4-channel Mobile NVR
H.264 PoE Network Video Recorder

- H.264 and MJPEG Compression
- Four-channel Synchronous Real-time Playback with GRID Interface
- HDMI/VGA/TV Simultaneous Video Ouput
- Supports Two (2) 2.5-in. SATA HDDs, up to 2 TB each
- Includes Four (4) PoE Ports (IEEE802.3 af/at)
- Aviation Connectors for Increased Signal Stability
- Optional WiFi Module Available
- Conforms to ONVIF Version 2.3
- 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 NVR (or MNVR) operates across different transportation networks. The MNVR simultaneously records up to four (4) IP cameras in real-time and provides up to four (4) simultaneous video output channels.

The MNVR offers advanced options such as built-in motion detection algorithms, alarm triggers, and customized recording modes. MNVR technology is the ideal solution for actively monitoring and recording video feeds from mobile IP cameras. The recorder uses M12 aviation connectors to connect to cameras as an added level of stability.

Functions

Interfaces
Record and monitor video from up to four (4) IP camera inputs simultaneously. The mobile NVR supports four (4) channels of HDMI/VGA/TV simultaneous video playback, multiple alarm inputs and relay outputs, plus two-way talk connections – one (1) audio input and one (1) audio output.

Flexible Recording
The MNVR offers a variety of configurable recording options and schedules that saves HDD space and active monitoring time. The HCVR monitors incoming video and can be programmed to record if motion is detected. The MNVR can also be programmed to record on a schedule or at different intervals.

Smart Search
Smart Search allows an operator to specify a region in the playback video to search for a motion detection event, saving time and manpower.

Onvif

Technical Specification

System

Main Processor	Dual-core Embedded Processor
Operating System	Embedded LINUX

Display

Interface	One (1) HDMI, One (1) VGA, Two (2) TV
Resolution	1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768
Multi-screen Display	1/4
Privacy Masking	Four (4) Rectangular Zones (each camera)
On-screen Display Options	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, and Recording

Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Alarm Out, Email, FTP, Buzzer, and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, and Camera Blank
Alarm	Alarm Input: Four (4) Channels Relay Output: Three (3) Channels

Playback and Backup

Sync Playback	1/4
Search Mode	Time / Date, Alarm, Motion Detection, and Exact Search (accurate to 1 second), Smart Search
Playback Function	Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, and Digital Zoom
Backup Mode	USB Device, eSATA Device, Network, Internal HDD

Storage

Internal HDD	Two (2) SATA Ports, up to 4 TB total
External HDD	One (1) eSATA Port
Memory Slot	One (1) Micro SD Card

Auxiliary Interface

USB	Three (3) Ports total, including two (2) USB 3.0 ports
RS232	One (1) Port for PC communication and keyboard connection
RS485	One (1) Port for PTZ Control
G-sensor	Support
UPS	Support
CAN Port	Support, Power Supply for PTZ

Audio and Video

Camera Inputs	Four (4) IP Channels
Audio, Two-way Talk	One (1) Channel Microphone Input, One (1) Channel Microphone Output

Recording

Video Compression	H.264, MJPEG
Audio Compression	G.711, PCM
Resolution	12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 1080p, 720p, D1
Record Rate	200 Mbps, maximum
Bit Rate	48 Kbps to 8192 Kbps per Channel
Record Mode	Manual, Schedule (Regular, Continuous), Motion Detection, and 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

Network

Interface	M12 Models	M12 D-coded Connector (10/100 Base-T)
	RJ45 Models	RJ45 Connector (10/100 Base-T)
PoE		Four (4) Ports (IEEE802.3af/at)
Network Function		TCP/IP, UDP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Email, Alarm Server
Wireless Network		Built-in 3G/4G WiFi Module (optional)
GPS		Built-in High-accuracy GPS Module
Max. User Access		128 users
Mobile Operating System		IOS, Android, Windows

Electrical

Power Supply	6 V to 36 V
Power Consumption	≤ 15 W

Environmental

Operating Conditions	-30 °C to +60 °C (-22 °F to +140 °F), with optional heater 10% to 95% RH, 86 to 106 kpa
Vandal Resistance	IK10

Construction

Dimensions	180.0 mm × 208.0 mm × 100.0 mm (7.09 in. x 8.19 in. x 3.94 in.)
Net Weight	3.0 kg (6.61 lbs), without HDD

Certifications

Safety	Conforms to UL Standard
Mobile Applications	EN 50155
Electromagnetic Compatibility (EMC)	FCC Part 15 Subpart B

Ordering Information

Type	Part Number	Description
Mobile NVR	DHI-NVR0404MF-GFW M12	Four (4) IP Camera Channels, GPS, Wifi, 4G, Network Video Recorder, M12 D-coded Connector
	DHI-NVR0404MF-G M12	Four (4) IP Camera Channels, GPS, Network Video Recorder, M12 D-coded Connector
	DHI-NVR0404MF-G RJ45	Four (4) IP Camera Channels, GPS, Network Video Recorder, RJ45 Connector

Dimensions (mm)

223.3

229.3

190.0

110.0