

Security Vehicle On-Board Video Systems

Get live situational awareness from any security vehicle direct to the control room with our HD-enabled video technology.

Technology now enables a cost-effective fully integrated vehicle movement and management system that will give greater than ever situational awareness, provide system level security and enhance safety for both officers and the public.

Our system delivers a full set of integrated, on-board features that are both backwards compatible and future proofed for next generation technology.

Our Command & Control management centre will provide you with instantaneous full visibility of fleet operations, providing situational awareness to respond to any event. Alternatively you can connect and integrate into an existing management centre.



Live Surveillance Video

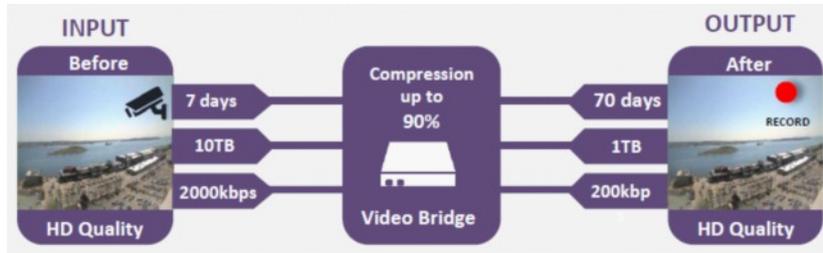
HD video has very large data-rates which is very costly to both transmit from remote sites and store for long durations. Often it is not possible to send HD video from remote locations due to non-existent or slow or congested cellular infrastructure, forcing most users to rely on barely-identifiable analogue video.

Using state of the art video compression technology, the cost of storage and transmission is greatly reduced, enabling them to be streamed live over mobile networks such as 3G/LTE/satellite modem. The on-board computer acts as an Omni Compressor for up to eight Full-HD IP cameras recording internally for up to 90 days.

When the vehicle enters the depot the stored video footage is uploaded to a VMS over a wired/wireless network connection, which it senses automatically. This can be encrypted to protect the data. It is then available on-demand for a period of time in case any evidence is required.

At any time the video from any of the eight cameras may be streamed live to the control room. Multiple streams may be accessed live simultaneously depending on the speed of the data connection available. This allows real-time events to be made available in a control room to manage incidents as they happen.

The video streams are compressed using the Omni Compressor patented algorithms, yet made available for either download or live streaming in their original formats, only now in much smaller files/bitstreams. Up to 95% compression is given, depending on the amount of motion in the video frame (with much motion compression can reduce to 50-70% - still enabling streaming to take place).



Tracked Vehicle Infrastructure

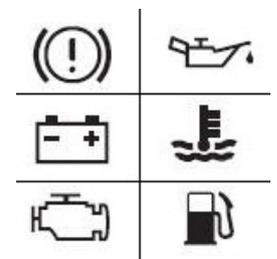
Locations of all vehicles will be displayed in real-time on an interactive map in the control room, either for basic viewing or integrated into a full Command & Control platform. Smart analytical tools will provide customers with an enhanced experience showing real-time trip information whilst riding the bus, standing at a bus stop, or even online from anywhere. This can be integrated into existing asset tracking platforms.

Tracking devices on vehicles which use cellular networks can be replaced with the on-board connected infrastructure which can query the GPS network and send its location over the data network without incurring SMS charges, offering total cost of ownership (TCO) savings.



On-Board Diagnostics

Real-time presentation at the control room of the vehicle operating data, fuel levels, and engine performance will enable right time servicing and total fleet management.



WiFi Equipment Hotspot

With backhaul to the control room already established for video, this can be provided to other network-ready equipment, such as a PNC/ANPR terminal, either through a WiFi hotspot or direct wired Ethernet connection.

Specifications

Physical (W x H x D)	223 x 46.6 x 133 mm (8.69" x 1.81" x 5.18"), 1.7 kg
Environmental	Operating -20 ~ 55° C with 0.7m/s air flow, Humidity 95% @ 40° C (non-condensing) Vibration 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis Shock 30G, IEC 60068-2-27, half sine, 11 ms duration
Processor & Memory	Intel i5-4300U Dual Core 1.9 Ghz, 8GB DDR3L, 64 GB to 1 TB solid state
Operating System	Microsoft Windows 7/10 Pro 64-bit
Video Input/Output	Input MPEG4, H.264, H.265, ONVIF, Output on-device storage & streamed as RTSP
No. video streams	1 to 8 Full HD 1080P simultaneously
Other Inputs	GPS GPS/QZSS GLONASS, ECU OBDII SAE J1962, Audio Line-in, Line out, Mic-in
Compliance	EMC CE/FCC Class A, CCC, BSMI. Safety UL, CCC, BSMI, CB
Connectivity	Ethernet 2x 10/100Mbps, Cellular 2G 3G 4G LTE modem Mini-PCIE, Satellite modem USB