

# CARMEN® OCR-ACCR SOFTWARE

**A must-have automation in** all logistics centers for modern shipment tracking



Shipping ports and logistics centers changed a lot in the past decades. Automatic Container Code Recognition (shortly ACCR) became almost a standard for building comprehensive databases – tracking container movement, automating and simplifying railway or harbor logistics, border control and container surveillance systems.

Carmen® OCR-ACCR automates these processes efficiently: all you need is a camera, set in position to view container codes so Carmen® can receive the perfect input.

The recognition happens in a blink of an eye and the OCR data – including serial number with check digit, owner, country code, size, type and equipment category – can be saved to a database or transferred further to any IT system.



AIRPORT  
AND HARBOR  
LOGISTICS



BORDER  
CONTROL  
CUSTOMS



INVENTORY  
MANAGEMENT



CONTAINER  
SURVEILLANCE  
SYSTEMS



TRAFFIC  
MOVEMENT  
DATABASES



TRAFFIC  
SECURITY  
MONITORING

## Main benefits

- Automating ISO 6346/MOCO/ILU code reading that saves time and resources
- Increased accuracy and security for logistic supply chains
- Allowing faster, more accurate inventory tracking
- 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 ACCR cameras are available for recognitions rates.

## General information

Purpose	Automatic recognition of container codes – an ISO container code recognition software for logistic systems (railway, marine, harbors and airports), supporting ISO 6346 (BIC code), ILU and MOCO codes
Supported Operating Systems	Windows (32/64 bit) Linux (32/64 bit)
Supported Platforms	x86_32   x86_64   ARMv7   Cortex A8 and above   PPC
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 Multi image for same container
Output	ACCR data ISO Container code in ASCII text Position of the 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.

