DAHUA TECHNOLOGY

Four-channel Mobile Network Video Recorder

4MP H.265 Mobile Network Video Recorder

- Four-channel IP/PoE Camera Input
- 4 MP Real-time Recording on all Channels
- H.265 Video Compression
- Simultaneous HDMI, VGA, and TV Video Output Channels
- Embedded 3G/4G/LTE-FDD/Wi-Fi and GPS Modules
- One (1) Hard Disk Drive Port and (2) USB 2.0 Ports
- Aviation Connectors for Increased Signal Stability
- 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 NVR (or MNVR) operates across different transportation networks. The MNVR simultaneously records 4 MP real-time video from four (4) IP cameras and provides four (4) simultaneous video output channels.

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

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

3G/4G/LTE-FDD/Wi-Fi
Embedded with a 3G/4G/LTE-FDD/Wi-Fi module (supports Verizon, AT&T, and T-Mobile services), the MNVR can register into a public network, connect with a VMS, and transmit video, audio, alarm, and GPS information through a wireless network.

GPS
The MNVR 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 MNVR supports 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

Video and Audio

IP Camera Input	Four (4) Channels, RJ-45
Audio	Input: One (1) Channel Output: One (1) Channel

Display

Interface	One (1) HDMI Output Port One (1) VGA Output Port, 10-pin Aviation One (1) A/V Output Port, 4-pin M12 Aviation
Resolution	800 x 600
Display Split	1/4
On-screen Display	Camera Title, Time, GPS, License Number

Recording

Video Compression	H.265
Audio Compression	G.711A, G.711U, PCM
Record Rate	Four (4) Channels at 4 MP Real-time Recording
Record Mode	Manual, Schedule (Regular - Continuous, MD, Alarm), Stop
Record Interval	1 minute to 120 minutes (default: 60 minutes) Pre-record: 1 s to 30 s Post-record: 10 s to 300 s

Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Alarm, Email, FTP, Buzzer, and Screen Tips
Video Detection	Motion Detection, MD Zones: 330 (22 × 15), Video Loss, and, Tampering
Alarm Input	• Channels 1 to 8: Local Alarm Input • Alarm 10 Reserved for Panic Button
Relay Output	Two (2) Total Channels, One (1) Relay Output, One (1) Control 12 V Output

Playback and Backup

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

Storage

Internal HDD	One (1) HDD Port, up to 2 TB per HDD
SD Card	One (1) SD Card Slot, up to 256 GB

Network

Ethernet	One (1) RJ-45 Port (10/100 Mbps)
Wireless Network	3G/4G/LTE-FDD/Wi-Fi Module (Verizon, AT&T, T-Mobile supported)
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	Front Panel: Two (2) USB 3.0 Ports
RS232	Three (3) Ports, for PC Communication and Keyboard
RS485	Two (2) Ports, for PTZ Control One (1) Port, standard connection One (1) Port 4-pin M12 Aviation
GPS	Use included GPS Antenna
Wi-Fi	Use included Wi-Fi Antenna
3G/4G/LTE-FDD	Use included Cellular Antenna

Electrical

Power Supply	6 VDC to 36 VDC
Power Consumption	< 10.2 W, without HDD

Environmental

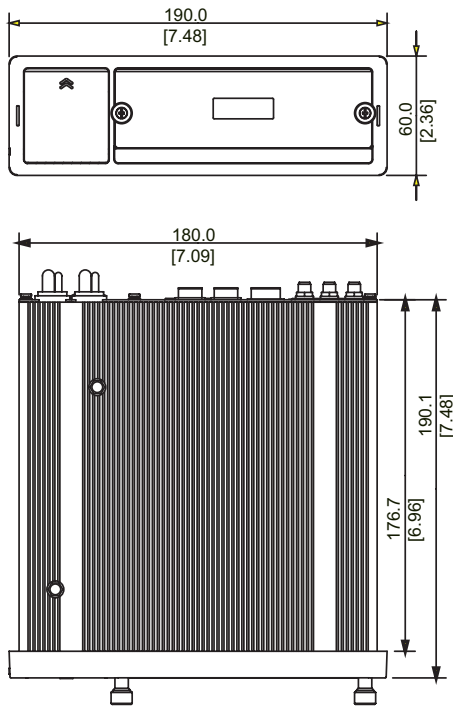|	
Operating Temperature	−10° C to +70° C (14° F to +158° F)
Operating Humidity	10% to 90% RH
Storage Conditions	−30° C to +70° C (−22° F to +158° F), 0 to 90% RH

Construction

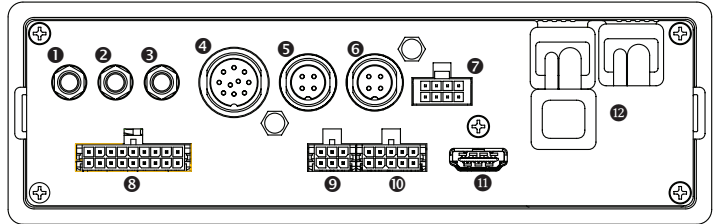|	
Dimensions	180.0 mm × 190.0 mm × 50.0 mm (7.08 in. x 7.48 in. x 1.96 in.)
Net Weight	1.92 kg (4.23 lb), without HDD
Package Weight	2.93 kg (6.46 lb)

Ordering Information

Type	Part Number	Description
Mobile NVR	MN4104-VR	Four (4) IP Channels, 4 MP, GPS, Digital Video Recorder, RJ-45
Accessory, optional	MA-PB01	Mobile Recorder Protective Enclosure
	MA-DPBB6401	Emergency Backup Recording Device
	MLED_BOX	Mobile Recorder Status Indicator with Panic Button
	MP06	Full-Duplex Talkback Terminal
	DH-LM10-V100	10.1-in. WXGA LCD Monitor

Dimensions (mm/in.)

190.0 [7.48]

60.0 [2.36]

180.0 [7.09]

190.1 [7.48]

176.7 [6.96]

Rear Panel

1	GPS Antenna	7	RS232
2	Wi-Fi Antenna	8	Alarm/CAN/RS485-1
3	Cellular Antenna	9	Audio In/Out
4	VGA Out, 12-pin Aviation	10	Extension Cable Input
5	A/V Out, 4-pin M12 Aviation	11	HDMI Out
6	RS485-2, 4-pin M12 Aviation	12	Video Input / Power Input