



IDIWAVE
Wireless Mobile Video Solutions

Vehicle Remote Managed Services



Key Features:

Fleet

- GPS Tracking
- Remote EDU/OTMR Diagnostics
- Reduce emissions
- Save up to 15% fuel
- Lower maintenance costs
- Driver performance statistics
- Driver training interface
- OTMR Information
- Fuel Theft Protection

CCTV

- Live Video via 3G
- PASCOM passenger alerts
- Video replay of deliveries
- Bodywork damage log
- Video reversing aid
- Lone worker protection
- Video people counting
- Asset protection
- Insurance investigation tools

Network

- 3G / GPRS / CDMA
- WLAN
- VPN

User Access

- Via PC
- Via Cloud
- Via Smart Phone

Solutions Brochure 2012
Rail & Metro

Why move to our solution?

Normal Fleet Management

GPS Tracking / Tachograph / EDU / OTMR / CCTV / People Counting / PASCOM Passenger Alerts are all separate technologies from different manufacturers. So as you would expect this means that there is very little if any integration between the technologies.

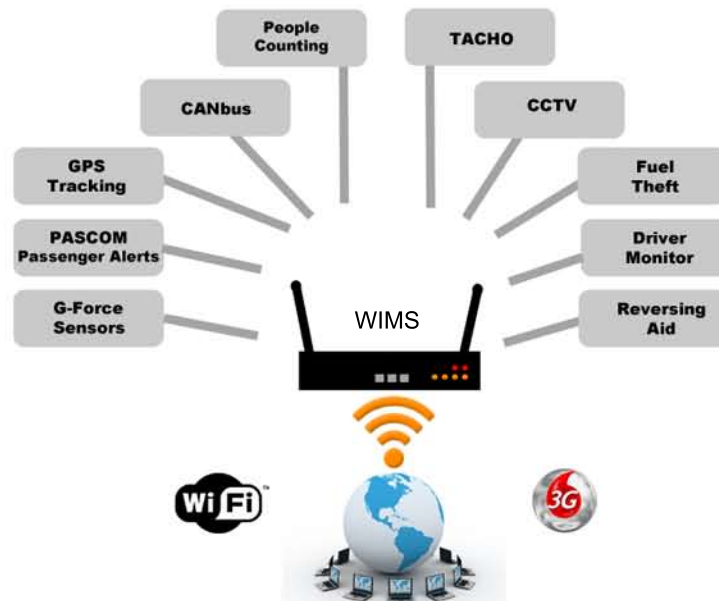
- **Problem 1:**
This means that YOU have to work hard to integrate the information into one REAL-TIME synchronized platform to manage your day-to-day fleet activities.
- **Problem 2:**
Because of the cost of multiple 3G modems and fixed IP SIM cards – generally this means that you can only afford to manage key services via 3G – like vehicle tracking.
- **Problem 3:**
Different technologies means different suppliers and service and maintenance partners – so total cost of servicing and spares is high simply because it is fragmented.

Vidiwave Fleet Management

GPS Tracking / Tachograph / EDU / OTMR / CCTV / People Counting / PASCOM Passenger Alerts are all fully integrated into our WIMS module. (Wireless Integrated Management System)

- **Solution 1:**
Already synchronized - everything is managed via one software suite – one platform - all with fully integrated reporting too.
- **Solution 2:**
Our WIMS module has a built-in SIM card – So all the devices (TCP/IP and serial) can be accessed via one 3G network (Cost saving 1). This runs over a standard Public APN cellular network at standard data rates (Cost saving 2).
- **Solution 3:**
One manufacturer – One technology platform – One service and maintenance partner – lower day-to-day running and maintenance costs.

*Suddenly everything is not only possible – but also **very affordable**.*



Our Network Integration



GPRS (m2m) 3G

Built-in to every WIMS module is a STREAM 3G SIM card.

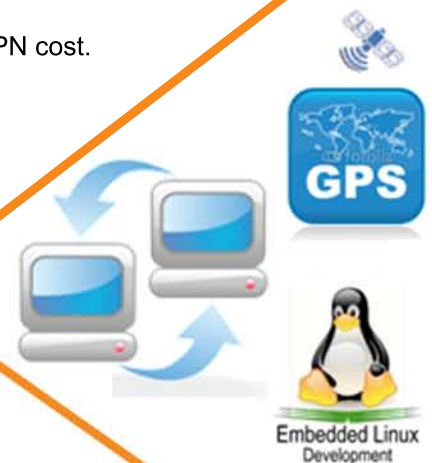


So why STREAM? ...

- Because they have a proven pedigree and track record as one of the largest providers of M2M SIM cards for over the 10 years.
- The Stream APN is a PRIVATE APN designed to manage PUBLIC APN networks in different countries.
- This means they can integrate single or multiple local APN networks onto one STREAM SIM card.
- It means they can better manage IP leases over multiple cells.
- It means they can better manage contention ratios and reserve bandwidth.
- It means you get all the advantages of a PRIVATE APN ...But at a PUBLIC APN cost.
- Plus they add Enterprise class security to your 3G Data for free.

Put simply ... Quality of Service is 1st class.

Vidiwave VPN



Also built-in to every WIMS module is a **WDS 5GHz** wireless client.

So why **WDS** and why **5GHz**? ...

- Because 5GHz delivers better range, reflection and stability than 2.4GHz.
- Because 5GHz is not affected by rain, fog and snow unlike 2.4Ghz.
- Because 5GHz supports non-static clients like vehicles better than 2.4GHz.
- WDS means that each vehicle acts as a wireless repeater – effectively meshing and boosting the signal to reach vehicles further away without loss of performance.
- Our WDS (Wireless Distribution Service) – is zero config and meshes automatically.
- In addition, because 5GHz is not a saturated band like 2.4GHz it can easily switch to TURBO mode and achieve up to 40% faster download speeds than 2.4Ghz.

Put simply ... Our WLAN is faster – more stable – longer range - zero config.

5GHz Turbo



Our EDU/OTMR Integration

When developing our solution - one of the top requests from fleet managers was the integration of a FLEET DIAGNOSTIC tool into our 3G solution. Their ultimate goal was to be able to perform workshop level diagnostics REMOTELY via 3G. This would allow them to correctly diagnose roadside breakdowns and dispatch the correct technician and parts to fix 1st time in the field.

In addition they wanted a tool that would pro-actively CONDITION MONITOR and provide remote ALERTS to the Fleet Manager relating to vehicle health / Fuel theft / and driver performance.

So here is a list of the reports we have built-in and what we monitor:

Idling:

- Time Spent at idle each day
- Fuel used at idle each day
- Fuel used at idle per week.

OTMR

- Recovery of OTMR data daily
- Distribution of data via email

Brake Analysis

- Number of brake actions per day
- Total time harsh braking per day

Clutch Gearbox

- Number of gear changes per day
- Number of times at high RPM per day
- Time spent engine braking per day
- Time spent coasting per day

Fuel Analysis

- Total fuel used per day – liters
- Total fuel used per week – liters
- Actual fuel consumption (MPG) per day
- High Torque per day
- Refueling time / date stamp – daily
- Fuel level recorded at every start / stop (fuel theft alert)

CO2 Emissions

- Total CO2 per day

Driver Analysis

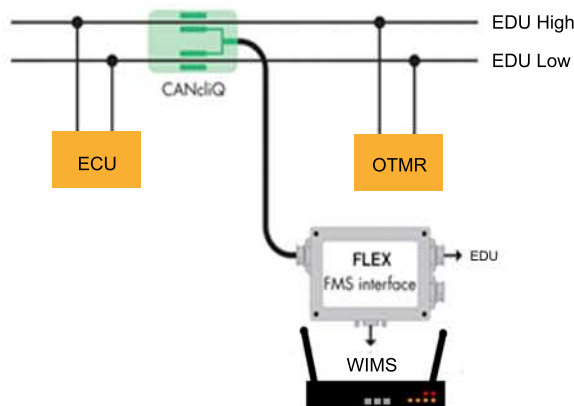
- Speeding alert (user definable)
- Total driving time per day
- Total time cruise control used per day

Maintenance

- Service requirement alert – at 1000 miles to service interval.

Having achieved this integration – the next big challenge was to simplify the installation but keep all the vehicle warranties intact.

We achieve both by adapting a unique CANcliQ technology that simply clips around the EDU hi-lo cables and listens without cutting into the original OEM wiring loom. Then our FLEX unit automatically recognizes the vehicle manufacturer and model using a smart listening filter then loads the correct DCF file to analyze the EDU & OTMR data buses.



This is then connected to our WIMS module, which runs periodic collections of data via RS232 and reports back to our Cloud FMS software VidiMonIQ. Once in the cloud – VidiMonIQ instantly post analysis and uses PUSH technology to send any pre-determined condition alerts to the client.

Our CCTV Integration

One of the most exciting aspects of our solution is the new level of information that the CCTV integration provides to Fleet Managers on almost every aspect of their daily fleet operation. From consultancy to concept the CCTV integration was designed to provide a new level of Quality and Reliability coupled with the latest innovations and technologies to enhance the end-user experience. To deliver this level of performance Vidiwave have combined traditional CCTV with a unique Hi-Definition IP camera technology never seen before in a mobile platform.

Below is a list of some of the key features our Mobile CCTV solution delivers:

8 CH MOBILE DVR with GPS Tracking

DVR

- H.264 Compression
- 1 TB HDD providing 30 days storage
- Full D1 resolution
- Up to 8 cameras - 25FPS per camera.
- 2 Audio inputs
- Removable HDD / DVR dock
- USB HDD back-up
- Back-up via 3G and WLAN
- 4 alarm inputs (PASCOM Alerts)

Cameras

- Ultra Wide Dynamic Range
- Hi definition Colour – 560 TVL
- Ultra low-light light 0.01 Lux
- IP66 rated & snap-lock connectors
- People counting to optimise route plans

G-Sensors

- X Y & Z sensors recording collision data
- Time synchronized and embedded into video for insurance claim protection.

GPS Tracking

- SiRFstar III chipset with ARM7TDMI CPU
- Tracks up to 20 Satellites simultaneously
- Ultra fast first fix locating
- Ultra low power



2 Mega Pixel IP Cameras with 360° FullSight™ Technology

IP Camera

- 2MP resolution for ultra hi definition
- IP65 rated Waterproof
- Built-in audio
- Built-in image de-warping
- Built-in NVR technology to local NAS

Storage

- Built-in SD card storage > 64 GB
- Optional NAS connected to WIMS

Simplified wiring

- PoE (Power over Ethernet)
- Only one cable to run to camera

Low Maintenance

- Unlike normal PTZ – no moving parts means low maintenance.

360° Vision

- FULLSIGHT™ technology – 360° vision
- Single camera Multi-View Technology™
- One camera replace 4 normal cameras



VidiSafe PSU Technology

- Automotive PSU with full spike protection
- Wide ranging input 9-32 VDC
- Reverse polarity protection / Self healing fuses
- EN-50121 & EN50155 certification

Automated Reporting

- Email with video confirmation of all PASCOM passenger alerts as they happen in real time with date stamp & location
- Automated health checking to VidiMonIQ Cloud
- Email condition alerting for Cameras, DVR and Hard drives



Our Management Interface

Via Your Depot Server



- IP Camera Integration
- Revolutionary 360° Vision live & Playback
- 14 days storage built-in to camera

- VPN Health
- On-line status
- Instant Health Alerts
- Instant Back-up to Cloud storage



- Smart Search of Video
- Search by:
- Time/date
- GPS location
- Collision data
- Speeding
- PASCOM Alerts

- PUSH Alerting built-in
- PASCOM Passenger Alerts
- Collision
- Lone worker protection



- GPS Tracking with VIDEO
- Live via 3G
- On playback too

Via Smart Phone

- VIDIMONIQ -Fleet Management Interface
- Instant overview of Fleet
- Instantly see and respond to alerts and faults



- FLEET Tracking
- See all vehicles at same time
- Instantly see which are off-line
- Just select icon to go to vehicle

- Individual Vehicle Tracking
- Live
- Historical
- By day
- By week
- By location



- Secure Your evidence on VidiVault.
- Then share it securely to others.
- No more CD's or DVD to burn
- No More Courier costs for HDD's



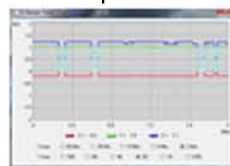
- Access Your fleet video via Internet Explorer
- Using you're your VPN IP address

Reports Available

CANBus / WLAN / 3G Health



G-Force Report with video



Automated PDF reports



Instant Alert Reports





IDIWAVE
Wireless Mobile Video Solutions

Get in Touch



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