

CARMEN® OCR-UIC CODE RECOGNITION



Automate any railway system with OCR-UIC code identification



What do these trains carry? Are they on time? Are they where they should be? Any missing carriages? – you can answer these questions easily by having an automatic railway code recognition system. Carmen® OCR-UIC was developed exactly for such a function.

This is the way how commercial railway system operators register passing railway carriages (carrying cargo or passengers) without human assistance by taking advantage of automation.

The gathered data – the codes, used for identifying railway cargo (called UIC) are automatically stored and processed for statistical and system management purposes – functions that simply cannot be done manually.



INTELLIGENT
CONTROL SYSTEMS
FOR RAILWAY
OPERATORS



RAILWAY
LOGISTICS



BORDER
CONTROL
CUSTOMS



INVENTORY
MANAGEMENT
AT LOGISTIC
CENTERS



RAILWAY
CARGO
DATABASES

Main benefits

- Automated UIC code reading saves time and resources
- Increasing railroad safety by providing continuous, real-time traffic data
- Market leader high accuracy and recognition rates
- Smooth and maintenance-free 24/7 operation

Specifications

- straightforward use • hardware independent • multi format image input • motion detection • scalable • high accuracy

Special cameras are available for recognitions rates.

General information

Purpose	Automatic recognition of the railway vehicle ID numbers – a UIC wagon/coach number recognition software for various intelligent railroad management systems
Supported Operating Systems	Windows (32/64 bit) Linux (32/64 bit)
Supported Platforms	x86_32 x86_64 ARMv7 Cortex A8 and above
Minimum System Requirements	1 GHz CPU 512 MB RAM 1 GB HDD free slot for NNC
Licensing	One license per application thread, multiple license/controller is available One year from purchase included, optional subscription available on yearly basis
Available Neural Controllers	USB 2.0 dongle - type A USB internal 4-pin PCIe card (X1) Mini-PCIe card

Interface

Input	Still image from file or memory in various image formats (BMP PNG JPEG JPEG2K RAW) Live analog video input (PAL or NTSC) Live digital camera input
Output	UIC data UIC number in ASCII text Position of the UIC code Confidence level in percentage Confidence level for each character ID of the best image
Trigger	Can be integrated with any trigger device (recommended when recognizing from live video stream) Software motion detection module is included

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



Technical specifications are subject to change without prior notice. This document does not constitute an offer.