

Vehicle License Plate Recognition systems offer massive potential and are currently used for a wide range of applications.

Basic elements and principles of a VLPR system

A typical system will consist of a specialist CCTV camera hard wired to a dedicated computer processor running specialist application software. In addition, such systems may incorporate a dedicated digital image recorder, specialist overt or covert lighting, as well as a range of secondary / peripheral components (e.g. automatically controlled rising traffic barriers).

Images from the camera are processed to identify the registration number of a vehicle from the captured pixels. The identified number plate can then be recorded and / or matched against a database of registration numbers.

Dependent on the nature of the application, once a registration number has been identified, it may be used for a variety of applications e.g.

- The identification of stolen vehicles or vehicles of potential interest to the police or security forces.
- Identifying vehicles authorised to enter a managed estate, company car park, etc.



- Recording visitors to commercial premises or controlled private estate, such applications can also incorporate facilities for visually matching drivers to vehicles using stored driver images.
- Counting vehicles entering or leaving / spaces remaining available in a municipal car park.
- Identification and recording of untaxed vehicles.

Peripheral components and activities may include dedicated image recording facilities, vehicle logging, rising barriers (automated or manned), among others.

Choice of system

Frame grabber technology facilitates the capture of individual images for processing by custom designed computer hardware and software against sophisticated algorithms to identify the vehicle registration number. The overall cost of the system will depend on the level of sophistication of the installation, the power of the computer, the versatility and speed of the software, the choice of camera and lighting.

Top of the range VLPR systems can offer amazing accuracy – over 95% success rate in number plate recognition irrespective of weather conditions, volume and / or speed of traffic (up to 200 kph) but obviously such systems come at a price.