



Hidden Camera Surveillance

Tel 1300 763235



MDVR-X3 Mobile Digital Video Recorder

Introducing the world's most advanced H.264 hardware compression Mobile Digital Video recorder. The MDVR-X3 is available in either a 4 or 8 Camera channel system specially designed for mobile use including Buses, Trucks, Public Transport, Vessels, Heavy machinery in fact any mobile or 12V application.

Built in rugged shock absorbers ensure the MDVR exceeds user requirements. Available with a huge range of optional accessories including GPS, **3G Networking**, GPRS, USB and 2.5 Sata Removable HDD.



MDVR-X3 Mobile DVR

How is this system different?

The MDVR-X3 is our 4-channel H.264 Mobile (DVR) Digital Video recorder. The MDVR-X11 is the identical 8-channel system and both are absolutely packed full of the latest advances in mobile DVR technology.

What makes this DVR system any different to all others in the market? First of all over 60% of the world's MDVR systems are produced by just one company whereas all others try to copy or produce an alternate system which quite frankly fail to deliver.

Other mobile DVR suppliers not only use older compression Codecs such as MPEG4 or MJPEG but also use inferior hardware, which will ultimately "rattle to bits" clearly not designed for mobile applications.

The MDVR-X3 series set the mobile DVR benchmark many years ago. For example, H.264 compression is the very latest Codec preferred throughout the security surveillance industry, not just the mobile market. H.264 not only uses Hard Drive (HDD) capacity up to 40% less than MPEG4, the quality of recording (specially moving objects is far superior) so no ghosting or interlacing typically associated with other older compression standards.

On the same subject, as H.264 is an efficient and higher quality compression or Codec, the ability to wirelessly network and stream via 3G is not just superior but "chalk & cheese".

Who uses the MDVR-X3 & Why?

As mentioned previously the MDVR-X3 and X11 mobile DVR systems are not just preferred world wide, including the US, but for good reason.

Far too often we see TV news footage depicting various traffic incidents where the quality of video is poor, slow or time-lapse, or even worse the offenders cannot be identified. There are two fundamental reasons for this, the quality of the MDVR Recorder (including the Compression standard) and the camera resolution. There is no point using a high quality MDVR system with low-resolution CCTV cameras, the two must marry up. By the same token high-resolution cameras with a poor quality recorder is equally counter-productive.

Another major issue with Mobile DVR suppliers is dependability and reliability. The Internal 2.5" HDD is removable (key locked) however, our X11 system is also supplied with SD backup memory so in the event of HDD failure the internal memory will take over and continuously retain at least 2 hours of footage called **Mirror Recording**. This could be critical in the event of severe impact damaging the HDD.

Other optional hardware items include GPS with coordinates, speed, heading, altitude etc all recorded in sync with the video. Climate will also play a role in MDVR and HDD reliability and a built in heater for cold regions maintains optimum performance.

Remember that our Professional MDVR systems are designed for networking. Australian tried and tested, wireless 3G networks are remotely able to live view at near real time plus play back recordings, adjust settings etc with no interruption to recording. Additional advanced Networking features and functions are pending.

Product Features

- ◆ 8CH full CIF recording.
- ◆ Dual streaming
- ◆ Wireless module: GPRS, EDGE, 3G (EVDO, HSPA), WIFI (b/g).
- ◆ Built-in GPS for global location tracking.
- ◆ Watermark.
- ◆ Built-in Vibration absorber.
- ◆ Built-in heater for HDD.
- ◆ H.264 compression
- ◆ Special File System



Specifications

System	Processor	Hisilicon Hi3511 Processor
	OS	Real-time Linux OS (ver2.6)
	File System	FS 2.0 is specifically designed for mobile surveillance. Multiple security strategies, indexing and core data backup.
Video & Audio	Video Compression	H.264 Codec
	Video storage	2.5" SATA (Up t1TB), SD card (32GB tested)
	Video System	NTSC/PAL
	Total Resource	100 or 200 frames Per Second @ CIF
	Max FPS	2CH D1 at 25FPS PAL 30FPS NTSC 4CH D1 at 12FPS PAL 15FPS NTSC 8CH CIF at 25FPS PAL 30FPS NTSC
	Audio Compression	ADPCM+G.726 (8 kbps)
	Input	4 or 8 Cameras (DIN-JACK X8)
	Output	DIN-JACK X 1; RCA X 1
Recording	Recording Mode	General/Timer/Alarm
	Event	Sensor trigger, Speed, Acceleration, Temperature, Video Loss
	Pre Alarm recording	1~60mins prior to event
	Watermark	Prevents video files from being altered & assures authenticity
Network	3G Module	GPRS, EDGE, EVDO, HSPA
	WIFI	802.11 b/g
	LAN	100Mbps Ethernet (RJ45)
	GPS	Vehicle tracking, Speed detection, Synch time
I/O Interface	Sensors	8 Inputs, 3 Outputs
	USB	USB 2.0
	Serial	RS-485×2, RS-232×2
	Input	8 ~36V DC
Physical Characteristics	Dimension (W×H×D)	See below
	Weight	4.8 kg (8.51lb)
Environment	Operating Temperature	0 ~ 55°C (If temperature is below 0°C, please use built-in heater)
	Vibration Resistance	< 2 Grms
	Shock Resistance	< 1200 Grms

MDVR Features & Functions

4 or 8 video input channels with FULL 4CH D1 at 12fps PAL continuous or priority recording
Live View Display and live recording all channels
Semi-transparent GUI allows for simultaneous GUI and live display
NVRFSTM Special file system is designed to improve security levels, provide self-recovery due to power failure, self-check status, self-backup of certain critical data avoiding data fragmentation
Mirror Recording allows for at least 2-3 hours recording back up in the unlikely event of HDD failure.
Digital Watermark prevents any recorded file from being altered or tampered
Dual Streaming for wireless transmission is bandwidth dependent
H.264 compression results in less HDD storage (40% less than MPEG4) and superior quality recording
4 channels HD digitally recorded and in sync audio matched perfectly to video
Continuous recording even in playback mode
User selectable settings for quality video and audio recording
Ability to enable/disable individual video channels as required
12V power supply for multiple devices such as cameras, sensors, relays and other accessories.
Selectable frame rate with event-triggered real time all channels “emergency recording”
Multiple alarm inputs with selectable pre and post-alarm recording timer

REMOTE CONNECTION CAPABILITIES

- Supplied with Wireless IR Remote control with OSD for quick access to recorded video and menu
- PC-Based Client software for live viewing, playback video, events video, and download capabilities
- Support CMS (Central Management System) for remote monitoring by CDMA/GPRS/EDGE/3G and WIFI, PAS (Playback Analysis Software) for video playback, meta-data analysis.

ACCESSORY MODULES FOR MDVR

Video Interface Module including GPS location and speed.
Vehicle Motion Manager includes 3-axis Inertia Sensor to determine video-matched motion events

Tested in Australia with remote access using the 3G Network our Mobile DVR system was able to video stream at 20fps on a single channel so very close to **real time remote monitoring**. The 3G network significantly outperformed GPRS.

DVR Recorder

H.264 Codec
4CH Full D1 (At 12FPS)
8CH Full D1 (At 12 FPS)
40% Less Storage required compared to MPEG4

System

ARM9, 270MHz
Built-in Power Rectifier
New File System [NVRFSTM]

Case Design

Small Profile
Removable HDD
Built-in HDD Vibration Absorber
Built-in Heater

Special Recording

Watermark
Special Mirror Recording
Sub-stream Recording in SD

Software

Live view
Location Tracking
Vehicle Status Monitor
Remotely Live View/ Playback/ File Download/ Upgrade
AVI Conversion
Auto File Download
Remote Configuration of DVR Recorder

USB 2.0

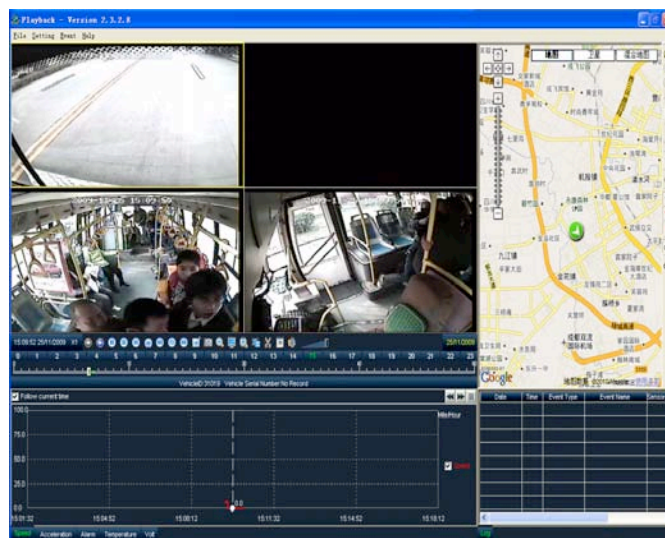
High Speed
3G/EVDO with USB Adaptor
DVD File Backup

Network

Built-in Wireless Network Card
Support WIFI802.11N
Dual-streaming
Supports Mobile Phone Browser Viewing/ Login
Uses Mini-PCI Modules

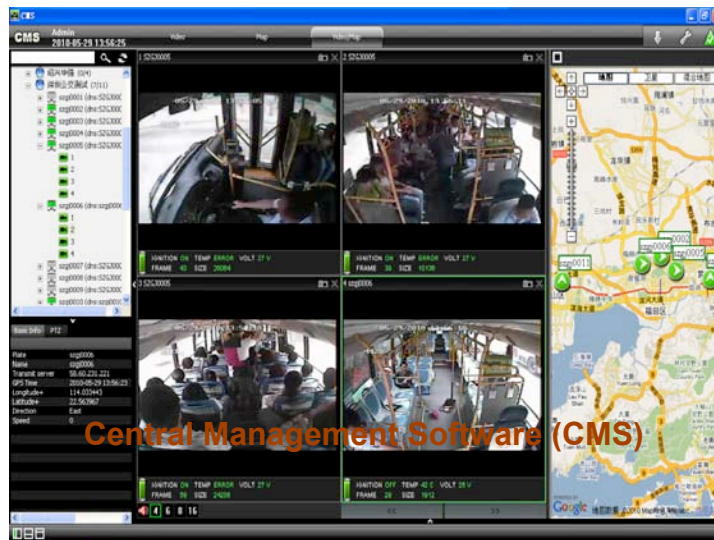
MDVR Analysis Software

1. Offline analysis with full detail of recorded video
2. 4-8 Channels simultaneous video playback
3. GPS Vehicle tracking history
4. Advance Database Search System
5. Alarm Event display vs. Recorded time matching
6. GPS Coordinates, speed etc vs. Recorded time matching
7. Playback from desired location



Central Management Software

1. Online GPS location for each vehicle (supports multi-units)
2. Detailed data for each vehicle is displayed on-screen
3. Live view request by CMS (via GPRS/3G)
4. Remote alarm notification
5. Auto Alert when vehicle breaches GPS Geo fence
6. Remote MDVR System setup

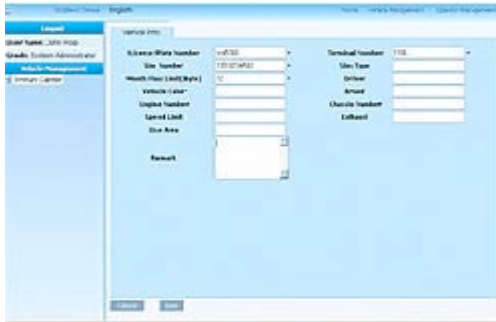


Operation Interface



Data Server

Vehicle and Operator Management



Broadcast Server



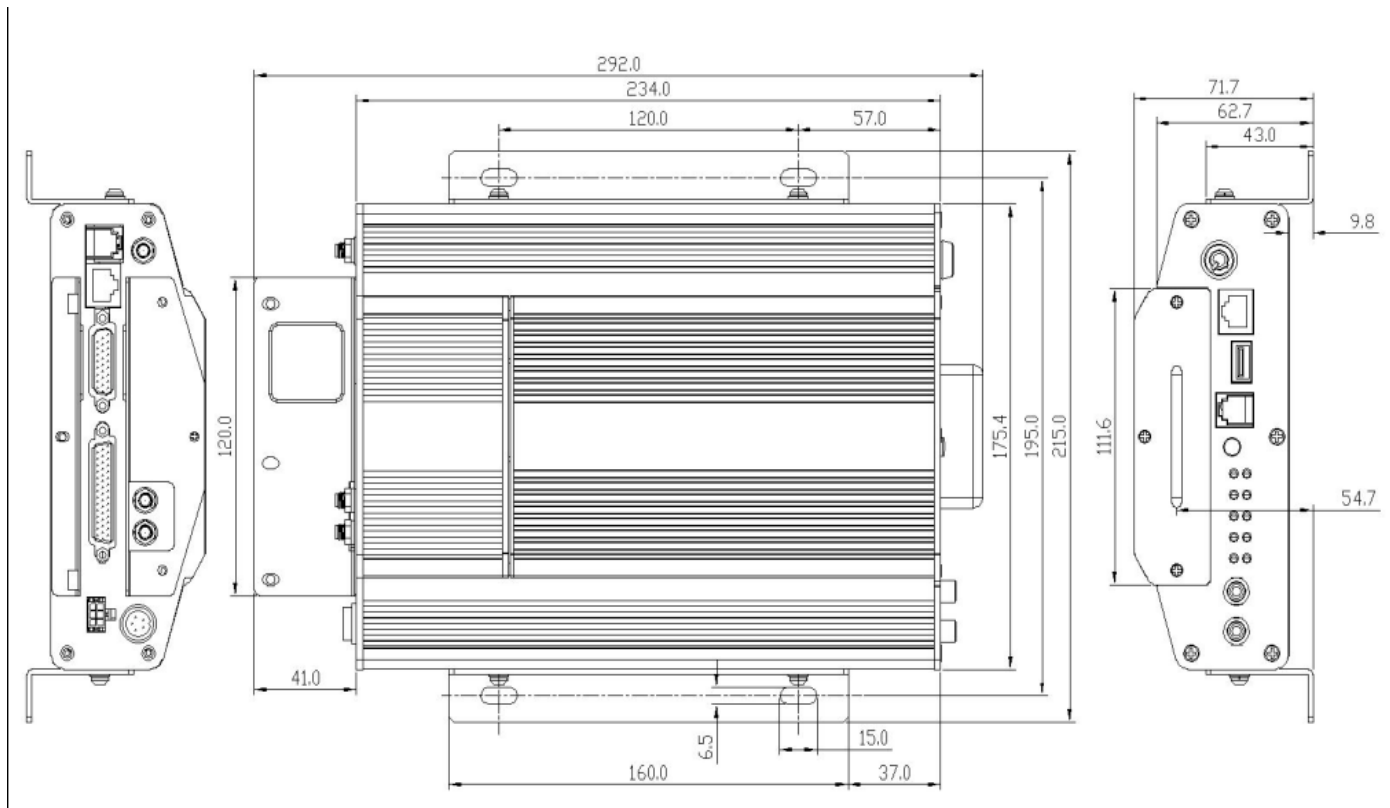
Monitor Client



Gateway Server



MDVR Dimensions



Optional Accessories



ID Card Server can be used to record driver on/off duty attendance



I/O Interface used to connect the MDVR optional external devices.



Lock Box with built in battery protect the MDVR, data and HDD from damage. The internal battery will also support post recording if power is suddenly or accidentally cut.



Inertia Sensor used to detect alarm information from X, Y & Z axis data with an expanding \pm vibration magnitude.

Need more information

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