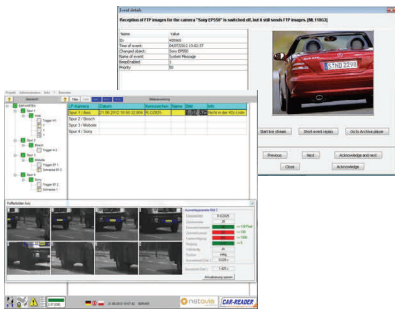


Value added number plate recognition

NETAVIS CarReader is a comprehensive module for EU license plate recognition and vehicle access management. Fully integrated in the NETAVIS Observer platform, all events are evaluable from the NETAVIS Observer user client.



Security & Transparency

The access and departure roads of premises are observed with video cameras and shown at the NETAVIS operator station. Security personnel therefore keeps track of all events on the property, including the access points. Details can be displayed on a full screen monitor. The Observer archive includes the identified EU number plates as video meta data. Consequently, every access and departure can be re-traced quickly by various search criteria. The optional statistics functionality includes valuable analytical possibilities, CSV export of archive data allows further processing. Due to NETAVIS Observer privacy features NETAVIS CarReader also meets highest standards of data protection.

Vehicle Access Management

The management of access authorization is easy with NETAVIS CarReader. EU number plates can be white- or blacklisted with various constraints (e.g. by time or number of accesses). Additionally, a picture of the vehicle or the driver can be stored. Due to group or subgroup assignment it is also possible to e.g. dedicate 5 parking lots for 10 particular license plates. Unknown vehicles can also be listed. The EU license plate is read automatically while approaching the access point. Depending on its authorization, particular routines can be defined and triggered.

Additional Options

An additional authorization system based on transponder chip cards or PINs is available, thus access control can consequently be executed by EU number plate and/or ticket respective correct PIN. Another optional implementation allows text to be displayed at the gate according to the recognized EU license plate and also on large network displays. The statistics extension shows the allocation of EU license plate related events over a defined period of time and is able to analyse provenance of vehicles. An access closure feature after reaching maximum capacity is also available. Implementations of third party applications are possible with TCP/IP, SQL and serial interfaces.

Full Integration

The full integration of EU number plate recognition into NETAVIS observer platform provides comfortable overview of all cameras, indoor as well as outdoor. Operators can intervene for corrective action any time. NETAVIS CarReader is triggered by motion detection, loop detectors or I/O-signals. Integration of gates, barriers and stoplights is also possible.



Examples of Usage

If a EU license plate is recognized as authorized, the gate opens automatically and the access is documented.

All drivers are allowed to enter, only departure is possible with whitelisted vehicles, all others have to pay the parking fee first. Blacklisted vehicles trigger an alarm, the event is reported to the responsible person by email.

Many more configurations are possible due to interfaces with parking systems.

NETAVIS CarReader at a glance

Control

Automatic recognition of EU number plates and triggering of defined routines depending on its authorization e.g.:

- open gates
- record of access and departure
- alarm
- notification (e.g. email)

Observation

- whitelist management
- management of access authorization with various constraints (e.g. by time, number of accesses)
- blacklist management
- management of parking space for visitors

Database

- record of system and client interaction
- various count, search, sort, and print functions
- CSV-export by criteria like camera, license plate, date, access, departure, manual gate opening, denied access, currently present vehicles etc.

Miscellaneous

- optional sound in case of EU license plate recognition
- direction switch for single lanes serving as both, entry and exit
- triggered by motion detection, loop detection and I/O-signal (by external I/O-modul)

System Architecture

A Windows-based CarReader server is connected to the NETAVIS Observer system. Client-on-server is possible, additionally up to four NETAVIS CarReader client-PCs can be connected. NETAVIS CarReader is available in English, German and one additional, embedded language. Licensing is done according to number of cameras.

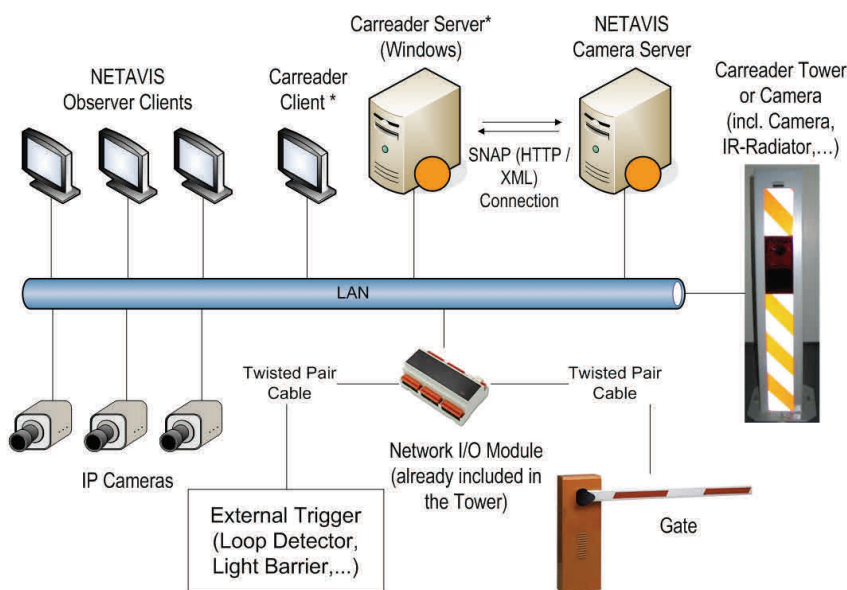
System Requirements

The requirements for NETAVIS CarReader server respective client-PC are:

- Intel or AMD CPU with 2.0 GHz
 - operating system: Windows Server 2003, 2008, Windows 2000, XP, Vista, 7
- NETAVIS CarReader supports analogue as well as IP-cameras for number plate recognition of leading vendors. Details should be defined in the course of project planning. With professional installation and fine tuning **detection rates up to 95 %** are reached.

Additional Options

- statistics extension (graphical display by vehicle origin, filtering, etc.)
- ticketing system based on transponder chipcards (authorization by EU number plate and/or ticket)
- authorization based on PIN-codes (authorization by EU number plate and/or valid PIN)
- counting of present vehicles and closure at reaching maximum capacity
- automatic text display e.g. at the gate or on large LED display
- integration of third party applications possible upon request



* Client-on-Server is possible as well; another option is that the Carreader Client runs on a NETAVIS client