

Frequently Asked Questions

Part 1 General

Who are Vemotion? Vemotion are an innovative leader in the world of live video streaming and integration.

What do you do? Vemotion specialise in the compression and transmission of live video over IP and non-IP networks focusing specifically, but not exclusively, where the available bandwidth is low or restricted, such as 2.5G and 3G mobile networks. Other managed and unmanaged networks are also used to deliver high quality live video streaming.

Why are you based in Thirsk? Our Founder and Chairman lives here, and if you've ever been to North Yorkshire you'll understand why we wouldn't want to move – and don't tell too many people (we don't want to spoil the area). But you're welcome to visit to see a demonstration and tell us about your or your partners' current and future project needs.

What is different about Vemotion? Vemotion, unlike many other video streaming companies, are able to transmit good quality live video over low bandwidth networks like GPRS, EDGE and 3G mobile networks, reliably and with ease of use and low maintenance as key features. Yes, transmission over 4G, WiFi and other broadband networks is supported.

Why should I choose you? Because, as the iconic beer advertisement says, we reach the parts that others cannot reach. Using Vemotion's acclaimed compression and transmission technology, good quality live video can be transmitted from many more locations and scenarios than with other solutions – seeing is believing.

Who uses your products and services? Working with our partners we engage with defence and security organisations, service providers with remote service centres or distributed expertise, telehealth / telemedicine / telehelp organisations, mobile transport and distribution providers, environmental agencies, wildlife protection agencies, process control (machine to machine) operators, CCTV integrators and resellers.

Why do they use them? Cost savings: transmitting quality live video over low cost networks; time savings: efficient, immediate visual information and rapid response, and the ability to deliver a live video picture from a mobile platform. In rapid deployment situations the impact can be immediate and, particularly in telemedicine, immediacy of help can save lives or greatly improve the quality of life. Cheap and efficient proof of concept of fixed CCTV positioning allows rapid, responsive deployment to unexpected threats. For field technical staff, Vemotion's products allow specialist engineers to 'see' and advise on the problem in real time.

Where do they use them? The complete product portfolio (VB-10, VB-20 and VB-30) is used globally, in both urban and rural environments. Vemotion's products are not limited by any single network or national boundary.

How do they use them? Remotely deployed units (remote sites where cabling is costly, impractical and inefficient), man-borne (door security, military, or police) and vehicle-borne video capture units (police cars, cash in transit vans, lone worker recording) with remote command and control or service centres which are wholly owned and operated 24/7 by our customers.

How do you compare with your competitors? We are an easy business to do business with. Technically we are more cost effective and flexible to work with, more responsive and provide the best video quality in the low-bandwidth market with the ability to integrate with advanced centralised video surveillance platforms. We also offer SDK and integration support when working with technology partners.

Part 2 – Use

Is it easy to install and start using?

Yes. Encoders are designed for 'plug and go' operation, which means low setup times and minimal maintenance. Software applications are lightweight solutions which are easy to install using the industry standard installation wizards. There are a few configuration steps which need to be carried out using the Vemotion user guide. When these procedures are complete the system will start working automatically and after successful connection to the server will provide you with live streaming video images.

Is the system suitable for outdoor use?

Yes. The VB-20 and VB-30 products can be housed in suitable weatherproof cases and the VB-10 encoder software can be loaded onto a rugged mobile phone or tablet device using the appropriate (Android) operating system.

How secure is it?

The Vemotion Encoder compresses the video at source and sends it over the relevant network using its own integrated encryption. The video then has to be decompressed by the Vemotion Viewer. Vemotion offers a higher level of security, at a premium, which incorporates Secure Socket Layer (SSL) encryption up to AES 256 certification.

Can the general public see the video?

No. In addition to the higher level of security, Vemotion products are registered to specified devices and need a unique Licence Code/Key to operate. These codes are only issued to registered Vemotion users. However, if a registered Vemotion user wishes the public to see the video it could be re-transmitted, after decompression over a non-secure network in the conventional way.

What cameras should I use?

Most cameras will work with the Vemotion system. The better quality the camera the better quality the image will be on the Vemotion Viewer. Vemotion can run a compatibility check for any prospective camera connection to give greater customer

confidence in overall system capability. The VB-10 relies exclusively on the quality of the camera on the mobile phone or tablet device.

Can I connect with both Analogue and IP Cameras?

The VB-20 Encoder supports analogue cameras; the VB-30 and VB-40 Encoders support both Analogue and IP cameras. The VB-10 uses the integrated platform camera.

How many cameras can you transmit at any one time?

The VB-10 encoder transmits one stream at a time. The VB-30 and VB-40 units can be configured to offer 4 (VB-30) and 8 (VB-40) concurrent streams.

Can I remotely move and zoom (PTZ) the cameras?

Yes. If the cameras are capable of these functions they can be controlled remotely using the Vemotion Viewer or using the integrated software in the control room or server site (i.e. Laptop, PC or Tablet). You can also control the focus and iris controls if fitted (including VB-10 on the mobile phone or tablet).

Can I record on the device?

Vemotion are experts in the business of transmitting images securely using the mobile phone network at low bandwidth so our encoders do not currently record: they compress it and transmit it. However, in response to the demand from our customers we aim to add recording facilities to our encoders in the second half of this year. The Vemotion Viewers are capable of taking snap shots of images and recording video locally on the viewing platform. Third party digital video recorders can also be used with our products

Can I watch and record at the same time?

Yes. If the viewer is enabled for recording the video it can be watched whilst recording at the same time.

What digital video recorders can I use?

Vemotion is compatible with an ever-increasing and wide variety of Digital Video Recorders. Please contact us (enquiries@vemotion.com) for an up to date compatibility list.

Can I integrate the Vemotion encoders into my own system?

Yes, Vemotion is now compatible with a number of industry leading VMS and recording platforms such as Milestone, i-Comply, Tecton and others. This means you can deploy and benefit from Vemotion encoders whilst using your existing platform at the control centre.

What power connection does it need?

The only Vemotion products that require external power are the VB-20, VB-30 and the VB-40 encoders (VB-10 uses the Mobile Phone or Tablet battery). The VB-20 and VB-30 require a 12V supply. This can be via a mains unit, battery or even a solar panel. The VB-40 is a desktop computer which will need a mains supply. If the VB-40 is used in a vehicle a suitable inverter will be required.

How long will it last on a battery?

A VB-20 will last for about 24 hours on a 12V 12Ah battery. (Alarm type Battery)
Peak power consumption is approximately 300 mA.

A VB-30 will last for about 18 hours on a 12V 60Ah battery. (Car battery)
Peak power consumption is approximately 3A.

Can I connect it to another alarm (like a Passive Infra-Red (PIR), or a break beam, pressure pad or contact switch?

The VB-30 can be connected to this type of equipment via its data comms interface.

Does it work from a vehicle?

Yes. The VB-20 and the VB-30 are ideal for use in vehicles as they are powered by 12 Volts. The VB-40 can be used in a vehicle with a suitable inverter – but would you really want to? We find that the VB-30 is more suitable and the integral camera in VB-10 smartphone can always be used with a dashboard mount of course.

Can it be used with body-worn equipment?

Yes. The VB-20 is ideal for this application. It is lightweight and durable and requires just a battery pack to allow full streaming.

Can it be used on a boat?

Yes. The VB-20 and the VB-30 are ideal for use in boats as they are powered by 12 Volts (or if required the VB-20 can use just a battery pack to allow full streaming).

The VB-40 requires a mains supply or can be used with a suitable inverter.

Can it be used from an aircraft, helicopter or UAV?

Yes. The VB-20 and the VB-30 could be used in this application and it will need a 12 Volt supply. Consideration must be given to other active equipment fitted to the aircraft and therefore screening or even suppression may be required. **Note;** It is illegal to use mobile phones whilst airborne because of the mobile technology interference at low altitude.

Do I really need a server? / Why do I need a server?

A server would be ideal; however, this function could easily be carried out by a PC or even a laptop. Vemotion can provide hosting on one of their secure certified servers if required. A server is required to connect and manage the Vemotion Encoders and the Vemotion Viewers.

What specification of server do I need? Minimum specification for a server is Windows 7, 2GHz Processor, 2Gb RAM with a 40Gb hard drive.

How many viewers can see the video picture at any one time? There is no theoretical limit (except on the size of the server running concurrent video streams).

Can you give me a demonstration / how can I see it working?

Yes. Live demonstrations can be experienced at our offices or agents' premises, on customer sites or online by using webinar systems such as Gatherplace or Webex.

Part 3 - Technical

How does it work? Vemotion encoders compress the video from the camera using the Open Standard H264 compression which has been specially modified by Vemotion's software engineers for low bandwidth support. This offers you the best quality low bandwidth video whilst also allowing maximum compatibility to interface with other commercially available equipment and intelligent video processing programs.

What video transmission rates can you support? Vemotion encoders can operate from 3 Kilobits per second (Kbps) up to 2 Mbps. This means that a video signal can be sent over GPRS and 2G networks as well as 3G and the latest 4G networks. Extended capability is also available for restricted satellite transmissions.

What is the best resolution that you can offer? 25 frames per second at HD resolutions and this can be improved over 4G networks.

What happens if the mobile signal drops? As with mobile phones Vemotion encoders allow the video signal encoding to drop as the transmission signal drops and rise again as it recovers to make best use of the available signal. Where the signal drops altogether the Vemotion encoder will reconnect automatically when a signal becomes available. Systems are available for transferring from one network to another if required and have been designed to run in unattended mode so you should rarely, if ever, have to visit a unit to reconnect it to a network

What happens if the signal is lost? If the signal is lost then the encoder will still attempt to reconnect to the Vemotion server and when the signal returns, the system will automatically pick up where it left off. See above "What happens if the mobile signal drops?"

What testing has been carried out? Vemotion products are fully CE tested and field proven in various geographic locations using locally sourced SIM cards and local mobile phone networks. Both "pay as you go" and "contract" SIMS have been used in many countries.

Can the video signal be blocked or jammed? Blocking or 'jamming' of the video signal would need sophisticated equipment, which is not normally available to the general public. For sophisticated and purposeful jamming attacks, Vemotion has solutions which can be discussed privately by appointment and under separate contract and NDA. Use of jamming equipment is mostly illegal except by the Authorities themselves.

Part 4 – Commercial

How much is it to buy? Pricing is available on application through our Vemotion Channel Partners (VCP) or direct from Vemotion where a suitable partner is unable to fulfil your requirements fully. If you have got to this stage of the FAQs then you really should have spoken to us by now and had a live demonstration of the products – 'seeing is believing'.

How much does it cost it to run? Vemotion's highly efficient compression gives you the best performance from any network but this is not a straightforward question to

answer because ongoing operational costs are dependent on the duration of an active video stream and the quality level and consequent data rate required. However, we have found that an average CCTV monitoring usage should be possible for about £1 (GBP) or \$1.50 (USD) per day.

Do you have overseas representatives? We have a growing network of Vemotion Channel Partners (VCP) who understand the local conditions and who can meet, demonstrate and discuss various options for Vemotion products and services with you. Let us know where you are and we'll let you know where they are.

Do you have Introducer and Reseller Agreements? If you are interested in becoming a Vemotion Channel Partner (VCP) then we have two levels of access for you as either a full VCP Reseller or an Introducer. Please speak to us directly about your interest in a closer long term relationship.

Part 5 – Support

What support packages do you offer and how much is it? We offer an Annual Support and Maintenance (V-SAM) package which is available at 20% of the overall cost of the system per year – this entitles the user to the upgrades of software supported (“Ever Green Support”). Alternatively we have a one-off Software Upgrade and Re-vitalisation (SUR) package if you would like to talk to us about what suits your needs best.

Do you support and repair your Hardware? Vemotion supplied hardware may be returned to Vemotion for repair either under contract (subject to terms) or on a time and materials repair basis.

What training do I need to be able to operate it? Training can be carried out at our Head Office in Thirsk or on your own site by prior agreement. Training is one day and consists of a system overview followed by hands-on practical training. The training is supported by a comprehensive user manual and documentation.

Part 6 – Product Specific

Vemotion Product	VB-10	VB-20	VB-30	VB-40
Feature				
Form	Android Application	Small hardware unit	Hardware unit	Tower PC or rack server
Analogue inputs	No	Yes	Yes	Yes
IP Camera inputs	No	Available in 2013	Yes	Yes
DVR Source inputs	No	No	Yes	Yes
Number of inputs	1	1	8 Analogue, 8 IP	16 Analogue, 16 IP
Number of concurrent	1	1	Up to 4	Up to 8

streams				
3G / GPRS modem integrated	n/a	Yes	No	No
Ethernet streaming	Yes	Yes	Yes	Yes
Wi-Fi	n/a	No	Yes	Yes
OTA Configuration	No	Yes	No	No
USB Configuration	No	Yes	Yes	No
Video format	Optimised H.264	Optimised H.264	Optimised H.264	Optimised H.264
Bandwidth	3kbps - 1Mb/s	3kbps-2Mbps	3kbps-1Mbps	3kbps-2Mbps
Bandwidth management	Manual and Automatic	Manual and Automatic	Manual and Automatic	Manual and Automatic
Remote snapshot	Yes	Yes	Yes	Yes
Image enhancement	Available in 2013	Available in 2013	Available in 2013	Available in 2013
On device recording	Yes	Yes	Available in 2013	Available in 2013
Triggers	n/a	Yes	Yes	Yes
Audio	No	Yes play and record	Yes 2 way live	Yes 2 way live
Encryption	Up to AES 256	Available in 2013	Up to AES 256	Up to AES 256
Telemetry (PTZ)	n/a	Yes	Yes	Yes
Failover to secondary SIM	n/a	No	Yes	Yes
Dual capacity with secondary SIM	n/a	No	Yes	Yes
Timespace DVR integration	No	No	Yes	Yes
TECTON Recorder compatibility	Yes	Yes	Yes	Yes
I-Comply integration	Yes	Yes	Yes	Yes
Milestone integration	Yes	Yes	Yes	Yes
Synectics integration	Yes	Yes	Yes	Yes
Software SDK available	Yes	Yes	Yes	Yes



And finally, if you've got this far then please contact us directly at:

enquiries@vemotion.com we'd love to show you how good it is and discuss how it can help you – seeing IS believing!

We look forward to seeing you (literally)

The Vemotion Team

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