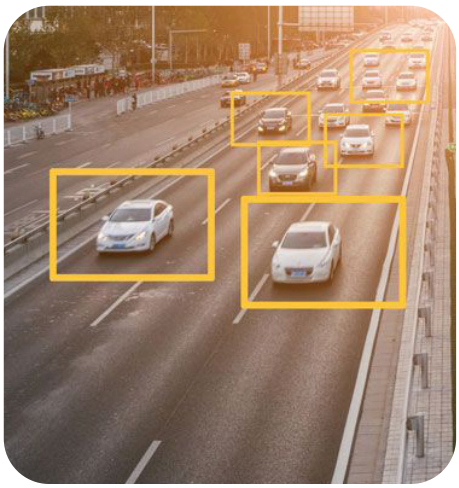
ADAPTIVE RECOGNITION

AUTOMATIC NUMBER PLATE RECOGNITION

CARMEN®
ANPR SOFTWARE

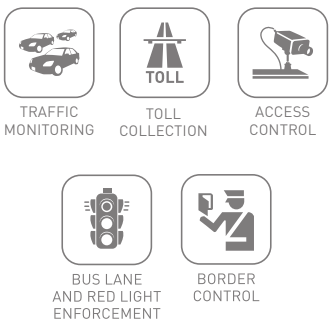
License plate recognition for applications
where accuracy matters



Carmen® is an Automatic Number Plate Recognition software that reads all vehicle plate types in the world – at any traffic speed.

Toll collection and congestion charging systems, traffic monitoring and security, speed and journey time measurement, bus lane and traffic light enforcement, parking or access control and many other systems benefit from the fast, exact, automatic identification and recognition capabilities of this ANPR software – since the 1990s, when the solution was first created – and constantly fine-tuned ever since.

The Carmen® ANPR software reads license plates from many image sources remarkably fast and with the highest recognition accuracy in its class. It offers country-independent recognition of not only Latin characters, but also Arabic, Cyrillic, Chinese, Korean, Thai and many more, as well as reflective, non-reflective, personalized and special interest plates that are typical in many U.S. states.



Main benefits

- Proven, fast and reliable automatic number plate reading software
- Industry leading high accuracy and recognition rates (>99% on a global scale)
- Ability to recognise various plate sizes, syntaxes and distorted plate images
- Reads Arabic, Cyrillic, Chinese, Korean, Latin, Thai and many more characters
- ADR non-empty/empty plates recognition included in selected regions
- Unlimited and cost effective versions available

Adaptive Recognition **America**
Adaptive Recognition **Hungary**
Adaptive Recognition **Nordic**
Adaptive Recognition **Singapore**

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Carmen® ANPR Software

Specifications

• highly customizable • camera independent • diverse input options • country/state recognition • scalable • high accuracy
• plate color detection • make model recognition (MMR) capability

Special ANPR/LPR cameras are available for recognitions rates.

General information

Supported Operating Systems	Windows (64 bit) | Linux (32/64 bit)
Supported Platforms	Windows: x86_64 Linux: x86_64*, ARM64*, ARM32
Minimum System Requirements	2 GHz CPU** | 1 GB RAM | 200 MB HDD | free slot for NNC
Licensing	one year from purchase included, optional subscription available on yearly basis

Interface

Input	Still image from file or memory in various image formats (BMP | JPEG | PNG)
Output	ANPR data Number plate DATA in ASCII/UNICODE text Confidence level in various formats Text confidence for each character Individual result for each plate on an image Location of each plate on one image Country/State/Province ID Background color (optional) Character color (optional) Category of the plate (optional)
Trigger	Trigger Can be integrated with any trigger
Make & model recognition	Yes (optional) Recognized categories: car, van, heavy truck, light truck and bus Recognized vehicle makes: over 100, including European and Asian brands too Recognized vehicle models: over 1000 models, constantly growing

Development tools for easy integration

Supported programming languages under Windows	C/C++, C# Visual Basic .NET Java
Supported programming languages under Linux	C/C++, Java
In The Box	Development libraries: .dll, .so files Demo application, sample codes for each programming language Neural network controller Comprehensive digital documentation

Available Versions	FreeFlow	K version
Capacity (images/day)	unlimited***	11520
Processing threads	1 / 2 / 4 parallel threads	4 parallel threads
Credit buffer	unlimited	300
Time for 4 new credits (sec)	–	30

*in case of running MMR, CPU must support AVX.
in case of running MMR, CPU must support AVX * Depends on CPU speed, settings, engine type
Technical specifications are subject to change without prior notice. This document does not constitute an offer.

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