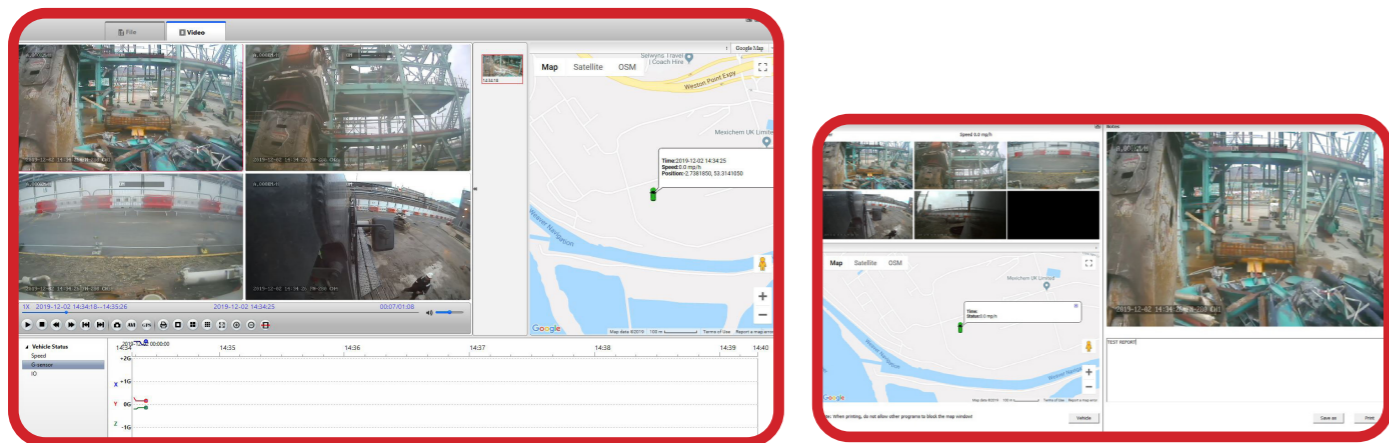


Analysis of Recorded Video Footage



The SD card can be removed from the vehicle so that the video footage can be reviewed on our bespoke analysis software which is designed to help the user quickly identify footage of interest, even when an accurate time and date is not known.

This software also provides archiving and export functions that allows the user to select specific footage to be archived, and to export it in a format suitable for general distribution.

For DVR's fitted with an internal SSD drive video footage is normally retrieved remotely over the 4G network (see below). However, footage can also be retrieved manually by copying it from the SSD onto a USB stick.

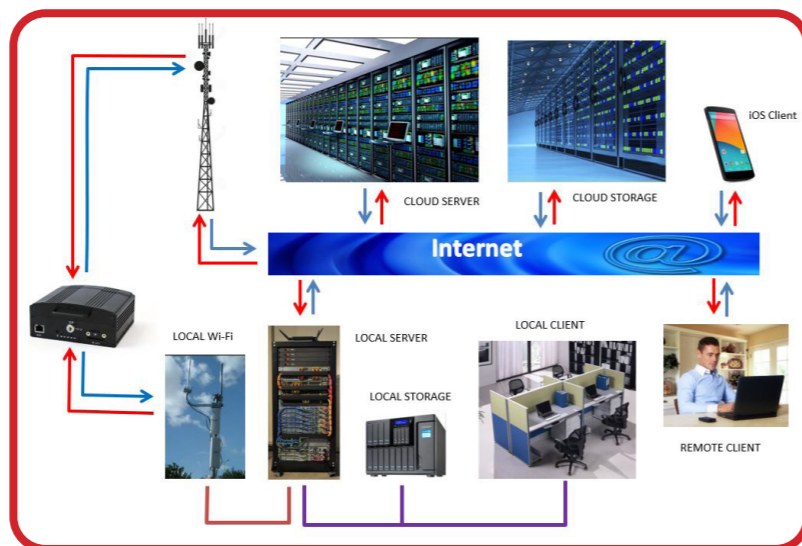
Remote Access, Video-Streaming, Alerts and Video Retrieval

This device is specifically designed to be upgradable into an Internet Enabled device.

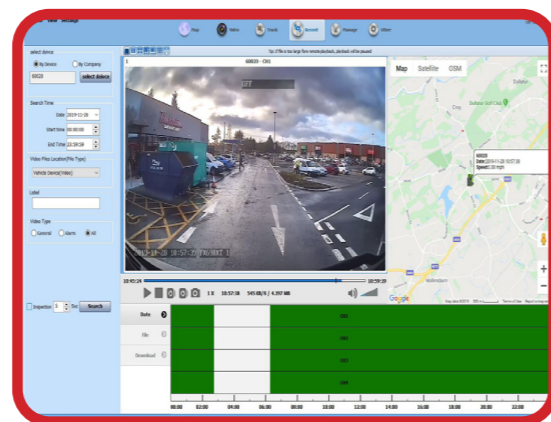
This provides functions such as enabling the DVR to send e-mail alert with an automatic upload of a snapshot and/ or short video - when an event such a High G Level limit is exceeded.

Even more usefully it also allows video footage to be retrieved from the device whilst the vehicle is in service, without the need to manually recover the SD Card.

Internet Enabled DVR's can also be upgraded with a tamper-proof Internal SSD drive.



- Other features of an Internet Enabled device include:
- Live Remote Streaming of all vehicle cameras*
- Statistical Reports on Key Vehicle and Driver Parameters*
- Reports on individual Alarm Events*
- System Issue alerts such as video loss, HDD and GPS failure*
- Live vehicle Tracking*
- Driven Route Reports with High G Events and Vehicle Stopped Notifications*
- Speeding within specified Area and Routes*
- Entering/ Leaving specified locations within prohibited times*
- Vehicle Stopped for too long within specified times*



Vision UK

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DVR-2040
Solid State Video
Recording System



DVR-2040 Solid State Video Recorder

KEY FEATURES

- Records 4 High Definition Video Channels at up to 1080P Resolution
- Solid State SD Card Primary Storage - up to 512GB
- Built-in 3-axis accelerometer that can detect high impact events
- Recorded Video Watermarked with Time, Date and Vehicle identification
- Trigger Inputs to identify specific operations - e.g. Reversing, Panic Button
- Innovative UPS Technology ensures the integrity of recording in event of power failure
- GPS providing Location, Journey History and Vehicle Speed, and GPS synchronised time
- Optional Internal (non-removable) SSD (up to 1 TByte)
- Option of Remote Access through Wi-Fi and/ or 4G, enabling Automatic Alerts of events by e-mail
Automatic upload of video and/or images of an "event"



RECORDING QUALITY

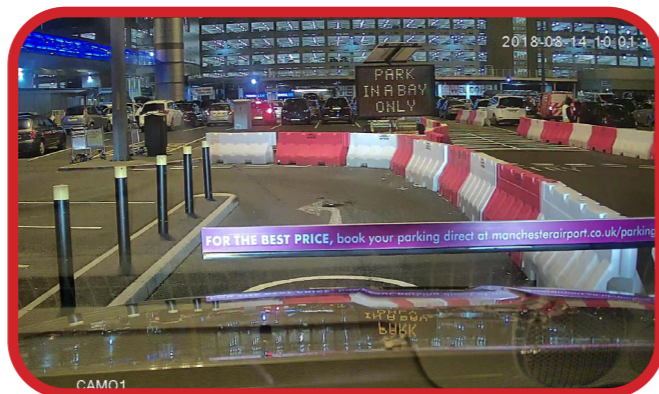
This device supports both Composite video and AHD video protocols which allows us to offer the widest choice of cameras and provide solutions that best meet individual customer requirements.

In many cases the "best" solution can be a system that uses a combination of different camera types.



The latest generation WDR 720P & 1080P Chip Sets allow us to provide the highest resolution recording with excellent colour reproduction at night and during the day.

For more information on the main characteristics of these and the different camera chip sets please see the table on the opposite page.



DVR SPECIFICATION

OPERATING SYSTEM		Linux
PROCESSOR		Hi-silicon Hi3520D
PHYSICAL SECURITY		Removable Storage Medium protected by key lock. <i>Option of Tamper Proof Housing allowing no physical access to storage medium</i>
VIDEO	Video Inputs	4 x AHD/ Composite Video Protocol
	Video Compression	H.264 or H.265 Video Compression with Codec ffmpeg.
	FPS	25 Frame/s (Maximum)
AUDIO	Audio Inputs	4 Inputs (G.726 Compression)
STORAGE	Storage Requirements	100 GByte storage will store 110 hours video off 1 camera @ 720P resolution
	Storage Medium	Removable SD Card: Max 1TByte/ Internal: Max 2 TByte SDD
	Data Protection	Video and data is saved in a proprietary file format; The saved video is protected so that the Files can only be accessed through our proprietary software and the files can be further encrypted with a unique password
ALARMS	Alarm inputs	Support up to 4 alarm i/o inputs. Suitable for connecting direct to indicators
	G Sensor	3 axis accelerometer is integrated into the device
	Alarm record	Up to 30 seconds prior to and 120 seconds after an alarm event can be recorded and automatically uploaded to Remote Server
	Alarm File Protection	Alarm Files are protected for 30 days (configurable)
GPS - Standard (Can be deleted)		External GPS Receiver can be connected to record position and speed of the device
REMOTE ACCESS- Optional		Wi-Fi Module Integrated with main board 4G Modem integrated with main board
POWER	Power Management	Configurable system Power down time after ignition OFF
	Power Input	DC:+8V to +36V: Overload, Low Voltage and Short Circuit Protection
	Power Consumption	Working 10W, Standby 0.1W
OPERATING ENVIRONMENT		-25 deg C to +70 deg C, 10% to 90% Humidity
DIMENSIONS		142(W) x62(H) x123(D) mm, 1.1 KG

Camera Specifications

	600 TVL CVBS Cameras	720P AHD Camera	1080P AHD Cameras	1080P WDR AHD Cameras
Effective pixel array	960(H)x 576(V)	1280(H) x 720(V)	1980(H) x 1080(V)	1980(H)x 1080(V)
Resolution at best recording quality	Reasonable	Very Good	Excellent	Excellent
Daylight Colour Reproduction	Very Good	Reasonable	Reasonable	Excellent
Low Light Performance	Good	Reasonable	Reasonable	Excellent
Bright Sunlight Performance	Reasonable	Reasonable	Reasonable	Excellent
Viewing Angle (diagonal)	45-170 degrees	50-170 degrees	50-170 degrees	60-170 degrees
Max Frame Rate	25 fps	25 fps	25 fps	25 fps
Operation temp	-20 °C to +70 °C RH 95% Max	-20 °C to +70 °C RH 95% Max	-20 °C to +70 °C RH 95% Max	-20 °C to +70 °C RH 95% Max
Storage temp	-30 °C to +85 °C RH 95% Max	-30 °C to +85 °C RH 95% Max	-30 °C to +85 °C RH 95% Max	-30 °C to +85 °C RH 95% Max
Power Requirements	DC 12V input	DC 12V input	DC 12V input	DC 12V input
Typical File Size for 1 hour's video footage at best recordable quality	0.8 GByte	1.6 GByte	2.0 GByte	2.0 GByte