, One (1) Control 12V Output |

## Playback and Backup

|                   |  |
|-------------------|--|
| Playback          | 1/4  |
| Search Mode       | Time/Date, Alarm, Motion Detection, and<br>Exact Search (accurate to one second)   |
| Playback Function | Play, Pause, Stop, Rewind, Fast Play, Slow Play,<br>Next File, Previous File, Next Camera,<br>Previous Camera, Full Screen, Repeat, Shuffle,<br>Backup Selection, Digital Zoom |
| Backup Mode       | USB Device/Network   |

## Storage

|              |                                    |
|--------------|------------------------------------|
| Internal HDD | Two (2) SATA Ports                 |
| SD Card      | One (1) SD Card Slot, up to 128 GB |

## Network

|                         |   |
|-------------------------|---|
| Ethernet                | One (1) RJ-45 Port (10/100/1000 Mbps)             |
| Wireless Network        | 3G/4G/Wi-Fi Module (optional)                     |
| GPS                     | High-accuracy GPS Module                          |
| Network Function        | TCP/IP, UDP, DHCP, DDNS, FTP, Email, Alarm Server |
| Maximum User Access     | 128 Users   |
| Mobile Operating System | IOS, Android                                      |

## Auxiliary Interface

|        |   |
|--------|---|
| USB    | Three (3) Total Ports<br>Front Panel: Two (2) USB 3.0 Ports<br>Rear Panel: One (1) USB 2.0 Port |
| RS232  | Two (2) Ports   |
| RS485  | Two (2) Ports   |
| CAN    | Support   |
| Heater | Optional  |

## Electrical

|                   |                     |
|-------------------|---------------------|
| Power Supply      | 6 VDC to 36 VDC     |
| Power Consumption | < 12 W, without HDD |

## Environmental

|                      |  |
|----------------------|--|
| Operating Conditions | With Optional Heater: -30° C to +65° C (-22° F to +149° F),<br>Without Heater: -10° C to +65° C (14° F to +149° F) |
| Storage Conditions   | -30° C to +70° C (-220° F to +158° F), 0 to 90% RH   |

## Construction

|            |  |
|------------|--|
| Dimensions | 180.0 mm × 190.0 mm × 50.0 mm<br>(7.10 in. × 7.50 in. × 2.0 in.) |
| Net Weight | 2.20 kg (4.80 lb), without HDD                                   |

## Certifications

|                     |                                |
|---------------------|--------------------------------|
| Safety              | Conforms to UL Standards       |
| Mobile Applications | EN 50155, Conforms to ISO16750 |

**Dimensions (mm)**