DATA FM

VEHICLE MANAGEMENT SOLUTIONS

ABOUT US

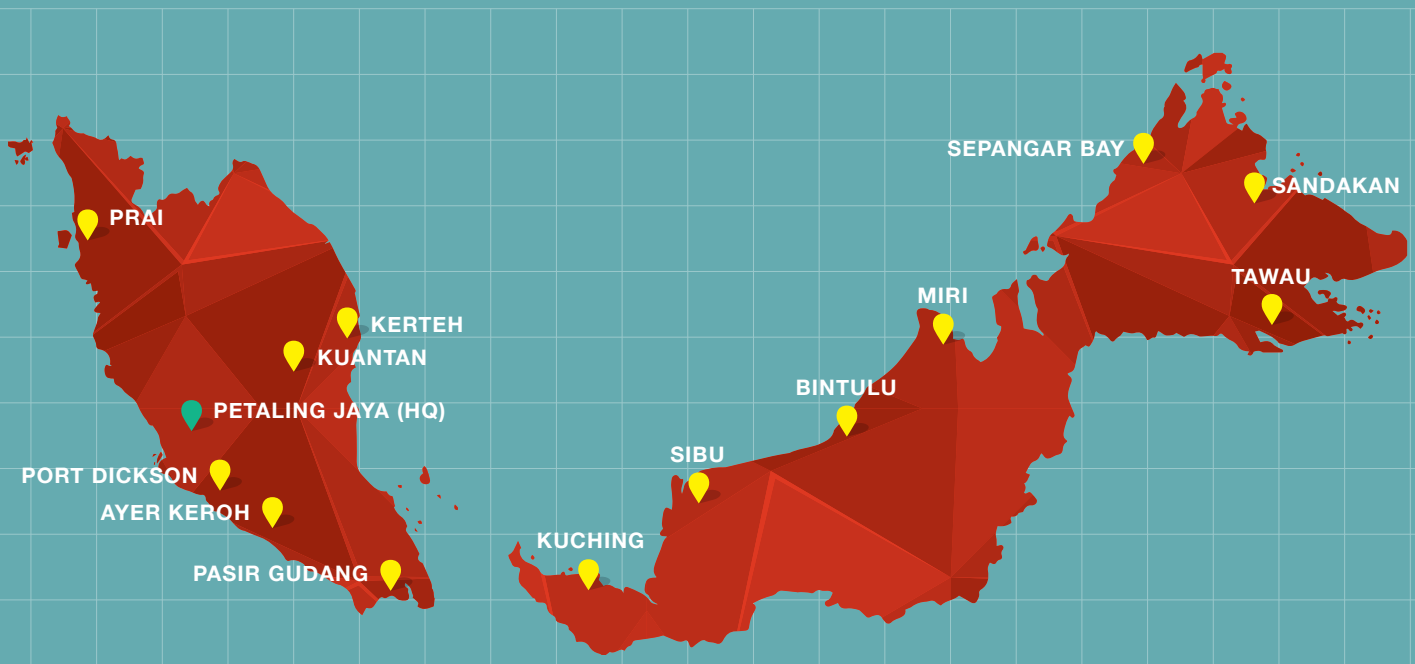
DataFM has been involved in the design, development and marketing of Fleet Management Systems and telematics' solutions since 1998.

For more than a decade, DataFM has been committed to empowering logistics and transportation industries not only to track their assets but also to reduce cost, educate drivers and also help our partners meet customer requirements. DataFM Fleet Management Solutions comprises a range of telemetry modules to provide real-time tracking, vehicle scheduling and dispatching, monitoring status of assets and employees, analyzing fuel efficiency and driving behavior, generating various reports, asset performance summaries and so forth.

DataFM Call Centre operates 24/7 and is supported by an established nationwide maintenance and service infrastructure, including neighboring countries such as Singapore and Thailand.

DFM Track offers a track and trace system that satisfies the needs of advanced industries. It is designed to manage the safety and security of vehicles/drivers/operations and also day to day efficiency such as fuel consumption monitoring and vehicle scheduling.

ESTABLISHED SUPPORT NETWORK IN PENINSULAR & EAST MALAYSIA



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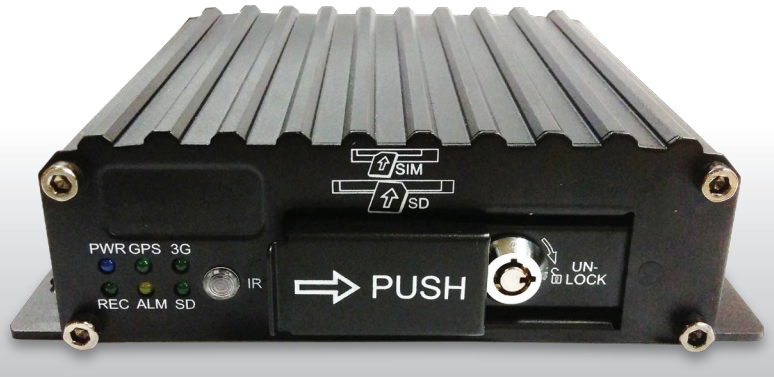
Mobile Digital Video Recorder (MDVR)

Model: DFMCam-V210



Product Model	G-Sensor	GPS	Wifi	3G	Walkie Talkie
V210a	Yes	No	No	No	No
V210b	Yes	Yes	No	No	No
V210c	Yes	Yes	Yes	No	No
V210d	Yes	Yes	No	Yes	No
V210e	Yes	Yes	Yes	Yes	Yes

PRODUCT INTRODUCTION

MDVR is a cost-effective, multi-functional device designed for video surveillance and remote monitoring of your mobile assets. It uses a high-speed processor, an embedded Linux platform and the most advanced technology in the IT field, such as H.264 Video Compression/-Decompression, 3G/4G/LTE network transmission technology and GPS positioning technologies. MDVR can realize four/eight channel video recording. Each channel supports HD1, D1 and HD IP Camera image solution. Drivers' driving information, GPS data and alarm data are recorded in hard disk or SD Card which is used as the storage medium. The MDVR may look simple in its exterior design, but provides powerful auto black box features, installation flexibility and high reliability.

PRODUCT APPLICATION

This product can be used for video surveillance or remote monitoring which applies in common or special vehicles such as buses, logistic vehicles, trucks, long-distance coaches, taxis, tankers, cars, school buses, police cars, ambulance and etc. On the front-end, it mainly collects video signal by dedicated automotive camera and then transmits it to the MDVR host via a special video cable to do the video compression and image processing, which is locally stored in the Hard Disk od SD Card. It can be monitored via live streaming or downloaded remotely through the client application with the 3G/4G models. It can also locate the vehicle position in real time.

Armored Vehicles

Logistics carrying high value goods

Transportation carrying hazardous / highly flammable products

Coach / buses carrying passengers

BENEFITS OF INSTALLING V210 ON YOUR VEHICLES

1 Driver Behavioral Monitoring, which is the source of accidents. The video recording allows you to analyze the driving pattern of each individual driver and hence able provide the appropriate consultation for him/her. The body language captured can highlight driver fatigues indications, talking on the phone, messaging, watching a movie, surfing the internet, reading the news, smoking etc. Failure to buckle the seat belt or hosting unauthorized passengers are some other key points the MDVR can highlight.

2 The MDVR functions as a deterrent for pilferage and suspicious activity. With surveillance, you can ensure that your cargo is accessed only at the authorized locations. The MDVR can verify of unauthorized stopping, in which most pilferage cases take part. At the same time, it also records any discussion that may imply wrong doing or dishonesty.

3 To serve as evidence in the event of an accident or incident such as hi-jacking. This also protects the driver if accident was caused by the other party. Evidence of thieves during hi-jack or stealing goods.

4 Cost effective as the V210 supports multiple modules including vehicle tracking and 2-way walkie-talkie communication.

FEATURES AND FUNCTIONALITY OF THE MDVR

1. Ensure only authorized personnel is allowed on the vehicle
2. Prevent and/or track theft of asset and cargo
3. Video and voice recording can be provided as evidence in court in the event of accident or incident.
4. Driver violation monitoring such as over-speeding, harsh braking or acceleration, route deviation, unauthorized stopping and etc
5. Auto data downloading or live streaming to and from control center during major accidents or hi-jacking.
6. Panic button to activate live streaming to call center during emergencies.

TECHNICAL FEATURES

Items	Parameters	Specifications
Systems	Languange	English
	Operation Menu	Graphical User Interface (OSD menu)
	Password	User / Administrator Password
Video	Video Input	4-CH video input 1.0Vp-p, 75Ω, 8-CH optional
	Video Output	1-CH composite video output 1.0Vp-p, 75Ω
		1 VGA output
	Video Display	1 channel or synchronous 4 channels
	Video Signal	PAL, NTSC
	Video Compression	H.264 Main profile
		Pal: 100fps at D1
		NTSC: 120fps at D1
Audio	Audio Input	4- ch Audio input
	Audio Output	1-ch Audio output
	Recording Mode	Audio & Video sync. Recording
Image Processing & Storage		
	Image Resolution	4 D1, 4 HD1 and 4 CIF options, up to 25fps
	Video Compression	H.264 Main profile
	Video bit rate	CIF: 1536Kbps -128Kbps, 4 levels optional
		Highest: level 0, Lowest: level 3
		HD1: 2048bps -512Kbps, 4 levels optional
		Highest: level 0, Lowest: level 3
		D1: 4Mbps -1Mps, 4 levels optional
		Highest: level 0, Lowest: level 3
	Audio Compresion	ADCM, G.726, G.711 Options
	Audio Bit rate	8KB/s
	Storage	Support Single or Dual SD card
		Support One HDD Max 1TB (optional)
Alarm	Alarm Input	8 Digital level inputs
	Alarm Output	2 Digital level output
Communication Interface		
	RS485 Interface	Support 2 x RS485 Interface (optional)
	RS232 Interface	Support 1 x RS232 Interface
	Wifi Interface	Support 802.11/g/b/n (optional)
Extended Interface	Support connecting LCD control panel via extended interface	
	Walkie-Talkie VoIP Function (support 2-way and group communication)	
Audio amplifier interface	Support Stereo Audio output, it can contact 20W speaker directly	
3G/4G	HSUPA/HSDPA/WCDMA/EVDO/4G LTE Optional	
GPS	Built-in GPS module, Geographic coordinates, speed can be recorded in HDD or SD can also be transmitted to CMS.	
	GPS can be utilized for vehicle tracking and/or alert monitoring	
G-Force Sensor	Embedded acceleration sensor. Braking and Acceleration Monitoring	
Software	Playback	Playback Software is used to playback video file, GPS tracking, G-sensor and alarm information
	IVMS	Intelligent Video Monitoring System platform can manage up to 20,000 devices at the same time.
Firmware	Support Flash disk upgrading	
Power Input	+8+36V	+8V +36V, When long-term under 8V, or long-term over 36V, auto power off, enter protected mode
Power Output	12V	12V (+/-0.2V), Max:3A
Acc/Dec Detection	≤4V	Power OFF
	≥5V	Power On
Video Input Impedance	75Ω	75Ω for each video input impedance
Video Output Volt	2Vp-p	Output 2Vp-p CVBS analog signal, displayer device needs 75Ω impedance to fit in
I/O Interface	0-4V	Low Level Alarm
	Above 4V	High Level Alarm
Operating Temp	-40C – 75 C	Under well-ventilated environment

Vehicle Camera

Model: CL20

Product Description

Heavy-duty Color CCD Camera
System Compatibility: PAL/NTSC
Lens: 2.8mm, F2.0, 120°, Infrared LED: 18pcs
Resolution: PAL 752(H)*582(V)
Horizontal Resolution: 700 TV line
S/N ratio: >48dB
Connection Type: RCA or BNC
Microphone: NO
Auto White Balance
Power Supply: DC 12V
Waterproof rate: IP67 Vandal proof
Operation Temperature: -20°C~70°C (RH: 95% Max.)
Optional 9 to 26V DC input

Internal Side View Camera (Dome)

Model: CL10

Product Description

Car Roof-mount Camera
Lens: 2.8mm, 170° diagonal, IR LED: 12pcs
Resolution: PAL 752(H)*582(V)
Horizontal Resolution: 600 TV line
S/N ratio: >48dB
Mini. Illumination: 0 Lux
Microphone: Yes
Auto Balance Control
Power supply: DC 12V
Waterproof Rate: IP54
Operation Temperature: -20°C~70°C
Colour: White or Black
Optional: 700TVL

Walkie

Model: WL10

Product Description

Input Voltage: 5V
Interface to V210: RS232 serial port
Internal CPU: VoIP compress DSP chip
Speaker: 1.5 Watt
Volume: Adjustable from 0 to 100% by wheel on handset
Working Temperature: -20 to 60 degree C

DIAGRAM 3G MOBILE DVR

PHONE VIEW

PC VIEW

SATELLITE

GSM BASE STATION

INTERNET

ROUTER

GPS ANTENNA

GSM GPRS/3G/4G/LTE ANTENNA

SERVER

- MGMT Server
- Gateway Server
- Streaming Server
- Storage Server
- Alarm Server
- Notice Server
- Upgrade Server
- Backup Server

CAR SPECIAL CAMERA

CAR REAR VIEW CAMERA

EMERGENCY BUTTON

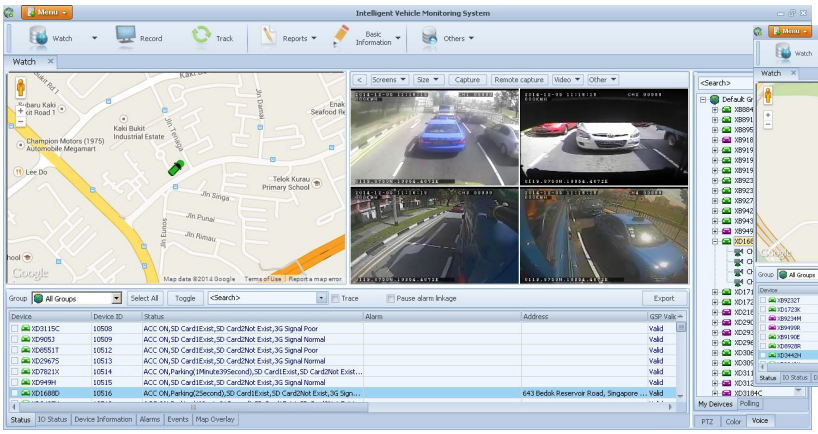
TALK BACK MIC

CAR DEDICATED MONITOR SCREEN

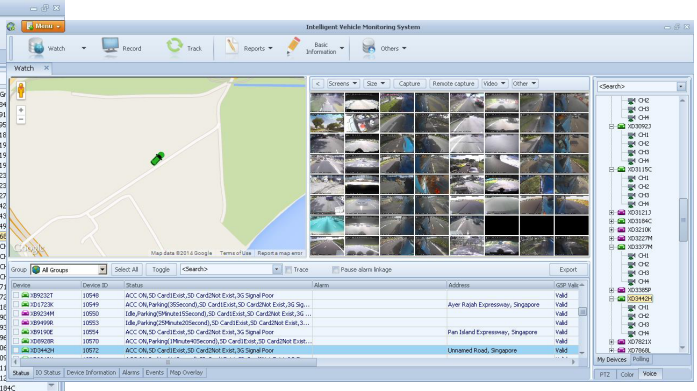
PICKUP

INTELLIGENT VEHICLE MONITORING SYSTEM (IVMS) SOFTWARE

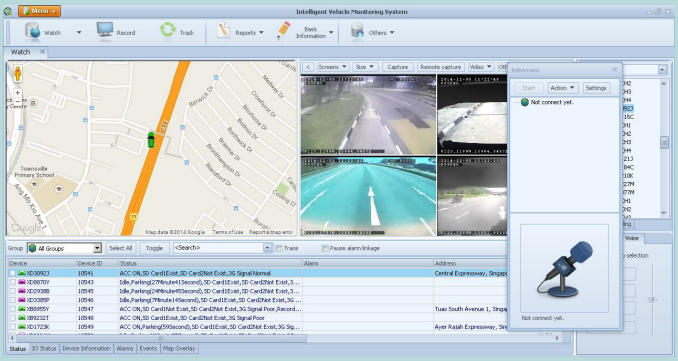
LIVE STREAMING



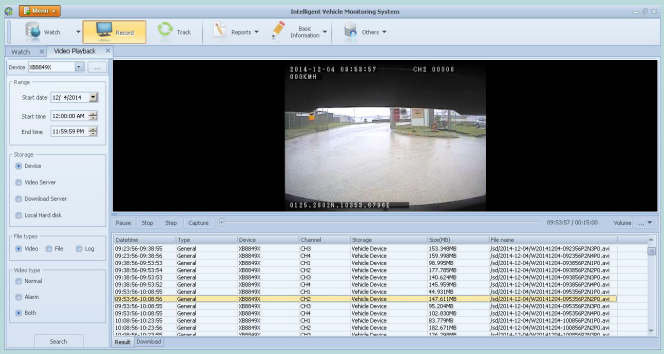
The IVMS supports the live view from 1 to 8 cameras per vehicle simultaneously.



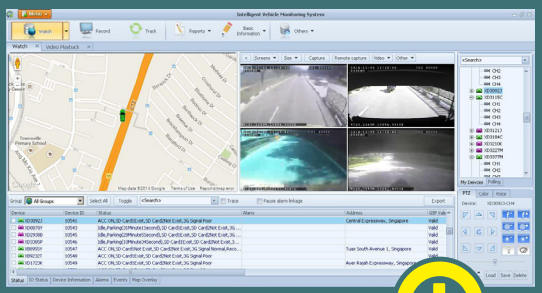
It also has the option to view 8 x 8 individual screens to monitor multiple vehicles in one page.



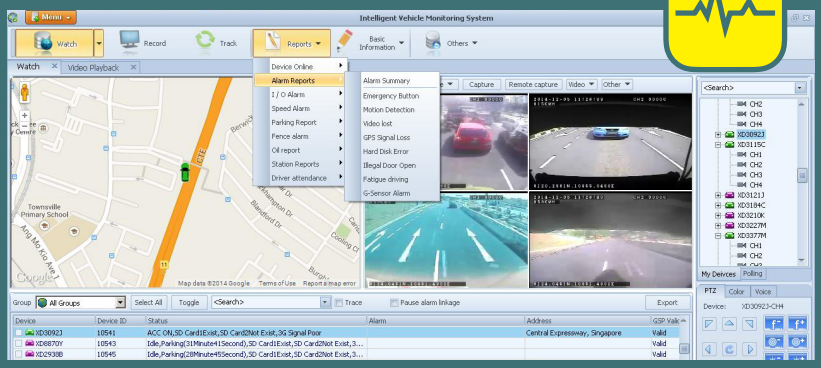
The IVMS can be utilized in the command center to broadcast messages to group of drivers or to communicate with individual driver via walkie talkie.



The record function in the IVMS allows the user to stream live data or download historical data directly from the vehicle to the server. User can either extract video or gps data from this function.



IVMS is able to support PTZ camera for remote zooming and panning.



The IVMS provides various reports including external I/O's connected to the device. It also gives numerous alerts based on driver behavior such as harsh braking, over-speeding etc.

The IVMS can support a video playback directly from the hard disk or SD card as above. Play back will show the historical tracking on the map as well as a graphical speed, I/O, event or G-sensor display.

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