## Get The Picture With Mobile Video and change the way you operate



# Seeing is believing

Live video information makes the difference between hearing about events as they unfold and seeing what's going on for yourself. Vemotion makes it possible to transmit quality real time video efficiently over unmanaged networks, allowing visual coverage from many more locations than is possible with fixed CCTV solutions.

Vemotion's solution allows real time video capture and delivery across any low bandwidth transmission which means that video traffic is delivered reliably, over even the most challenging network conditions.

Using existing GPRS or 3G mobile networks means the Vemotion Solution is inherently more flexible and lower in cost when compared to systems requiring fixed infrastructure.

### Continuous Coverage

Vemotion can be located within a vehicle to stream video back to a central control room, giving a live view of what's happening.

Operators on the same Vemotion system can send back streamed video to the Control Room from their body-worn solution and viewing can be switched to allow continuous coverage of a target – even if it becomes mobile.

Real time video images are then able to be distributed to key personnel using their existing mobile phones or PDAs and to other control rooms across the region – or even across the world.

#### Cross Platform

Vemotion will improve visibility within overt and covert surveillance operations and provides the ability to beam back images to an existing central control room over public GSM networks.

The encoder can be loaded onto a vehicle, attached as a body-worn unit or used as an Android Smartphone application. It can also be delivered as a robust, standalone, remotely deployable unit.

Deployable units can be remotely operated with full Pan, Tilt and Zoom control allowing much improved safety for field operatives.

#### Rapid Response

Vemotion enables key command personnel to decide on additional resource requirements or an appropriate response to rapidly changing situations.

A voice message will convey less information and so it will take longer to convey the situation than a moving picture.

With Vemotion, CCTV cameras can be rapidly deployed to key locations, offering coverage that would not otherwise be possible.

As situations change or targets move, so too can Vemotion maintain coverage, relaying accurate and timely information.





# 'Eyes On' while you move

Theft from commercial transport is currently running at \$30 Billion per year in the USA and  $\notin$  8 Billion per year across Europe. Vemotion is particularly suitable for use in the protection of high value goods, offering live surveillance on demand or by triggered alarm from containers or articulated trucks.

Vemotion's ability to operate in a mobile environment offers great possibilities for those who need video coverage irrespective of geographic location. Widespread GSM coverage allows Vemotion to convey 'live' video from almost anywhere in the world utilising existing GPRS or 3G data channels or any other low bandwidth network and true global connectivity can be achieved through the use of satellite backhaul.

#### Situational Awareness

Vemotion allows drivers and remote security centres visibility of the interior and near-field environment of the vehicle.

Video coverage can be triggered by a wide variety of contact switches, sensors or motion sensitive cameras.

Full 24 hour capability can be effected through the use of low light or IR cameras allowing 24/7 protection.

The remote encoder can be sited covertly or overtly and can deliver real time video whilst the vehicle is mobile or parked up, allowing images to be distributed to key personnel or to other control rooms across the organisation.

### Driver Safety

Vemotion inherently increases driver safety. Lone drivers can now sleep soundly in the knowledge that a remote security centre can observe the contents and surrounds of their vehicle whilst they rest.

In the event of an attack, the driver can be contacted directly, reassured of swift assistance and confident that all activities around his vehicle are being monitored and recorded.

Vemotion allows transportation companies to demonstrate to their staff and customers that they have effective measures to reduce the threat to both drivers and valuable cargo.



### Operational Support

Vemotion can be located within a vehicle to stream video back to a central control room, giving a live view of what's happening in or around the vehicle.

The video stream can be activated on command from the vehicle cab, or from the control centre, or by triggered alarm.

Remote coverage allows active remote surveillance of a vehicle and its contents whilst the driver is away from the vehicle, thus lessening the opportunity for theft from an unattended vehicle.



## A picture's worth a thousand words

Video means customer service can be improved, technical support increased and equipment downtimes reduced whilst effectively reducing costs. Vemotion allows direct access to specialist expertise by offering immediate access to real time visual information. The availability of live video information allows the viewer to 'see the whole picture', validate the reported situation and allow more accurate decision making and faster response.

Because Vemotion uses only data channels, simultaneous Mobile calls allow Service Centre audio support to the video picture. A voice message can convey less information and take longer to convey the situation than a view of a moving scene.

#### Project Management

Vemotion can be used to improve project management through off-site visibility of work progress and live situational reports.

The onsite encoder can be deployed centrally, hand placed onsite or used through the Android Smartphone application to give real time coverage from site to an off-site project manager.

Streamed information can be relayed to multiple viewers, regardless of their mobility or location and recorded for subsequent analysis or training.

#### Improved Service

Vemotion allows immediate access to specialist professional assistance – be it engineering, medical or scientific. The ability of Vemotion to make use of extant GSM, or other low bandwidth networks, allows portage between and access from multiple sites.

CCTV cameras can be rapidly deployed to key locations, or used from vehicles, relaying accurate information and providing key personnel with the information they need to decide on additional resource requirements or an appropriate response in rapidly changing situations.



#### Cost Reduction

Customer service support functions can be greatly improved by using Vemotion to show a remote expert the true picture in real time.

Technical assistance to detailed or semi-complex tasks can be easily effected by allowing 'the expert' to see the performance of remedial or repair actions and quickly judge their effectiveness.

Vemotion allows improved service levels, reduced repair times, increased efficiency of technical staff and better use of scarce resources.



#### So, how do we do it?

There are three key components to Vemotion: the Encoder, the Server and the Viewers:

- the Encoder captures and sends the video images to the Server
- the Server manages the images, integrates them with other key applications and forwards selected messages and images to the Viewers
- the Viewers allow real time access to the images, simultaneously and anywhere in the world.



Vemotion's Encoders come in a variety of small form factor cases to suit individual situations - vehicle based, body worn, smartphone or ruggedised covert units. All encoders have the acclaimed Vemotion compression and functionality to provide the most cost effective, high quality solution for low bandwidth and remote scenarios.

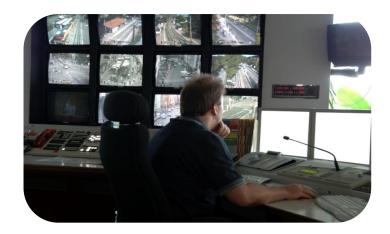


#### From the Scene to the Control Room

The Encoder streams video back to the Server over the public GSM networks, satellite 802.11 or other IP network, or physical radio network, typically operating at low bandwidths but is able to take advantage of higher network speeds if available.

The Server is the receiver. It is Windows based and runs on a PC or Windows server and will, typically, be housed in a control room enabling the Vemotion delivered video to be displayed on the multi screen Network Operation Centre (NOC) viewing facilities .





| Feature                 | Benefit   |
|-------------------------|---|
| Software-               | Flexibility to integrate with third party software to enhance solution's value. Option to   |
| based server            | add new features for specific applications.   |
| Hardware<br>independent | Works with industry standard hardware. No need to invest in new hardware to   |
|                         | enhance security and surveillance. Allows utilisation of the existing infrastructure  |
|                         | such as CCTV camera, IT equipment and servers.  |
| Dynamic low             | Support for low bandwidth connections increases the number of possible applications and conditions in which the surveillance equipment can be used. |
| bit rate                |   |
| adaption                |   |
| Standards-              | Integrates with third party applications such as ANPR software, facial recognition software, mapping software and GPS information.                  |
| based                   |   |
| software                |   |
| Various                 | Small, compact, easy to use, cost effective and reliable encoding transmission. State of the art.   |
| hardware                |   |
| encoders                |   |



### Integration with other applications

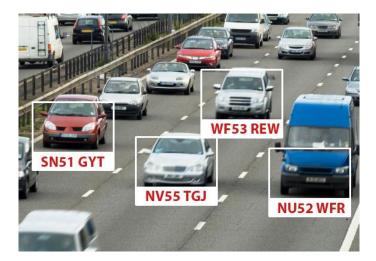
At this point, the Vemotion software has the flexibility to integrate with solution-based features for specific applications. This could allow remote control of encoders to enable a remote device to stop low bandwidth transmission and then capture and send a high quality image of a specific situation before returning to normal transmission. Another option is the ability to add alerts. For example, SMS messages can be sent to mobile staff advising them to take a look at a particular transmission. Operators can also 'drag and drop' incoming video feeds onto selected remote mobile handsets to provide an instant view of the most critical information to any location.

### The Flexibility of Hardware and Software

Vemotion hardware encoders connect to a software server within the control point. The server has the ability to integrate with a wide variety of applications, such as Automatic Number Plate Recognition (ANPR) software, facial recognition software, mapping software and GPS information to locate vehicles or personnel.

The Vemotion video is sent out from the server to remote operatives or locations over the same network options – the public GSM networks, satellite 802.11 or other IP network or physical radio network. Vemotion actively controls the video encoding parameters according to the conditions available. Encoding parameters can be changed on-the-fly, increasing the number of possible applications and conditions in which the surveillance equipment can be used.

Vemotion Viewers can be accessed as applications on a laptop, Smartphone or PDA.





## Rapid GSM Deployment

Where bandwidth is not available or where rapid deployment of a secure video and network solution is needed, Vemotion can be used in conjunction with a Private Mobile Network to provide immediate, private bandwidth. The PMN can be supplied as a Rapid Deployment Unit or as a fixed infrastructure solution.



#### Vemotion In Situ

For full solution information and case studies please visit www.vemotion.com



#### **Remote Surveillance**

Within Shrewsbury, most cameras are connected to our own fibre network but the cost of fibre connections from outlying positions would have been prohibitive. Vemotion have provided us with an effective low cost solution backed by superb service.

Dave Roberts, Environmental Enforcement Manager

#### Seeing is Believing

The primary benefit of having Vemotion has been that the security operatives have been able to work in a way which was hitherto unavailable to them.

Ashwin Lal, Visual Security Systems





#### Video where you need it

We have forged an excellent working relationship with Vemotion staff who have adapted their technology to meet our specific needs.

Marcus Beacham Head of Community Safety and Partnerships







pbvm130404



T +44 (0) 8444 906 906 E info@vemotion.com W www.vemotion.com

A TeleWare House, York Road, Thirsk, North Yorkshire, Y07 3BX