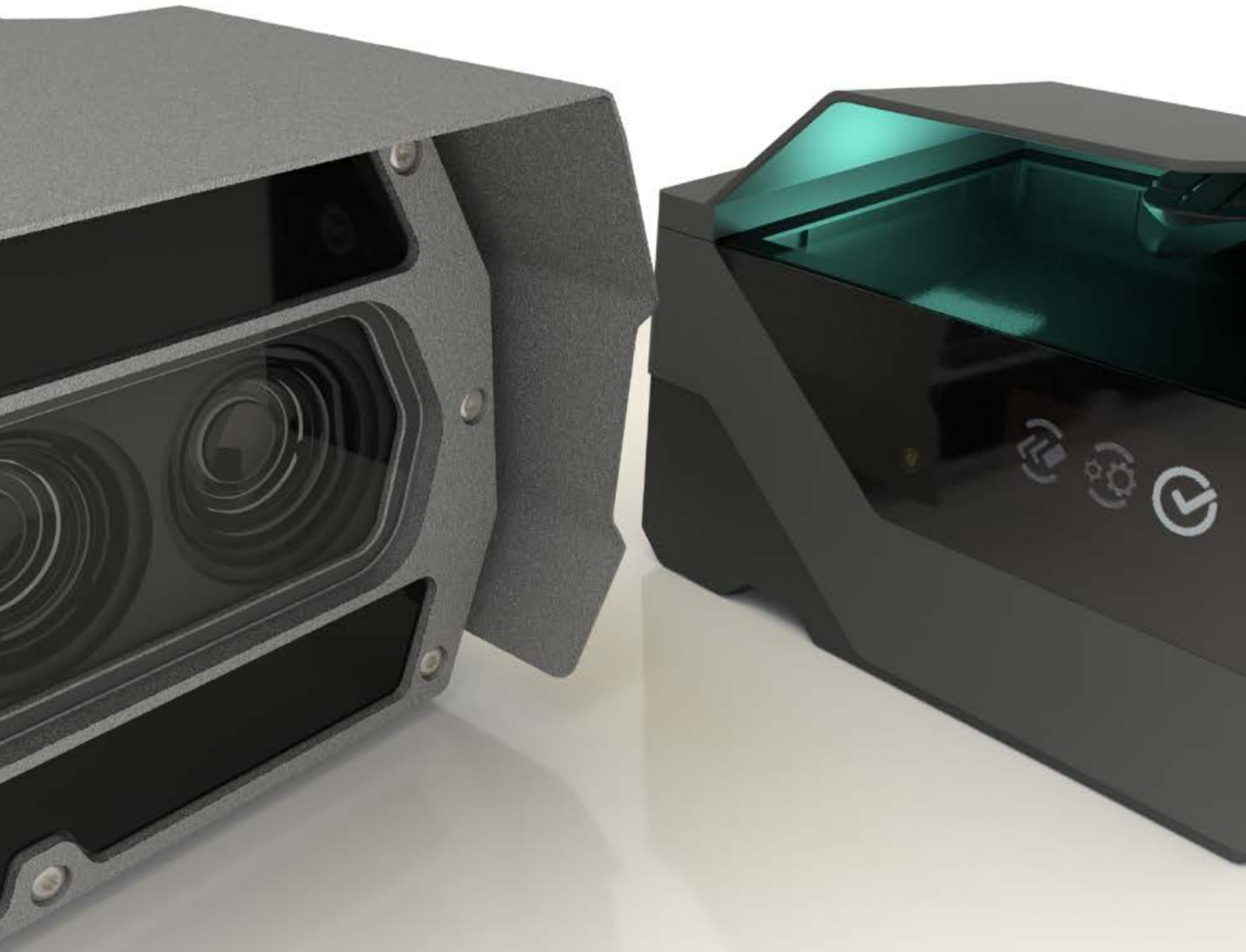


ADAPTIVE RECOGNITION

PRODUCT CATALOG



World-class **software** and **hardware** components
for image capturing and analytics

Setting Standards and Exceeding Expectations

In the world of image processing technology, we stand as pioneers, defying expectations and continuously pushing the boundaries of accuracy, efficiency, and resilience. Our hardware and software deliver standard-setting performance, meticulously designed to operate flawlessly under the harshest conditions, braving the extremes of scorching heat and frigid cold.

We raise the bar for robustness and durability, ensuring that your systems can withstand the rigours of daily operation without fail. In a world demanding precision and unwavering performance, our world-class software and hardware components for image capturing and analytics stand out as beacons of innovation and reliability.

Experience the difference - Image Processing Technology that exceeds expectations.

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Passport Readers and ID Scanners with OCR & Authentication Software

Trust Perfected in a Single Scan. Unmatched in Accuracy and Efficiency.

In a single scan, our Passport Readers and ID Scanners redefine trust, setting the benchmark for precision and reliability. From age verification to law enforcement, each scan guarantees unrivalled accuracy, ensuring seamless operations and uncompromising security. Place your trust in our technology to safeguard your world, identity by identity, as we redefine the standards of excellence in identity verification.



Visit our website
for more information



Osmond L and R

ID Scanners with USB Interface



Border control
& Immigration



Law
enforcement



ID quality
assurance



KYC/AML
applications



Telco

3 years
manufacturer's warranty

Scanners for Reading and Verifying Optical and Digital Data from IDs

Minimize Time Spent on ID Checking

Osmond L and R models read, authenticate, and analyze identity documents in a matter of seconds. They are ideal for mission-critical applications in security, border control, and commercial environments.

Both models feature hardware-accelerated automatic image enhancement with a maximum resolution of 700 PPI to provide complete analysis of optical security features. They inspect the MRZ (machine readable zone) and VIZ (visual inspection zone) parts of the document and perform ID/2D barcode reading as well. In addition, R models read digital (RFID-chip) data of e-documents. Besides the standard visible white, infra-red and ultra-violet, a built-in white oblique (edge) light helps visualize the surface structure of documents.

The included software API allows easy integration into any system, supporting C/C++, C#, .NET, and Java.

Main Highlights

- Speedy verification of both ICAO and non-ICAO ID documents
- Clear and immediate feedback, easy communication with databases and external systems
- Configurations to cover use cases from border control to hospitality
- Maintenance-free operation, no moving parts
- Industry-leading image quality for OCR and authentication with high-resolution 700 PPI imaging
- Visible white, IR, UVA illumination, and oblique light
- IP54 case, scratch-resistant glass, large scanning window, OLED display
- Adaptive Light Control (ALC) and Reflection Removal (RR) for filtering out interferences
- Jura IPI, letterScreen security visualization, RFID-chip/smartcard reading/writing



Easy usage with USB

Speedy document reading

Worldwide document support

Click or scan for the
product page



Click for the
video



IDENTITY DOCUMENT RESULTS

NAME: **RACHEL STEINMULLER**
DATE OF BIRTH: **1988-06-10**
PLACE OF BIRTH: **COPENHAGEN**
NATIONALITY: **DANISH**
SEX: **FEMALE**
DOCUMENT NUMBER: **112155675**
VALID: **FROM 13/06/2019 TO 13/06/2029**
PERSONAL NUMBER: **0068802510**



Osmond N

Standalone ID Scanner



Telco



Banking



Law enforcement



ID quality assurance



Border control & Immigration

3 years
manufacturer's warranty

Models Enhanced with Dual Interface

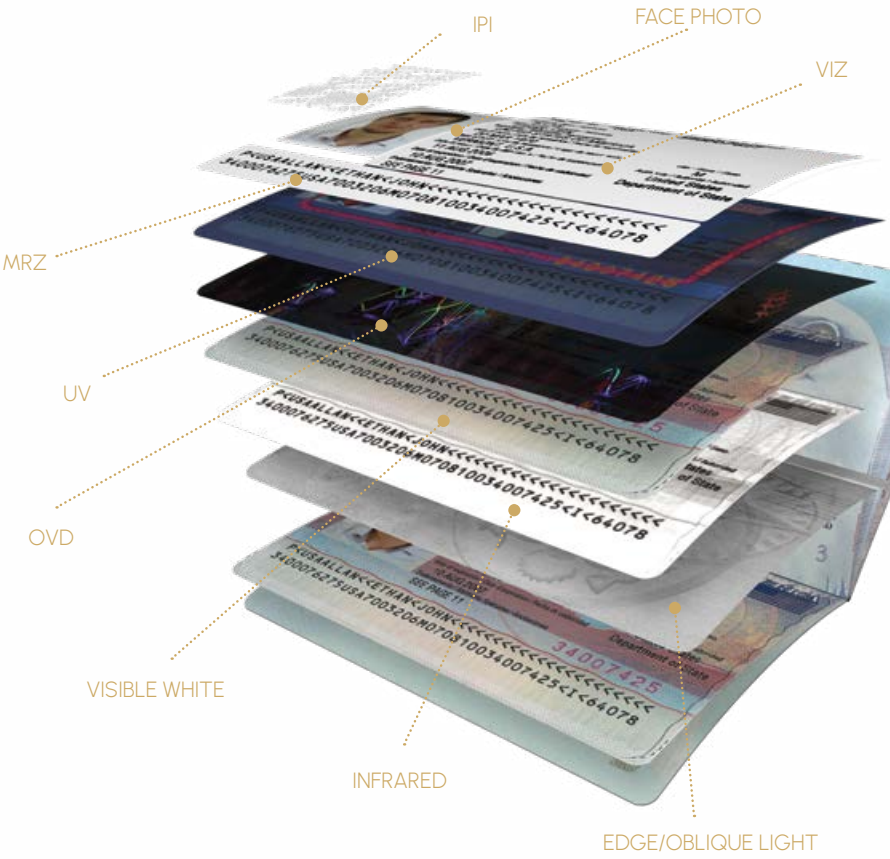
Make the Most out of Network Environments

Osmond network models are equipped with the same features as the L and R models, with the addition of a dual interface to either function as standalone network or USB devices. They can be integrated into systems with thin clients, virtualized operating systems, and any LAN and internet-based environment, with no local installation needed. Ideal for centrally managed networks, they can be used in pool mode, connecting to multiple clients in the network. Osmond N models connect to networks via Ethernet.

Models come with a software API for easy integration, featuring automatic image processing, MRZ (machine readable zone) data reading, and authentication of standard and document-specific safety features.

Main Highlights

- Standalone operation with no installation needed, selectable network (PoE+) or USB operation mode
- Speedy verification of ID documents
- Ease of use, programmable OLED display
- Customizable WEB GUI interface
- Software library and network API included
- Visible white, IR, UV-A illumination, and oblique light
- OVD visualization
- Adaptive Light Control (ALC) and Reflection Removal (RR) for filtering out interferences
- IP54 case, scratch-resistant glass
- Jura IPI, letterScreen security visualization, RFID-chip/smartcard reading/writing



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Ethernet & USB modes

Speedy document reading

Worldwide document support

Combo Smart II

ID & Passport Scanner



Visitor management



Access Control



Car rental



Casino KYC



Money Exchange

3 years
manufacturer's warranty

The Essential Everyday ID & Passport Reader for Quick Data Capture

ID Data Entry Has Never Been Easier

Focus on what matters. Combo Smart II scans IDs and passports instantly, freeing you up to connect with your customers.

Designed for Everyday Efficiency: Combo Smart II quickly scans and reads data from a wide range of identity documents, including passports, IDs, driver's licenses, and resident permits. It automatically detects the document type and initiates scanning for seamless data capture.

Ideal for KYC (know your customer), age verification and customer registration for businesses of all sizes that prioritize speed and accuracy in data collection (eg. hotels, banks, casinos, liquor stores, tobacco shops, car rental services, pharmacies, events and many more).

Forget about typing errors and all the struggle with entering complicated names and addresses; Combo Smart II can automatically detect and read these for you. Read MRZ (Machine Readable Zone), data from VIZ (Visual Inspection Zone) and barcodes, all in one device.

Use the captured data to fill in forms, contracts, register guests, clients, print badges with face photo. Captured data and images can be exported in various formats (including xml, pdf) or directly sent to another application (via SDK / API integration, or via our Autofill form filler software), like access- and visitor management, hotel PMS, client registration systems and many more.

Main Highlights

- Lightning-fast data entry - have all ID data in 1-2 sec
- High-resolution ID/passport images with face photo extraction
- Simple and effective - no user training needed
- Fully automatic document detection and reading
- Photocopy and fraudulent document detection
- High-quality 500 ppi images captured in normal white, infra-red and ultra-violet light
- Automatic image enhancement with Adaptive Light Control (ALC) and Reflection Removal (RR)
- Easy installation (single USB cable, powered from USB, use it with a laptop as a portable device)
- Software and drivers for both Windows and Linux systems
- SDK (API for software integration), test programs with GUI included

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Click for the video



- Ultra-fast ID reading
- Easy usage with USB
- Automatic fraud detection



IDENTITY DOCUMENT RESULTS

NAME: ✓ **ZHENGJIAN YANGBEN**
DATE OF BIRTH: ✓ **1985-03-20**
PLACE OF BIRTH: ✓ **GUANGDONG**
NATIONALITY: ✓ **CHINESE**
SEX: ✓ **FEMALE**
DOCUMENT NUMBER: ✓ **EF1260892**
VALID: ✓ **FROM 18/01/2019 TO 17/01/2029**
PERSONAL NUMBER: ✓ **NGKELMPONBPJB9**



Osmond and Combo Smart Kiosk

Scanners Designed for Built-in Use



Vending machines



E-gates



ID quality assurance



Liquor & tobacco shops



Border control & Immigration

3 years
manufacturer's warranty

Models Available for Counter, E-gate, and Kiosk Integration

Physical Integration without Compromises

The kiosk versions of our scanners (Combo Smart Kiosk and Osmond Kiosk) are designed for flexible physical integration in kiosk applications such as border control e-gates, airline check-in, utility payment, ATM/VTM kiosks and other self-service stations.

Thanks to its reversible frame, the Combo Smart Kiosk can be integrated into a wide variety of enclosures from either side.

A range of models is available to suit the needs of projects of different sizes and complexity levels. Our products may be customized for particular sets of requirements.

The devices come with a free software library, allowing easy integration into any system. They feature automatic image processing, VIZ (visual inspection zone), MRZ (machine readable zone), and RFID chip data reading as well as authentication of standard safety features.

Main Highlights

- Large scanning window for easier document placement
- Clear visual and audio feedback: LEDs, buzzers
- Reading and verification of ICAO and non-ICAO documents with optional authentication against identity fraud
- Digital and printed ID/2D barcode recognition
- Single-step OCR and RFID reading and writing
- Entry/Exit System (EES) compliance
- Visible white, IR, UV-A illumination, and OVD visualization
- LED-indicated operation feedback for better user experience
- Adaptive Light Control (ALC) and Reflection Removal (RR) for filtering out interferences



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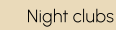
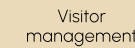
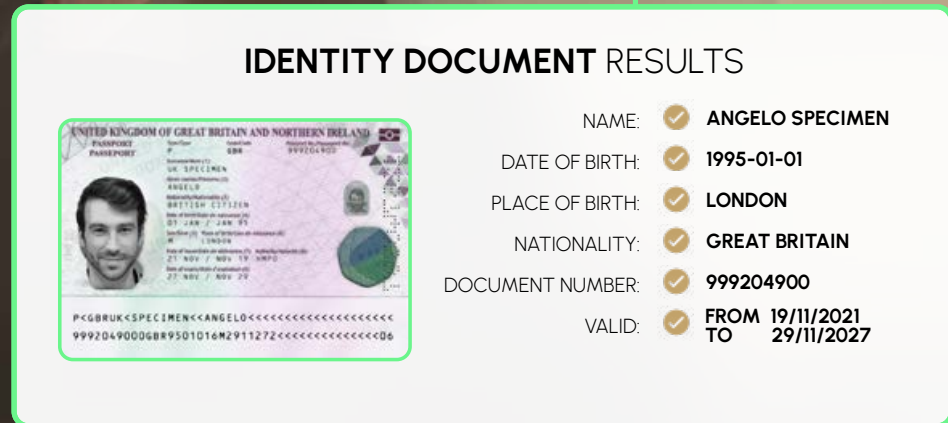


Easy integration

Automatic scanning

Adaptive illumination

Full-Page ID-1 and MRZ Scanner



3 years
manufacturer's warranty

Supercharge Your Data Entry Workflow

The device comes with a free software library, allowing easy integration into any system, and featuring automatic image processing, MRZ data reading and authentication of standard safety features. For VIZ field reading and authentication, optional software add-on is available.

- MRZ reading and full-page ID-I scanning in one device
- Suitable for portable use with a laptop
- High-quality reading in all light conditions
- Quick and accurate OCR and 1D/2D barcode reading
- Ultra compact size:
152 mm × 130 mm × 82 mm (5.98" × 5.12" × 3.23")
- High resolution 500 PPI imaging with visible white, IR, UV-A illumination
- Powered by a single USB connection
- LED-indicated operation feedback for better user experience
- Adaptive Light Control (ALC) and Reflection Removal (RR) for filtering out interferences



Portable, USB-powered



Software Add-Ons

for VIZ Reading and Authentication



Banking



Law enforcement



Various KYC programs



Telco offices



Border control & Immigration

1 year

software update included

VIZ Reading and Authentication with Geo-Specific Focus or Global Coverage

Tailor ID Checking to Your Requirements

You can supplement the default software (provided as a complimentary software library) included in all of our ID scanner and passport reader devices with the VIZ (visual inspection zone) and authentication software modules for specific project needs.

Use the VIZ module to read and process all printed data outside the machine-readable zone (MRZ) and the authentication module to verify the authenticity of identity documents.

The software modules come in a software library and work with ICAO and non-ICAO compliant identity documents. Depending on your requirements, you can include all national identity documents of a single country or the internationally recognized documents of a geographical region or the world.

Main Highlights

- Advanced verification of document-specific security features
- Worldwide document coverage, supporting non-standard Latin characters
- Pattern and geometry analysis
- Optional inclusion of local documents
- Continuous updates with new document types
- Seamless integration through API
- Jura IPI and LetterScreen security visualization
- Internationally accepted travel documents (different types of passports, visas)
- Local identification documents such as ID cards, driver licenses
- Local residence permits, address cards, health insurance cards, etc.



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VIZ reading

Authenticity verification

Global coverage

AutoFill Application for ID Data

Transfer into PMS and Other Systems



Casino gaming



Visitor management



Corporate receptions



Car rental



Night clubs

1 year

software update included

Fills in Web Forms Via Chrome Plugin or Sends Data to Native Application

AutoFill is an Application

AutoFill is an application available as an add-on to any Adaptive Recognition ID scanner device.

It is the easiest way to transfer data from the device to any system, such as property management systems (PMS) or any other registration systems where form filling is part of the process. It can handle data transfer from multiple pages or documents into a single form. AutoFill acts as an integration shortcut between the device and your system, keeping integration efforts to a minimum, saving time and money. There are two possible options to transmit data: by a web browser or a separate application. Both methods of implementation require maintenance of scripts and templates. Therefore this application is recommended for integrators, not end-users.

Filling by web browser requires the Chrome plugin that will transmit the data to a registration system, eg. a PMS software. It works with all browsers that support the Chrome Native Messaging service. To transmit the data, a javascript program is applied by the browser, corresponding to the given website.

In case the fields need to be filled in with the received data in a separate application, it can be done by a keyboard emulator. Here a template can be created to fill out the given program, simulating mouse clicks, space, tabs and more.

Main Highlights

- Integration made simple: shortcutting integration efforts, saving you time and money
- Fast data transfer: send data into any PMS or other registration system in no time
- Easy way of maintenance of scripts and templates for integrators
- Transmits data with web browsers or desktop applications as a plugin or via keyboard/mouse emulation
- Handles data transfer from multiple pages or documents into a single form
- Works all browsers that support the Chrome Native Messaging service
- Templates can be created to fill out the given program, simulating mouse clicks, space, tabs and more



Easy transmission of data

Handles data from multiple pages

Works with browsers and applications

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Carmen® ANPR Software Family for On-Premise or Cloud Applications

The World's Most Accurate Recognition Software for Uncompromising performance with every scan.

Experience uncompromising performance with the Carmen® ANPR Software Family, the epitome of recognition excellence. With capabilities extending from traffic analytics to border control, Carmen® ANPR Software Family redefines recognition standards, guaranteeing unmatched precision and reliability across various applications, safeguarding your world with confidence and efficiency of excellence in identity verification.



Visit our website
for more information



Carmen® FreeFlow ANPR Engine

with Software Development Kit



Tolling system



Congestion charging



Traffic monitoring



Law enforcement



Access control

1 year

software update included

Go for Top Recognition Rates and Coverage

Maximum Accuracy with Flexible Licensing and Multithreading

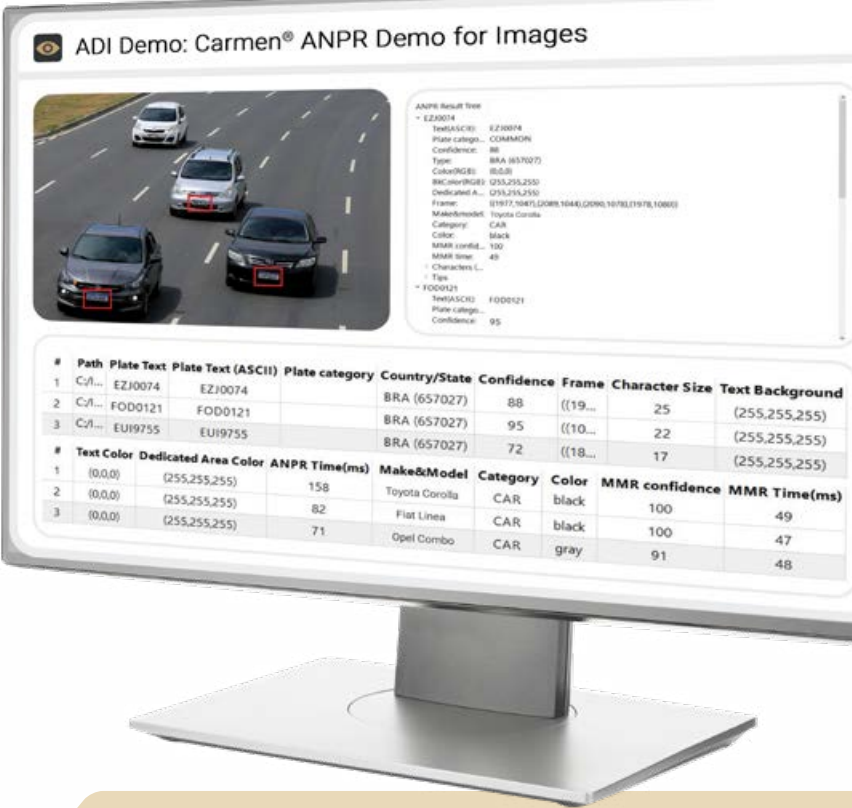
The Carmen® FreeFlow software library is designed to read and process license plates fast, with outstanding accuracy and low false-positive rates even for far-from-ideal images. Used by OEM partners and integrators in over 160 countries with more than 120,000 installations, Carmen® is the go-to choice for quality ANPR from Brazil to Japan, the Middle East and Africa to North America, and Asia-Pacific to Europe.

Carmen® offers country-independent recognition and familiarity with a wide range of alphabets, including Latin, Arabic, Cyrillic, Thai, and more. Runs on Windows and Linux. Applications that can benefit from the fast and accurate on-premise automatic recognition capabilities of Carmen® include traffic monitoring, security, highway tolling, speed and journey time measurement, access control, and more.

Main Highlights

- Flexible licensing for scalability to any project size, CPU core-based licensing for multithreading
- Integrate once and use anywhere in the world
- Reliable ANPR even for low quality images: 95%-99% real-life accuracy for all plates
- Low false-positive rates suitable for second verification in toll enforcement
- Camera-independent software, sample programs and quick support response
- Global coverage with local customization options: 38,000+ plate types recognized from 160+ countries and 20 regions
- Country, state or province, plate type and plate color recognition
- Optional make and model recognition (MMR), dangerous goods and IMO codes recognition
- ANPR results from video stream and still images

CARMEN®



AI-based global ANPR & MMR

Successful globally

Regular engine updates

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Carmen® GO

ANPR & MMR from Camera Streams



TOLL
Tolling system

Video analytics

P
Parking systems

Gated communities

Smart city ITS systems

1 year
software update included

Windows Application

Compatible with Any IP Camera

Get ANPR and MMR Data From Video Files and Streams

Carmen® GO is our Plug & Play ANPR solution that works with any camera. Installation and setup take less than 3 minutes; link your camera stream(s) to get ANPR and MMR results directly. An easy-to-use, intuitive GUI ensures that anyone can quickly set up and learn to operate the system without special training.

Carmen® GO identifies vehicles by smart video triggering and returns ANPR and MMR data with country-specific details. The application can handle up to 8 incoming streams simultaneously.

The output data provided by the app includes plate number, country code, image IDs, date, time, and, optionally, vehicle make, model, and color.

Main Highlights

- Easy integration via REST API
- Worldwide coverage via Carmen® ANPR engine
- No need for triggers and external vehicle detection
- Scalable solution handling up to 8 streams simultaneously
- Flexible licensing options to fit your needs
- Handles stream from fixed installation or from moving vehicle
- 38,000+ plate types recognized from 160+ countries and 20 regions
- Licensing based on number of streams and CPU cores
- Built-in advanced detection algorithm
- Various output formats: CSV datafile, FTP upload and/or internal database (available through JSON REST API)



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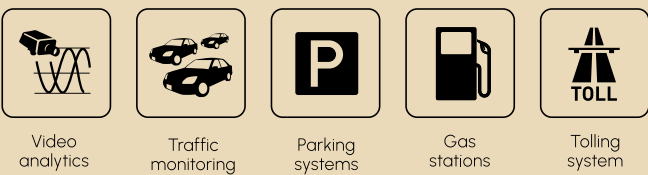
AI-based global ANPR & MMR

Camera-independent

Easy integration via API

Carmen® Cloud

Software as a Service (SaaS)



Always
up-to-date

CONTAINER CODE:
ECAU 100299 8 2261
ISO 6346: ☒ ECAU 1002998 2261
An ISO container code recognition software for logistic systems (railway, marine, harbors and airports), supporting ISO 6346 (BIC code), ILU and MOCO codes

IMO SIGN:
IMO CODE: ☒ Flammable Solid
Class 4.1 - Flammable solids, self reactive substances and solid desensitized explosives

HAZMAT CODE:
ADR CODE: ☒ 40 3175
SOLIDS or mixtures of solids (such as preparations and wastes) CONTAINING FLAMMABLE LIQUID, N.O.S. having a flash-point up to 60 °C

Plate text: ٦٠٠٦ ج ا ح 6006 JAA
Country: SAUDI_ARABIA
Dedicated Area Color: WHITE
Main backg. color: WHITE
Dedicated Area Color: WHITE
Main font color: BLACK

Plate text: 7MD2405
Country, State: USA
Main backg. color: WHITE
Main font color: BLUE

MAKE & MODEL RESULT:
Make: BMW
Model: i8
Color: BLACK
Category: CAR
Body Type: COUPE
View Point: REAR

OCR RESULT:
33 RIV 87 E-ATRR 7929 096-8
Zacens
33 87 7929 096-8
22440kg

Instant ANPR Results from Any Image, Anywhere in The World

Create an ANPR System Within 1 Hour

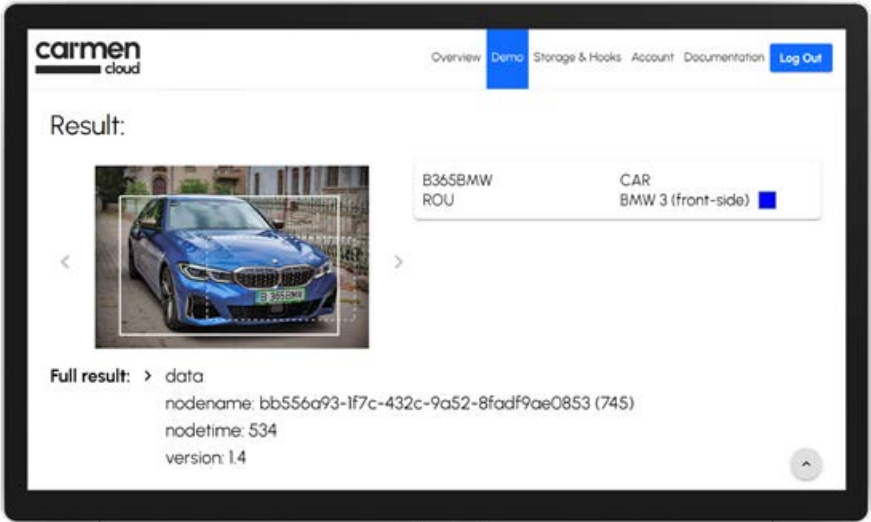
Carmen® Cloud is a cloud-based software as a service (SaaS) that lets you add a pay-per-use plate recognition function to your system without having to invest in a dedicated server.

It is the perfect solution for those looking for a robust, secure, scalable, and easy-to-manage solution with zero capital expenditures (CapEx) involved. Working with any programming language on any operating system through REST API, it analyzes images sent from a local machine, server, or any web-based URL.

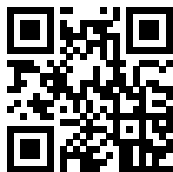
You can use Carmen Cloud with Adaptive Recognition's or 3rd-party ANPR cameras. Alternatively, turn your mobile phone into a plate recognition device with the Carmen® Mobile application, which is powered by Carmen® Cloud.

Main Highlights

- Easy integration through REST API
- No need for a dedicated server and other capital expenditures
- Only pay for what you need through several credit package options
- Worldwide coverage, access to all regional ANPR engines with a single subscription
- 38,000+ plate types recognized from 160+ countries and 20 regions
- Automatic access to latest engine updates
- Data security (no data is stored) and GDPR compliance
- MMR data included in returned ANPR event packages
- Data retrieval in JSON
- Camera-independent software



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SaaS with cloud server

Camera-independent

Quick integration via API



Carmen® Mobile

Android App for ANPR & MMR



Always
up-to-date

Data Collection for Carmen® Cloud Even from Fast-Moving Vehicles

Turn Your Mobile Phone into an ANPR Device

Carmen® Mobile is a free, ready-to-use application for collecting ANPR data with an Android phone. The app works with any Carmen® Cloud subscription, including the free trial. It either collects data from the phone camera or retrieves images/videos from 3rd-party applications. Its new interface allows the 3rd party to not only receive events, but also fully control Carmen® Mobile. You can easily integrate your own concept without leaving the app.

Uniquely on the market, Carmen® Mobile can collect ANPR-ready data even from fast-moving vehicles. Returned events include license plate and, optionally, MMR, GPS data, and timestamp.

Potential use cases include on-the-go traffic monitoring and parking control, wanted car detection, and visitor management.

Main Highlights

- Accurate ANPR even with a speed difference of 180 km/h (120 mph)
- 38,000+ plate types, 230+ vehicle models, and 1700+ types recognized
- Simple integration into existing apps, easy upload of events to chosen server
- Processing of live feeds, images, and video recordings
- Offline data collection, recognition can be done later
- Automatic or manual capturing, recognition even on images taken at night
- Smartphone camera or screen as input source
- Customizable event packages and alert hotlists
- Digital signature to validate and protect sensitive data
- Ready-made presets for different use case scenarios



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Mobile app is completely free

Several monthly pricing plans

SaaS with secure data

Carmen® MMR

Software Add-On



Tolling system



Traffic security monitoring



Traffic monitoring



Car rental



Gas stations

1 year

software update included

Make, Model, and Color Recognition for Any Version of Carmen® ANPR

Get Geo-Specific Brand and Model Data

Carmen® MMR is an add-on software developed for the Carmen® ANPR software family, Carmen® GO, or Carmen® Cloud plate recognition software. It is also available for all Adaptive Recognition traffic monitoring cameras that feature onboard or cloud-based ANPR.

The optional add-on enables the software to recognize the brand, model, color, and category of vehicles based on front or rear images. It brings value in many application areas, from tolling through identifying stolen vehicles to creating statistics for marketing in retail parking lots.

Carmen® MMR is available with region-specific engines. 230+ vehicle makes, 1700+ models from 7 geographical regions worldwide are recognized with high accuracy. Brand and model names are returned in a geo-specific manner.

Main Highlights

- Accurate make, model, color, viewpoint body type and category recognition
- Vehicle data for access control, marketing and other purposes
- Worldwide coverage through regional engines
- 230+ vehicle makes (brands) recognized
- 1700+ vehicle models recognized
- Regularly updated database
- One of the fastest results delivered compared to other MMR engines on the market
- Vehicle category recognition
- Vehicle color recognition
- Cloud or on-premise solution

CARMEN®

Make: Ford
Model: Ranger
Category: Car
Body Type: Pick-up
Color: Red
Viewpoint: Front-Side



Regional MMR engine

Recognition with high accuracy

Cloud or on-premise solution

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Carmen® Nano ANPR

for NVIDIA Jetson-Based Computers



Access control

Video analytics

Traffic monitoring

Tolling system

Smart city ITS systems

1 year
software update included

On-Premise Software for ANPR and MMR with Video-Based Triggering

Upgrade any IP Camera with ANPR and MMR

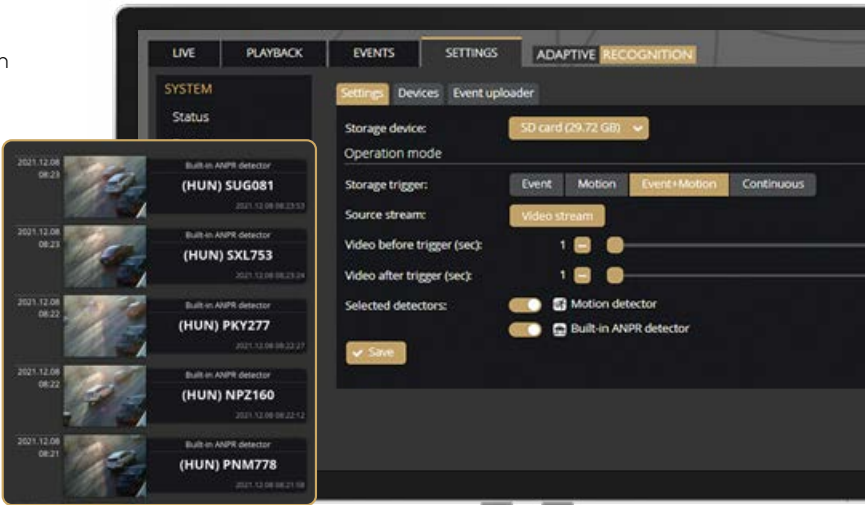
Carmen® Nano ANPR is a software module especially developed for NVIDIA® Jetson™-based computers.

Leveraging the deep learning capacity and processing power of NVIDIA Jetson Nano's graphics processing units, Carmen® software performs ultra-fast, accurate ANPR on it.

Its highly developed AI and analytics capabilities represent great potential in a wide range of applications. With this state-of-the-art hardware running Carmen®, there is no need to worry about software installation and hardware purchase. Carmen® Nano is ideal for those who wish to build their own futureproof traffic analytics system based on an NVIDIA Jetson board and handle video streams from any IP camera with an on-premise ANPR software.

Main Highlights

- On-premise plate recognition for building an ANPR system
- No need for triggers: video-based, highly accurate detection
- Rich set of features including search, statistics, allowlists and more
- Easy integration via API, camera-independent software
- GPU-accelerated plate detection
- 38,000+ plate types recognized from 160+ countries and 20 regions
- Triggering via hardware-accelerated PlateFinder module
- Adjustable detection area, various factory presets
- Event filtering based on confidence
- Videos included in recorded events



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- For Jetson-based hardware
- Camera-independence
- Multiple triggering options

Carmen® Industrial Code Recognition Software Libraries

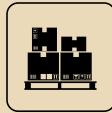


Visit our website
for more information



Carmen® OCR Software Library

for Container Code Recognition



Inventory management



Container surveillance systems



Truck loading



Automated tunnel security systems



Airport and harbor logistics

1 year
software update included

Recognition of ISO6346, MOCO and ILU Codes from Image Sequences

Track Container Codes with Utmost Accuracy

The Carmen® OCR software supports shipment tracking by extracting and reading international ISO/ILU/MOCO and North American regional container codes. The extracted information can be saved to a database or transferred to an IT system, as the software integrates seamlessly with any end-user application through API.

Carmen® OCR processes image sequences from multiple sources to guarantee the best OCR results. We recommend a 3-camera setup for maximum accuracy.

The automatic reading of ISO 6346 (BIC code), ILU (European Loading Unites), and MOCO (Montan Container) codes of intermodal shipping containers simplify road, railway, and harbor operations significantly, in which BIC codes serve as the primary identification for containers.

ISO6346 code recognition



Left side image



Top side image



Right side image

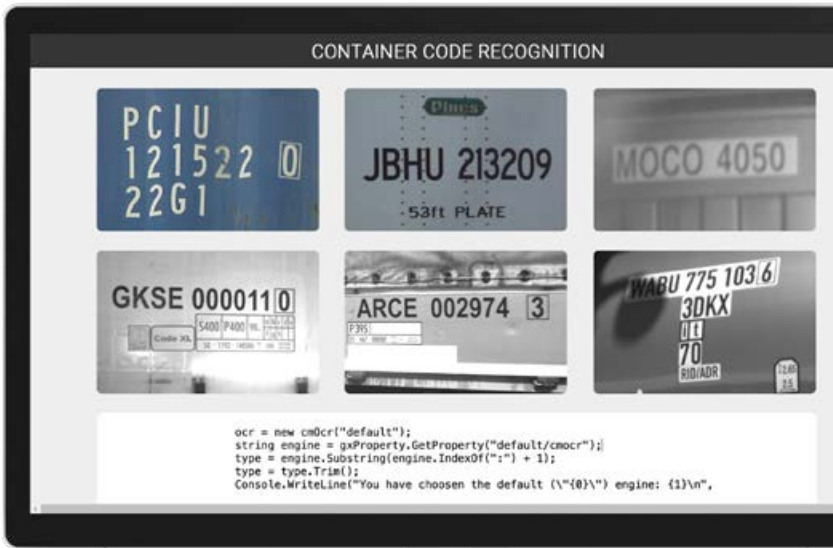


OCR result:

ECAU 1002998 22 G1

Main Highlights

- Accurate reading of ISO 6346 (BIC), MOCO, and ILU codes of 170 million shipping containers worldwide
- Camera-independence
- Easy integration via API
- Flexibility to suit independent project needs
- Compatibility with Adaptive Recognition Vidar for Containers cameras for building an entire container code reading system
- Support of horizontal and vertical codes
- Best images selected from a sequence for higher accuracy
- ASCII and Unicode output formats
- Checksum validation
- Support of multiple operating systems



Powered by
CARMEN®



Accurate reading of global codes

Scalability to large systems

Easy integration via API

Click or scan for the
product page




Click for the
video




Carmen® ADR Software Library


for Dangerous Goods Code Recognition



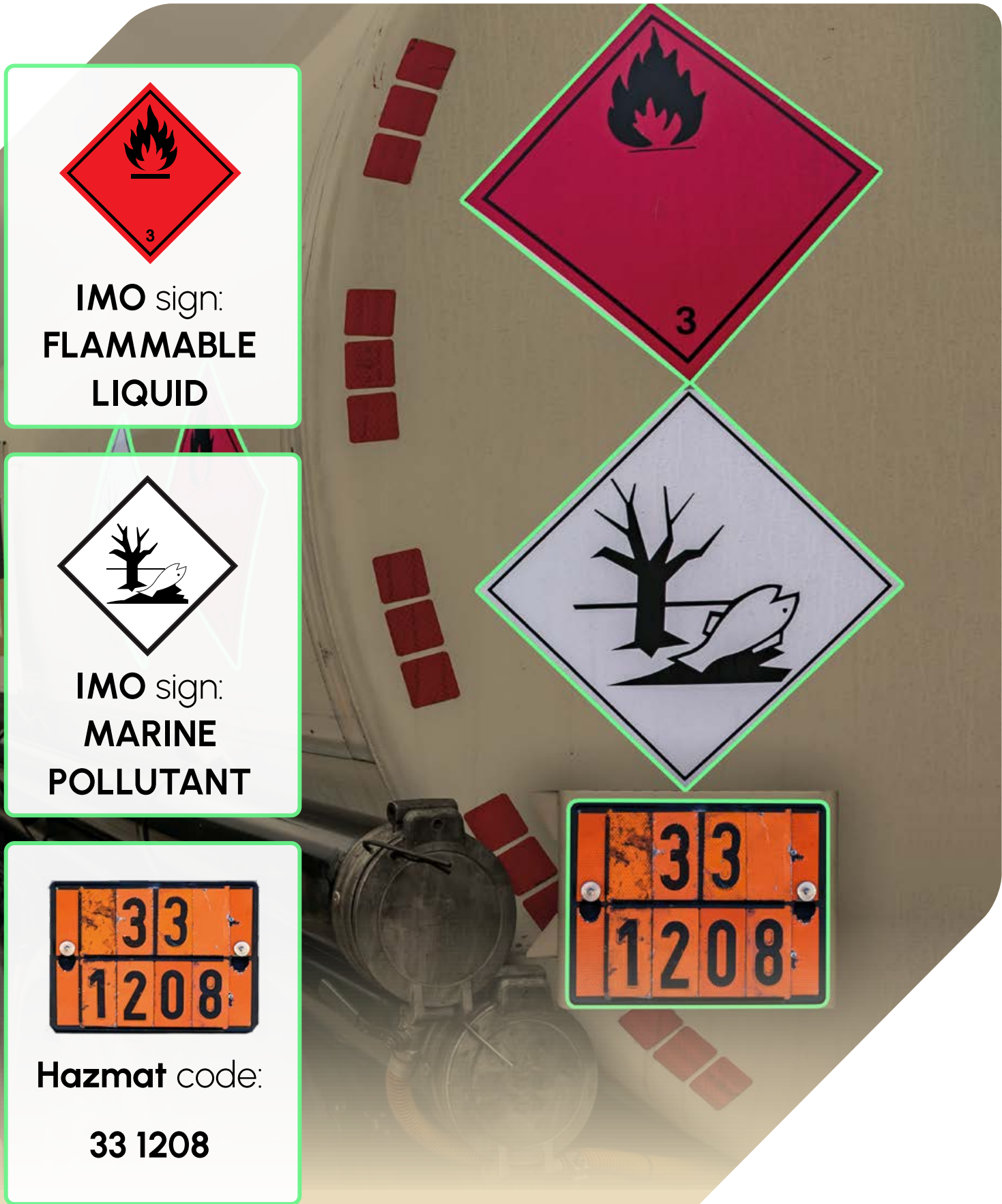
IMO sign:
**FLAMMABLE
LIQUID**



IMO sign:
**MARINE
POLLUTANT**



Hazmat code:
33 1208



Tolling
System



Gas
stations



Traffic
monitoring



Smart city
ITS systems



Automated
tunnel security
systems

1 year

software update included

Recognition of ADR and IMO (IMDG) Codes of Hazardous Materials

Complement ANPR with Hazmat Recognition

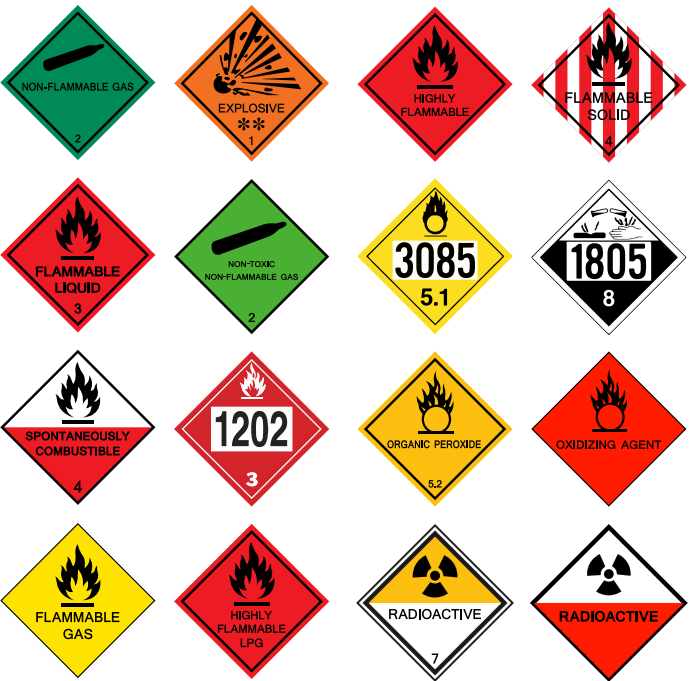
The Carmen® ADR software recognizes ADR codes and Hazard Identification Numbers (HIN) of vehicles carrying hazardous materials with exceptional accuracy. It also recognizes IMDG codes issued by the International Maritime Organization (IMO), found on containers and trailers.

The software processes the top (Kemler code) and the bottom row (substance ID) of the orange ADR signs. It indicates primary and secondary hazards, enabling emergency responders to get critical information about potential dangers quickly. Empty codes standing for multiple dangerous goods are also recognized.

Recognition of such codes increases safety on roads, bridges, tunnels, and wherever hazardous materials are transported.

Main Highlights

- Fast and reliable code reading
- Scalability to projects of any size
- Camera-independence
- Easy integration via API
- Global coverage of hazmat symbols, support of ADR, E-ADR, HIN, KEMLER, and IMO codes
- Confidence and code coordinates included in results
- Runtime code filtering to reduce false reading
- Best images selected from a sequence for higher accuracy
- ASCII and Unicode output formats
- Supports multiple operating systems



Powered by
CARMEN®

Global coverage of hazmat symbols

Fast & reliable reading

Easy integration & scalability

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product page

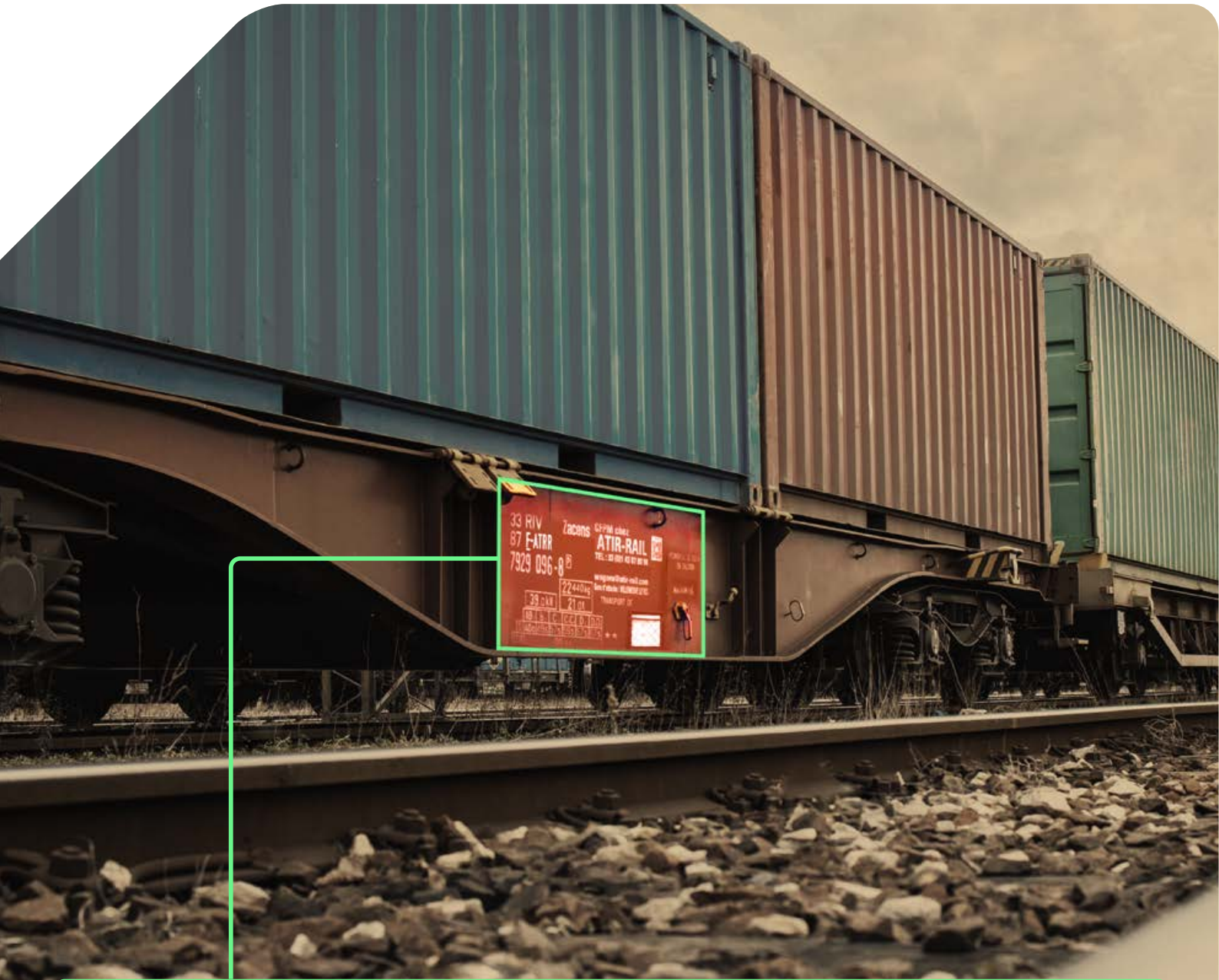


Click for the
video



Carmen® OCR Software Library

for Railway Code Recognition



OCR RESULT:
33 87 7929 096-8



Border control



Video analytics



Railway logistics



Military locations



Airport and harbor logistics

1 year

software update included

Recognition of Railway Codes Regardless of Their Placement

Read International Railway Codes

The Carmen® OCR software automatically extracts and reads international railway codes (UIC) as well as regional codes used in Brazil (BRA), Russia (RUS), and North America (AAR). It also handles North American chassis numbers (CHASSIS).

UIC codes are unique and internationally standardized identification numbers found on both sides of the wagon, as laid down by the International Union of Railways. The placement and font type of these codes can vary, but the software is flexible enough to recognize them with great accuracy.

The gathered data may be processed for statistical, transport, and logistics purposes.

Main Highlights

- Tolerance of variety in code placement and font types, ASCII and Unicode output formats
- Camera-independence, scalability to projects of any size
- Easy integration via API, support of multiple operating systems
- Support of UIC, BRA, RUS, and AAR railway codes and chassis numbers
- CPU core-based licensing for multithreading
- Image sequence-based results for higher accuracy
- Confidence and code coordinates included in results
- Runtime code filtering to reduce false reading
- Best images selected from a sequence for higher accuracy



OCR RESULT:
33 80 7920077-4



OCR RESULT:
50 1267 68962

Powered by
CARMEN®

Global coverage of railway codes

Camera-independence

Easy integration & scalability

Click or scan for the product page



Click for the video



Carmen® OCR Software Library

for Commercial Vehicle Code Recognition



Tolling systems



Smart city ITS systems



Traffic monitoring



Journey time measurement



Access control

1 year

software update included

Read and Process DOT Numbers of Vehicles

Automatic USDOT Number Recognition

The Carmen® OCR software has been created to extract and read the DOT number of commercial motor vehicles (CMVs) in the United States. These are required by the U.S. Department of Transportation for businesses that transport passengers for a fee or haul cargo across state lines.

The software functions as a highly accurate tool for automatic identification of these numbers, required to be displayed on both sides of vehicles.

With its ability to collect and audit inspection and compliance information, the software offers the DOT number, date, time, and location for CMV systems to verify key information in state and federal databases in real-time.

Main Highlights

- Easy integration via API, camera-independence
- Fast and reliable code reading
- Scalability to projects of any size
- CPU core-based licensing for multithreading
- Best images selected from a sequence for higher accuracy
- Image and ASCII output format
- Confidence included in results for characters and whole code
- Support of multiple operating systems



USDOT 432165

USDOT RESULT
432165

Powered by
CARMEN®

Accurate reading of USDOT numbers

Easy integration & scalability

Camera-independence

Click or scan for the product page



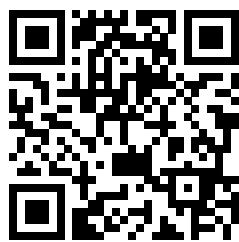
Click for the video



Cameras & Devices for Any Type of Traffic Monitoring and Speed Enforcement

*Smarter Cameras. Safer Roads: Where Every Lane is Covered
and Every Rule Enforced.*

Our Cameras & Devices redefine the landscape of traffic monitoring, covering every lane and enforcing every rule to ensure safer roads and communities. Meticulously engineered to withstand extreme conditions, from scorching heat to frigid cold, our cameras & devices deliver standard-setting performance, setting new benchmarks for durability, reliability, and superior accuracy.



Visit our website
for more information



Vidar Camera

for Any Type of Traffic Monitoring



10

Abu Dhabi

63465

Plate text:

10_63465

Country:

SAUDI_ARABIA

Main backg. color:

WHITE

Main font color:

BLACK

Make:

mitsubishi

Model:

galant

Color:

BLACK

Category:

CAR



Tolling systems



Smart city ITS systems



Traffic monitoring



Journey time measurement



Access control

3 years

manufacturer's warranty

ANPR & MMR-Ready Images, Remote Setup and Control

Reach 99,7% Detection without External Triggering of Vehicles

Vidar is a powerful ANPR camera developed for any type of traffic monitoring tasks. It is designed to solve common integrator problems like lengthy setup, missed events, and inaccurate recognition.

Vidar's unique features include a built-in laser for reliable vehicle detection, customizable triggering options, remote-control motorized zoom, focus, and iris, and advanced auto-brightness function. It provides perfect ANPR & MMR-ready images of reflective and non-reflective plates thanks to the frame parity flashing technology. A quad-core CPU is available for advanced image-based triggering and providing up to 8 streams continuously.

Main Highlights

- No missed vehicles thanks to a combination of AI-driven triggers, models with built-in laser trigger available
- Precise, white LED/IR-based imaging, handling of colored, reflective and non-reflective plates
- Suitable for surveillance purposes and ANPR
- Remote control and easy maintenance thanks to modular design
- Resistance to physical impact and weather
- 4-core CPU for outstanding performance
- Global shutter sensors, optical zoom, focus & iris lenses
- Light sensor for automated illumination and imaging settings
- Secure data transfer via HTTPS
- IK10 and IP67 certified, 100% aluminum cast design



Powered by
CARMEN

ANPR-ready camera with remote control

Leading performance & high security

Multilane detection & laser-triggering

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Click for the video



Vidar Smart ANPR Camera

with Embedded Processing

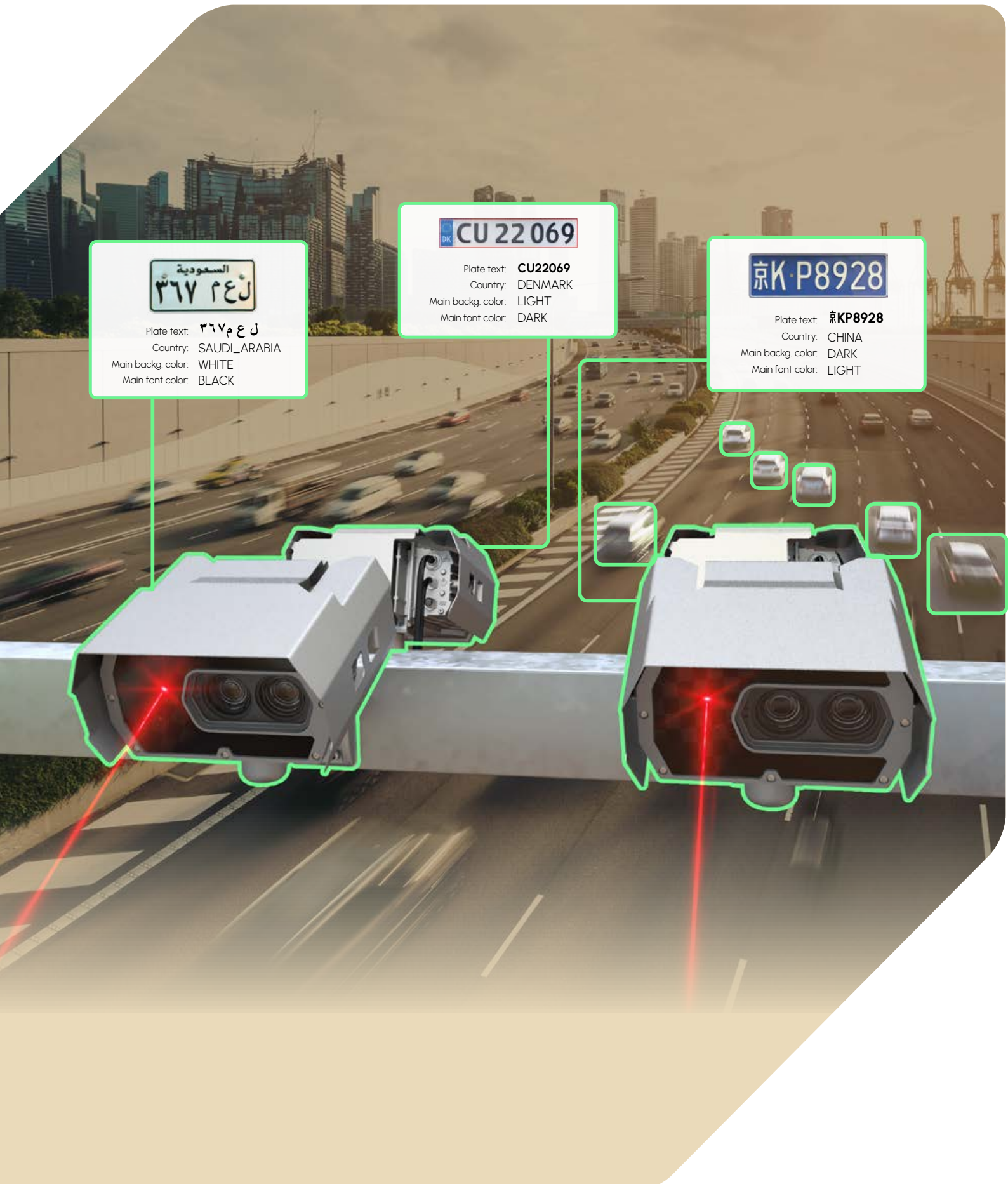





Plate text: ٣٦٧ ٢٤٧
Country: SAUDI_ARABIA
Main backg. color: WHITE
Main font color: BLACK




Plate text: CU22069
Country: DENMARK
Main backg. color: LIGHT
Main font color: DARK




Plate text: 京K P8928
Country: CHINA
Main backg. color: DARK
Main font color: LIGHT




Tolling systems




Traffic security monitoring



Low Emission Zone



Law enforcement



Smart city ITS systems

3 years
manufacturer's warranty

Onboard ANPR with Industry-Leading Performance and Dual optics

Cover All Functions with a Single Device

The Smart models of Vidar include all the features of Vidar cameras, with the addition of embedded ANPR powered by the Carmen® engine. The dedicated quad-core 4x1.4GHz CPU runs the pre-installed ANPR engine, making the device one of the most powerful standalone ANPR cameras on the market. The camera provides speedy and accurate vehicle identification with unparalleled global coverage of Latin, Arabic, Cyrillic, Thai, etc. plate types. It can also perform image-based vehicle speed estimation with high accuracy. Moreover, it features a dual optic system with varifocal lenses.

Make and model recognition (MMR) and dangerous goods code recognition are optionally available.

Main Highlights

- Accurate onboard ANPR with worldwide coverage, 99.9% vehicle detection rate with laser triggering
- Models available for multilane detection, optional make and model recognition
- Advanced data security through multi-layer encryption, secure data transfer via HTTPS, local storage with strong encryption
- Image-based speed estimation available, clear imaging even under extreme outer conditions
- Suitable for surveillance purposes as well, dedicated 4-core processing for ANPR
- Full remote control and easy maintenance thanks to modular design
- Resistance to physical impact and weather, IK10 and IP67 certified, 100% aluminum cast design
- Dual-optic system: ANPR+overview or ANPR+ANPR
- Models with built-in laser trigger available
- Object Detection trigger with vehicle categorization and direction filter
- Global shutter sensors, optical and digital zoom, focus & iris lenses



Powered by
CARMEN®

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Click for the video



2 CPUs with 4 cores each running ANPR & MMR

Accurate onboard ANPR with worldwide coverage

Built-in laser module

Vidar Speed Camera for Speed Measurement

with Advanced Traffic Analysis Capabilites



Lane: 2
Speed: 154 km/h (96 mph)
Category: 

Plate text: **W 1998TX**
Country: AUSTRIA
Main backg. color: WHITE
Main font color: BLACK

Lane: 1
Speed: 86 km/h (53 mph)
Category: 

Plate text: **3 ቋ 06971 SP**
Country: ETHIOPIA
Main backg. color: WHITE
Main font color: GREEN


Speed enforcement


Law enforcement


Traffic security monitoring


Traffic monitoring


Video analytics

3 years
manufacturer's warranty

Certified Speed Measurement on Multiple Lanes

Stationary Speed Camera with Advanced Traffic Analysis Capabilites

Vidar Speed cameras display all the Vidar Smart models' features and are equipped with a multilane, multi-object tracking radar. They perform vehicle categorization, and provide certifiable speed measurement: even the applied 4D Radar module is certified by the Swiss Federal Institute of Metrology (METAS).

Thanks to the ultra-high definition radar, the sensor can separate objects based on their speed, distance, horizontal and vertical angles. Its sturdy design ensures resistance to adverse weather conditions.

The radar can detect and simultaneously track all vehicles (more than 60 objects at a time) in the camera's field of view.

Main Highlights

- World leader Carmen® ANPR onboard with worldwide coverage, onboard MMR, ADR and vehicle categorization
- Certified speed measurement up to 320 km/h (200 mph), secondary speed estimation based on motion analysis
- Precise vehicle detection in multilane scenarios with dense traffic
- Clear imaging with 5 MP sensor, even under extreme external conditions
- Well-documented API, easy integration, suitable for surveillance purposes
- Resistance to physical impact and weather, IK10 and IP67 certified, 100% aluminum cast design
- Multilane, object-tracking 4D radar for triggering & speed detection
- Dual optics: one is optimized for ANPR, MMR and ADR recognition, the other for overview
- Internal storage for the temporary storage of approximately 50,000 events with images
- Dedicated quad-core processing for outstanding ANPR performance
- Light sensor for automated illumination- and imaging settings
- Secure data transfer with several protocols, including HTTPS



Powered by
CARMEN®

Stationary smart speed camera

Multilane tracking

Certified up to 320 km/h (200 mph)

Click or scan for the product page




Click for the video




Vidar Axle Camera


for Vehicle Axle Counting



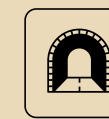
Tolling systems



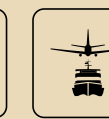
Road Usage Charging



Commercial vehicle applications



Automated tunnel security systems



Airport and harbor logistics

3 years
manufacturer's warranty

Image-Based Axle Counting with a Single, Smart Camera

Capture Complete Line Scan Images of Vehicles Analysis Capabilities

Vidar Axle Count is a compact yet robust camera designed for axle identification and counting in road tolling, ferry access control, logistics, and other operations. The camera provides line-scan type reconstructed images with metadata containing axle count and vehicle category, which can be further processed by any kind of traffic-related business intelligence.

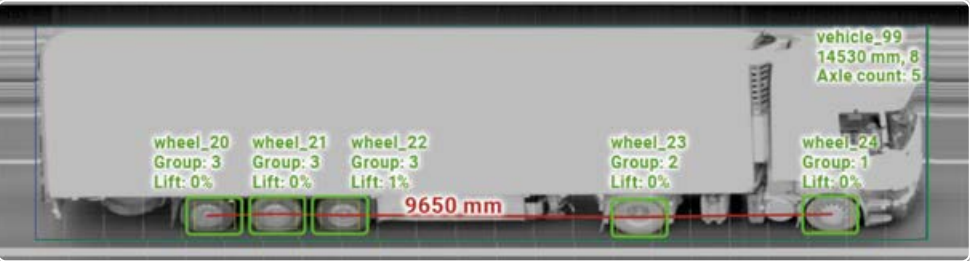
The camera has been designed to provide highly reliable, image based vehicle classification. It can capture complete image regardless the vehicle length and the embedded intelligence specifies the vehicle class (EUR13, FHWA, customizable), length and structure.

Main Highlights

- Standalone operation without external equipment
- Vehicle categorization based on axle count via image recognition
- Accurate detection and image capturing of slow and fast-moving vehicles
- Local storage with strong encryption for standalone operation, even when connection is not available
- Lift & retractable axle detection for accurate tolling
- Extra close-up installation possible (2.5-3m [8.2 ft - 9.8 ft])
- Resistance to physical impact and weather
- Dual optics with 3x optical zoom: one for line scan images, one for overview
- 850 nm IR, Bypass filter, 850 nm white mixed LED illumination
- Line scan images in results displaying entire vehicle



SIDE SCAN IMAGE:



AXLE NUMBER:

5

CATEGORY:



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Click for the video



Axle counting of trucks with any length

Vehicle categorization

Standalone with local storage

Vidar Container Camera

for Container Code Recognition



ISO6346 code recognition



Left side image



Top side image



Right side image



OCR result:

ECAU 1002998 22G1



Commercial vehicle applications



Railway-truck cargo monitoring



Smart city ITS systems



Automated logistics access control



Airport and harbor logistics

3 years
manufacturer's warranty

Laser Trigger-Assisted Recognition of ISO, MOCO, and ILU Codes

Capture Complete Line Scan Images of Vehicles Analysis Capabilities

The Vidar Container Camera is specially developed for container code reading. It supports the tracking of intermodal shipping containers through fast data processing. The camera takes ideal images for reading ISO, MOCO, and ILU codes, regardless of container size and surface. The built-in software processes the codes and transforms them into ready-to-use event packages.

The cameras are protected by IK10 & IP67 shock- and weatherproof housing. With a minimum amount of moving parts, they are vandal-proof, and work in all light and weather conditions.

Thanks to its dual-lens (one for overview and one for close-up image) design, this camera can also perform general CCTV surveillance aside from capturing the codes of passing containers.

Main Highlights

- Precise container code reading by a camera-only system
- Support of EU and global standard containers
- Images containing entire object regardless of length
- Onboard recognition for standalone systems
- Extra close-up installation possible (2.5-3m [8.2 ft - 9.8 ft])
- Resistance to physical impact and weather
- Built-in laser for non-intrusive triggering
- 3-9 mm wide lens
- 850 nm white mixed LED illumination, IR+White LED illumination for red characters and/or containers
- Contrasted images of both flat and knurled container surfaces



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CARMEN

Accurate container reading

Multilane tracking

Global and EU standards

Click or scan for the product page

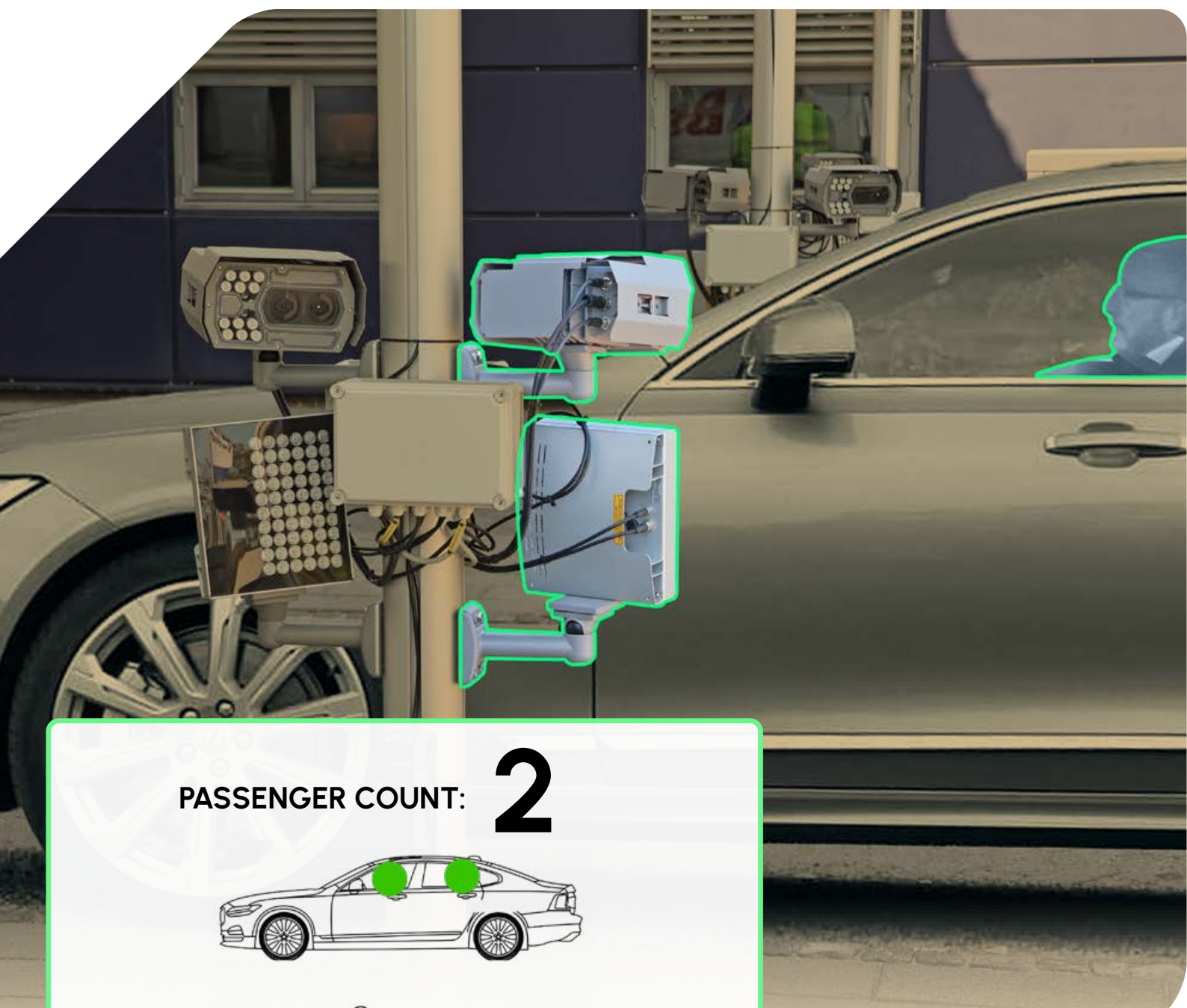


Click for the video

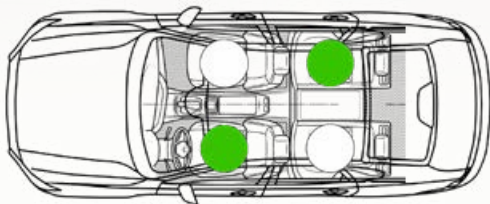
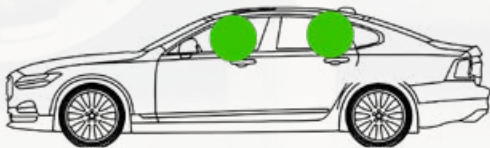


Vidar PAX Camera

for Passenger Counting & Identification



PASSENGER COUNT: **2**



NUMBER PLATE: CU 22 069  CU 22 069



Border control



Traffic safety monitoring



Security access control



Commercial vehicle applications



Traffic safety

3 years

manufacturer's warranty

Perfect Images of Passengers Captured Through Windscreens

Passenger Counting Added with Simple System Integration

Vidar PAX camera is designed to capture high-resolution images suitable for accurate recognition. The camera handles challenges such as high speed, tinted windscreens, darkness, high-glare sunlight, harsh weather, and more.

Run on a server, PAX allows police and other authorities to determine who is inside vehicles with accuracy and speed. This is enabled by extra-wide lenses and synchronized, built-in external high-performance LED illuminators.

Vidar PAX is ideal for system integrators that want to build a complete solution by integrating passenger counting into an ANPR system. To achieve a thorough passenger counting system, especially for accurately counting passengers in rear seats, we offer a preconfigured multi-camera setup.

Main Highlights

- Easy integration and maintenance thanks to modular design
- 24/7 recognition of vehicle occupants with high accuracy
- Strong encryption for data security
- No disturbance to drivers, EU-standard IR
- Resistance to physical impact and weather
- Dual optics: one grayscale for vehicle interior and one color for overview
- 3x optical zoom and IR Bypass filter
- 760 nm LED light for accurate recognition through windscreen in any light conditions
- Dedicated software module for image pairing, run on a server
- Continuous image capturing of passing vehicles at city traffic speed



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video



AI-based passenger counting

Accuracy thanks to special devices

Strong data security

Lynet ANPR-MMR Camera

for Mobile Vehicle Data Capturing



Tolling systems



Traffic security monitoring



Parking revenue systems



Law enforcement



Smart city ITS systems

3 years
manufacturer's warranty

An All-In-One Device for Dashboard or Rooftop Installation

The Ultra Small Mobile ANPR/LPR Camera with Onboard Analytics

Lynet is an ultra-small sized mobile ANPR/LPR camera, which has Onboard license plate recognition and Make, Model, Color and Categorization (MMR). Lynet stands out as the market's smallest camera equipped with Onboard analytics, making it an excellent choice for covert installations or instances where the camera needs to fit into confined spaces, such as police lights. Additionally, its remarkably lightweight design adds to its versatility.

It features color imaging - a feature that remains non-standard in many competitor products—coupled with a 5MP resolution and Global Shutter technology, which allows differential speed (between the monitoring and the monitored vehicle) of highway speeds. The camera has runs on PoE+ (super easy to integrate) and has an additional GPIO port. Seamlessly integrates with existing Einar or EnforceBOX installations. It comes in two variations: a fixed optics TELE option and an Automatic Zoom/Focus version to adapt all environments.

Main Highlights

- Stealthy compact design: the smallest on the market, perfect for discreet or embedded installations
- Lightweight advantage: effortless handling without compromising functionality
- Color image capture: superior imaging with 5MP resolution for enhanced visual clarity
- Global shutter technology: enables accurate readings at highway speeds, ensuring optimal performance
- Power over ethernet (PoE+): seamless integration for hassle-free deployment
- Ultra-compact size: unmatched in the market, ideal for covert operations and inconspicuous installations
- Carmen Onboard: license plate recognition, make, model, color, and categorization (MMR) capabilities for comprehensive vehicle identification
- Additional GPIO port: Enhanced flexibility and connectivity for expanded functionality
- Seamless integration: compatible with existing Einar or Enforce BOX installations for a streamlined surveillance system
- Fixed TELE or automatic zoom/focus optics to cover all scenarios



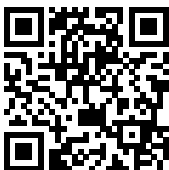
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CARMEN

Ultra-small mobile ANPR camera

Onboard with seamless integration

Lightweight and fits into small spaces

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video



ANPR RESULT:



Plate text: **88666**
Country: FINNLAND
Main backg. color: WHITE
Main font color: BLACK
Timestamp: 2024-04-03

MMR RESULT:



Make: **AUDI**
Model: **A8**
Color: **GREY**
View point: **FRONT_SIDE**
Category: **CAR**
BodyType: **SEDAN**



Lynet Speed Camera

for Mobile Speed Measurement



Speed enforcement



Traffic security monitoring



Traffic monitoring



Law enforcement



Tolling system

3 years

manufacturer's warranty

Speed limit Zone



154 km/h (96 mph)

Make and Model: FERRARI F430

Color: RED

Category: CAR

Plate text: 10234

Country: UAEAD



Mobile Speed Enforcement Camera with Dual Cameras and a Radar

Coverage of More Lanes On The Move

The Lynet Speed efficiently scans traffic, automatically identifies surrounding vehicles, and reads their license plate, even when mounted on a moving vehicle. The new speed module is capable of providing certified speed information for all traffic participants. Its remarkably compact size makes it ideal for integration into lightbars or discreet use within undercover patrol cars. Integrating it into a complete system is simple and straightforward.

Previously, when measuring speed on-the-move, confirming the speed of both the measuring vehicle (self-speed) and the subject vehicle (relative speed) and communicating it to the camera was vital to ascertain the actual speed of the target. Lynet Speed streamlines this process without relying on external devices onboard. Featuring 2x5MP resolution, color imaging, and Onboard IR, alongside a METAS-certified radar, it simplifies detection. Moreover, it includes ANPR and MMR functionalities.

Main Highlights

- Utilizes the unrivaled Carmen® ANPR + MMR Onboard
- Speed detection up to 320 km/h with METAS-certified radar
- Ultra-compact size with passive cooling
- Multilane coverage: 4 lanes with 2 onboard cameras
- Object tracking and categorization
- Simple to integrate with 3rd party systems
- Easy mounting onto vehicles with a single-cable connection
- Onboard IR to read at 0 lux, dual motorized zoom, iris and auto focus, 5MP, Global Shutter sensor
- IP67-rated durable housing containing the two camera modules, IR and the radar
- GPIO port to synchronize multiple units or to integrate to a lightbar



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CARMEN

Onboard speed measurement camera up to 320 km/h

Recognition of 4 lanes on the move

Accurate tracking, ANPR & MMR

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video



S1 – The Portable Speed and Enforcement Camera



Speed
enforcement



Traffic security
monitoring



Bus lane
and red light
enforcement



Law
enforcement



Tolling
systems

3 years
manufacturer's warranty

2-Minute Setup, On-board Traffic Analytics, Wireless Communication

Easy-To-Use, Complete Device without Any Infrastructure Requirements.

S1 is a portable, all-in-one ANPR camera specially developed for traffic enforcement authorities. It provides certified speed measurement and identifies speeders from a 1.2km (0.75 mi) distance. S1 and its central application (GDS) also detects several other traffic violations.

As soon as evidence of the violation is captured, the file gets encrypted and instantly transmitted to a central server through a secure channel.

You can get the device ready for operation in less than 2 minutes. There is no need for any add-ons: ANPR engine, illumination, laser tracker, GPS, Wi-Fi, and 4G modem are included inside the camera's protective casing.

Main Highlights

- Simple 2-minute setup portability, all-in-one device with no need for add-ons
- Autonomous roadside/in-vehicle operation, operation supported by the batteries up to 8 hours
- Certified speed measurement up to 320 km/h (200 mph), laser-based speed measurement up to 250 m
- Complete, court-admissible event data packages
- Live data transfer through 4G/Wi-Fi
- Video-based built-in laser triggers
- Secure data transfer via HTTPS and encrypted data packages
- Dual sensor: the user can choose the right sensor for the given measurement situation
- Automatic brightness control motorized iris and zoom & focus
- Weatherproof design, IP54-compliant, fiberglass-reinforced plastic shell



Powered by
CARMEN

Certified speed measurement

Quick setup & portability

Secure live data transfer

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product page



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video



Enforce BOX

for Automatic Detection of Traffic Violations



Red light and
bus lane
enforcement



Law
enforcement



Traffic
monitoring



Video
analytics



Smart city
ITS systems

1 year

software update included

Automatic Detection of Traffic Violations, Including Red-light Monitoring and Many More

Automatic Detection of 12 Different Traffic Violations

Enforce BOX can be connected with any standard, even existing 3rd party IP cameras or with any of AR cameras, including Einar or Vidar providing the right stream for traffic violation detection and can use the provided stream to detect the violations. Easy integration, via its well documented API, sample codes are also provided. Enforce BOX is an easily configurable device and can recognize violations parallelly on 6 traffic lanes.

Enforce BOX is an easily configurable device and can recognize violations parallelly even on 6 traffic lanes. 1 Vidar camera is needed per 2 traffic for a given direction, in addition to the standard set of 1 IP (overview) camera, 1 Enforce BOX and 1 router in case of any amount of lanes.

Native integration with our Vidar Smart ANPR cameras, and Enforce BOX enables the capture of license plate details, including nationality, vehicle make, model, color and category, of the vehicles.

Enforce BOX is a compact mini-PC designed to function effectively in various weather conditions, making it suitable for placement within small roadside cabinets.

Main Highlights

- Accurate recognition of 12 distinct traffic violations, including infractions such as running red lights, U-turn, crossing solid lanes, improper usage of emergency lanes usage, making wrong turns, and many more
- Any IP camera with H.264 stream can be used to provide video streams about the status of traffic lights
- In cases where license plate recognition or additional vehicle details must be added, our Vidar Smart ANPR cameras can be seamlessly connected
- Easy to use GUI to support the setup of the traffic violations to be monitored
- Lightweight design: 1 kg
- Supports traffic violation detection up to 4 traffic lanes
- GPU-accelerated plate detection via NVIDIA Jetson
- Internal microSD storage for up to 50,000 events and can be expanded upon customer request
- Images or even video streams can be stored related to defected traffic violations
- Compatible with the GDS Suite central middleware application



CARMEN®

NVIDIA.

Traffic violation detection

Easy integration & scalability

Accurate recognition on 4 lanes

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product page



Click for the
video





SmartPort

for flow transparency & automation

PRECONFIGURED SCENARIOS



PRE-GATE



FREIGHT GATE



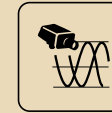
CHECK-IN



BOARDING



Border control



Video analytics



Railway logistics



Vehicle access control systems



Harbor logistics

1 year

software update included

Automatic Traffic Monitoring for Cargo Transportation and Passenger Traffic

The Future of Ferry Travel Today

After years of close cooperation with maritime industry experts, the Smart Port product-line has been launched to provide a single-step image analytics solution for RoRo Ferry & intermodal systems that facilitate both wheeled multimodal transportation and passenger traffic. SmartPort is ideal for system integrators that want to build a complete solution. It includes a continuously growing selection of pre-defined set of Adaptive Recognition products (hardware and software components) designed to create complex event capture suitable for SmartPort automation, including:

- Free-flow high speed multi lane traffic pre-gates.
- Tourist vehicles entry gates (PAX)
- Freight vehicle OCR pre-gates and entry gates
- RoRo Ferry embarking ramp monitoring

Freelflow systems provide operators with real-time information regarding check-in, lane allocations, boarding and other essential details, further streamlining the process and enhancing the customer experience.

Main Highlights

- High-accuracy recognition and detection 24/7, based on proven AI-led traffic technology
- Reliable equipment supporting transparency with simple system integration possibilities
- Compatibility in case of technology changes without any hassle: when upgrading the equipment, integrators will not need to recode their application thanks to the middleware handling all changes
- Reduced emissions by enabling a smoother flow of traffic and reducing vehicle idling time
- Energy efficiency by automated systems optimize operational procedures
- Creates a more seamless customer experience by reducing waiting time
- Reduces need for manual interaction and support automation management at peak traffic times
- Ideal for collaborative sharing of data with multiuser stakeholders
- Preconfigured sub-systems that are easy to connect to own business systems
- EU-based innovation, proudly supporting local manufacturing

FRONT IMAGE: 	FRONT NUMBER PLATE: 	ADR CODE:
REAR IMAGE: 	REAR NUMBER PLATE: 	IMDG CODE:
COLOR, MAKE & MODEL: 	DIMENSIONS: 	CONDITION IMAGES:
WEIGHT IN MOTION: AXLES: 6 GROSS WEIGHT: 26,6 T	CATEGORY: 	HEIGHT LIMIT WARNING:
PASSENGER COUNT: 	ID DATA: 	DATE & TIME STAMP:

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Click for the video




Accurate cargo traffic tracking

Scalability to large sustainable systems

Easy integration & compatibility

SmartRail

for Automated Identification of Railway Vehicles







Wagon lower side

Container upper side

Overview front

Overview rear



UIC low.

33-87-7929 096-8

UIC up

33-53-933 686-2



Border control

Video analytics

Railway logistics

Vehicle access control systems

Harbor logistics

1 year
software update included

Rail Freight Traffic Monitoring and Vehicle Recognition

SmartRail

State-of-the-art trackside equipment and data collection solution for international railroad operations. This innovative system offers high-level image analytics and aims to automate and digitize security and logistics tasks. It's designed for easy integration by integrators, allowing for a full solution that meets the specific needs of rail network stakeholders, with special regards to:

- Intermodal terminals
- Freight yards
- Border stations
- High speed (open track) and low speed (shunting) operations.

SmartRail is ideal for system integrators that want to build a complete solution. Its components offer ease of implementation, ensuring a high level of system availability and data security. This system automates the recording and management of rolling stock monitoring information, encompassing railroad vehicles, uniquely identifiable loading units, safety hazard signals, and intermodal identifiers. Integrators can leverage these dependable components to effectively build robust solutions.

Main Highlights

- Ensuring transparency and consistency of manual operations related to railway access
- Increased efficiency by automated rail traffic management and data collection, saving human resource demand
- Supports investigation by providing data about physical condition of the trains and track elements in cases of damages, beside detection of discrepancies in the operating schedule or wagon assembly
- Ideal for collaborative sharing of data with multiuser stakeholders
- Reliable equipment with simple system integration possibilities, supports real-time transparency with easy API integration
- Compatibility in case of technology changes without any hassle: when upgrading the equipment, integrators will not need to recode their application thanks to the middleware handling all changes
- Real-time monitoring of rail traffic with high-accuracy recognition 24/7
- Historical traceability of vehicle and loading unit movements
- Displays information related to the safety and general condition of assets
- Preconfigured sub-systems easy to connect to own business systems
- Based on proven AI-led traffic technology, manufactured in EU with high quality protection against environment





OCR RESULT:

33-80-792077-4

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Accurate cargo traffic tracking

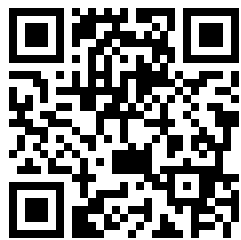
Scalability to large sustainable systems

Easy integration & compatibility

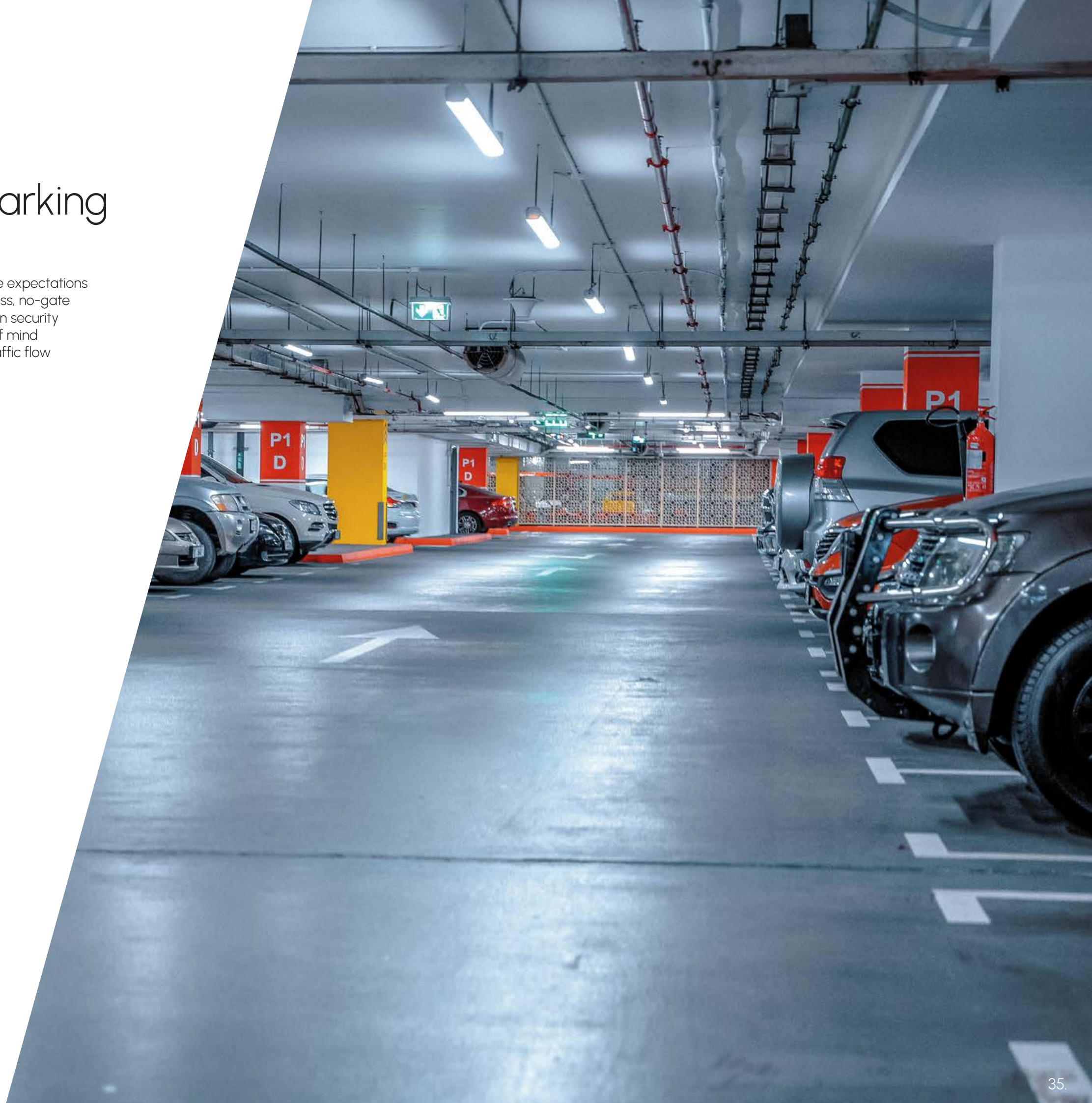
ANPR Devices for Access Control and Parking

Every Entry Secured, Every Exit Simplified

Our high-end, cutting-edge devices are crafted to exceed the expectations of parking integrators and service providers, offering frictionless, no-gate access control and seamless traffic monitoring. With a focus on security and efficiency, our innovative technology guarantees peace of mind at every entry and streamlines the exit process, optimizing traffic flow for a smoother experience.

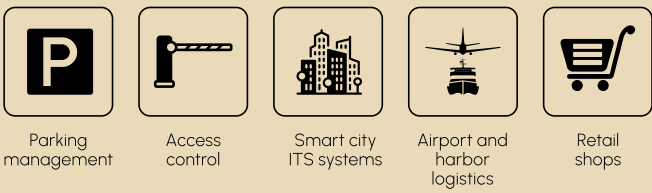


Visit our website
for more information



Einar ANPR Camera

for Access Control & Parking



3 years
manufacturer's warranty

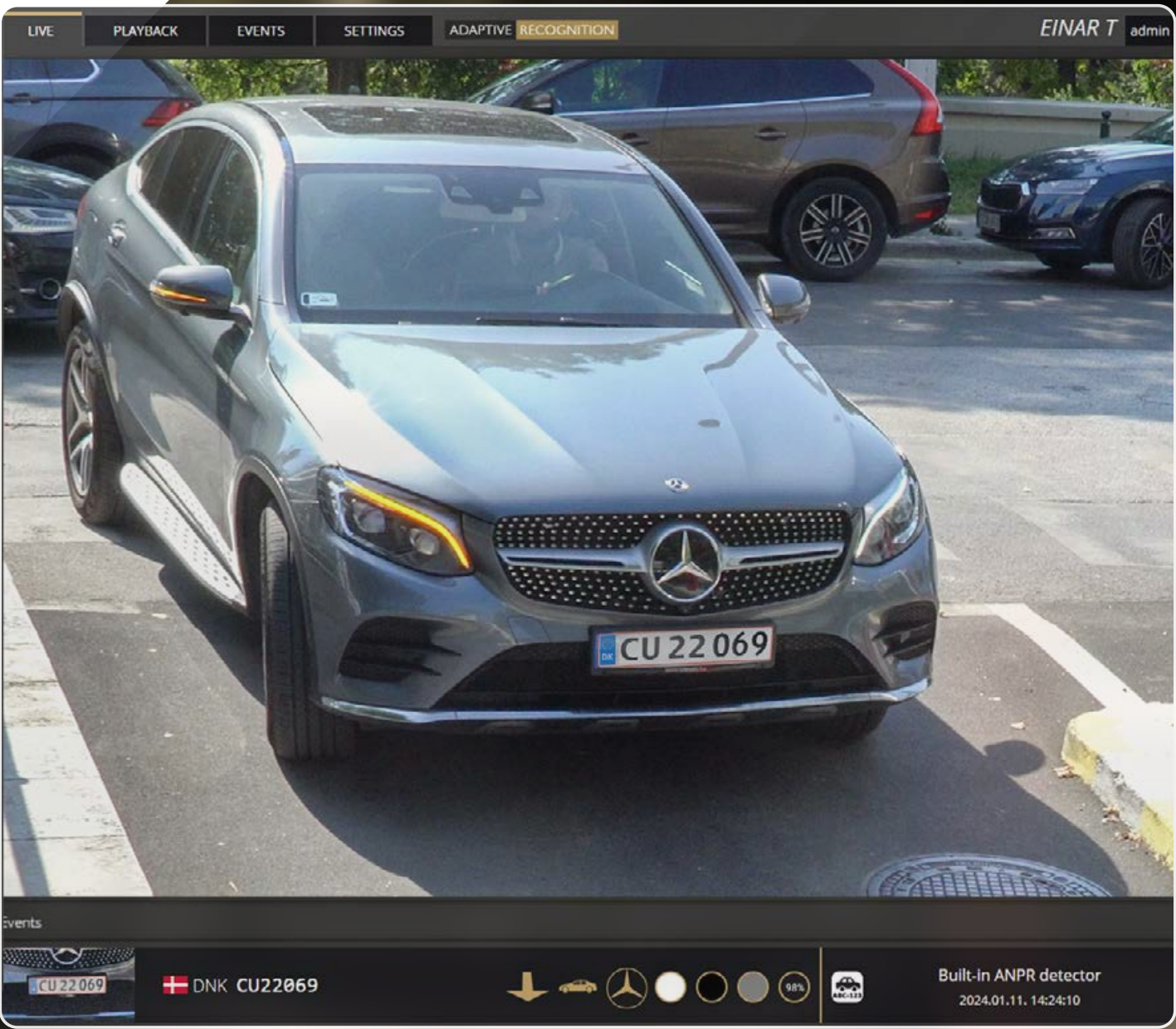


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ANPR IMAGE:

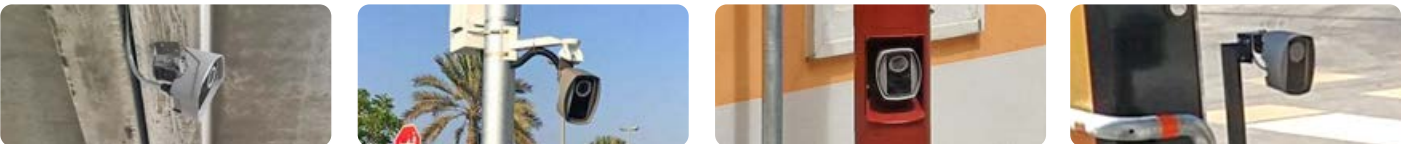
VIDEO PREVIEW:

PLATE IMAGE:

Easy Install PoE+ Camera with Onboard ANPR and Video Results

Build a Parking System with No Loops

Einar is an easy-to-use yet powerful ANPR camera, an all-in-one tool designed for frictionless, no-gate parking access control and slow traffic monitoring. It is a high-end cutting-edge solution crafted to meet the evolving expectations of parking integrators and service providers. In response to industry trends, Einar stands out as a solid aluminum housing multifunctional marvel, boasting features like quicker reaction times, direction detection flexibility, and motorized zoom. Its capability to cover two lanes simultaneously, diverse installation options, and single-cable simplicity align seamlessly with the demands of modern freeflow and stop&go parking environments. Moreover, Einar focuses on data accuracy with its built-in Carmen® engine, enhancing customer experience and security. As the parking industry diversifies, Einar emerges as a pivotal tool, not just for efficient ANPR but as a strategic asset for unlocking the full potential of parking spaces.



Main Highlights

- Camera, illumination, triggering, ANPR, MMR, list management, and gate control in one device, powered by onboard Carmen®
- Plug & Play design for easy installation and handling, single PoE+ cable operation
- Expandable memory via external microSD card
- Easy integration to VMS, parking, and ERP systems via ONVIF/API
- Seamless built-in vehicle detection- up to 80km/h with direction detection
- Video included in the event package
- Onvif S, T, M compatibility
- ANPR data and event displayed in same image
- Secure data transfer via HTTP, HTTPS, FTP, SFTP
- Playback and search functions, allowlist support



Powered by
CARMEN®

Click or scan for the
product page



Click for the
video



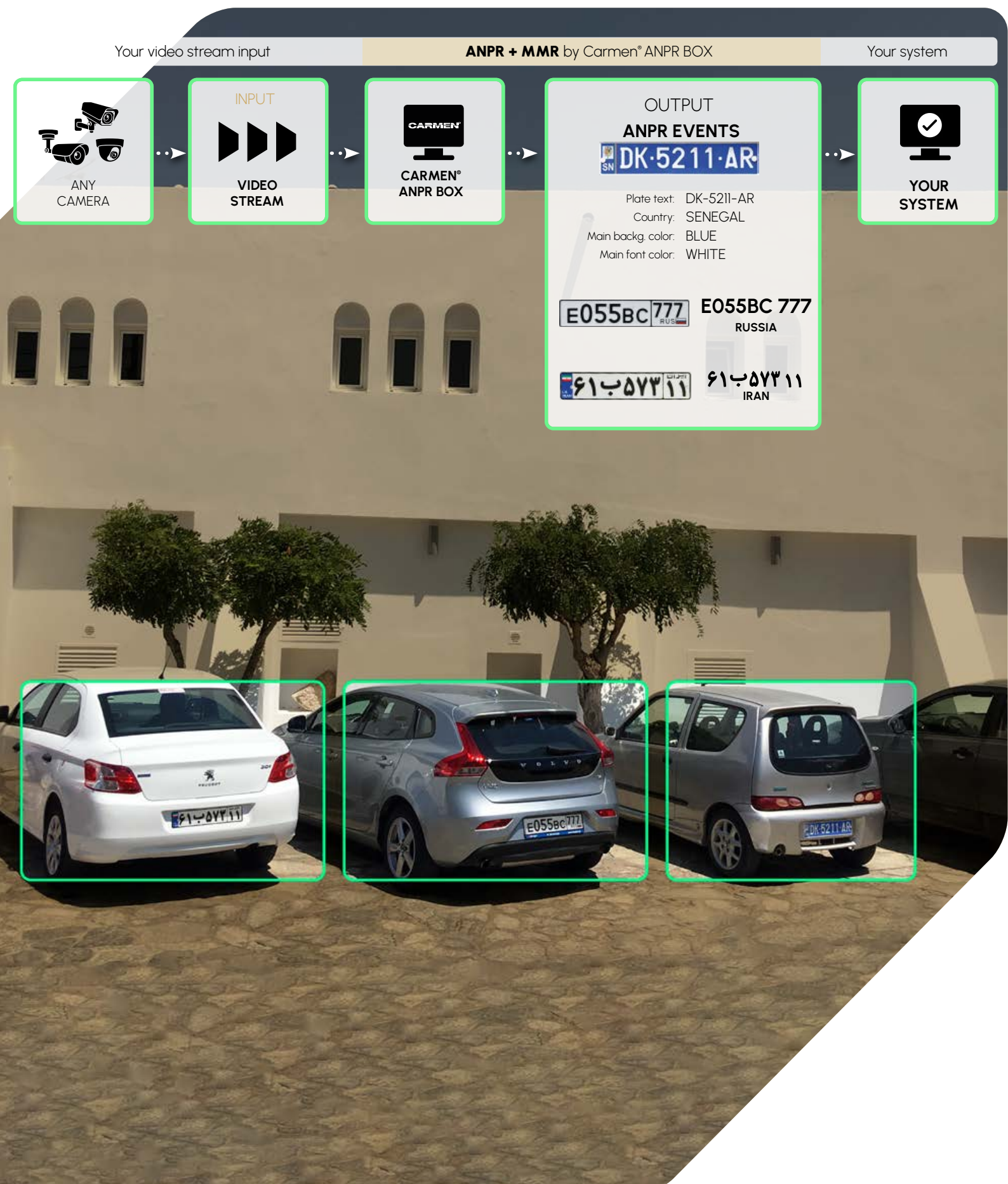
Parking camera with global coverage

Smart, compact, small size

Easy integration & compatibility

Carmen® BOX

for Video Streams of Any Source



Your video stream input

ANPR + MMR by Carmen® ANPR BOX

Your system



ANY CAMERA

INPUT

VIDEO STREAM



CARMEN® ANPR BOX

OUTPUT

ANPR EVENTS

DK-5211-AR

Plate text: DK-5211-AR

Country: SENEGAL

Main backg. color: BLUE

Main font color: WHITE

E055BC777

E055BC 777

RUSSIA

٤١٥٧٣١١

٤١٥٧٣١١

IRAN



YOUR SYSTEM

The Renowned Performance of Carmen® in a Camera-Independent Device

Add ANPR and MMR Data to Any Video Stream

Based on the NVIDIA® Jetson Nano™, Carmen® Box is a standalone device that allows you to enhance your IP camera with plate recognition function. Make and model recognition (MMR) is also available via Carmen® Cloud.

Connect it to your PoE-supported camera and your network to get license plate data and event-based video recordings. The easy-to-use interface helps with the proper settings. The IP video stream gets forwarded to your database, completed with ANPR and MMR data.

The device provides accurate vehicle and plate data for traffic analysis. You can create an access control system without reconstruction and downtime using the stream of an overview camera, or monitor traffic using an existing CCTV security system.

Carmen® BOX also natively supports GDS, our database middleware for event storage, analytics, and data visualization.

Main Highlights

- Add on-premise plate recognition to any IP camera
- Video-based, highly accurate detection
- GPU-accelerated plate detection via NVIDIA Jetson
- Plug & Play for easy installation and handling with intuitive graphical interface to handle multiple cameras
- Video included in the event package
- Easy integration to VMS, parking, and ERP systems via Onvif/API
- Easy streaming with direct link
- Onboard and cloud-based plate recognition powered by Carmen®
- ANPR data and event displayed in the same image
- Allowlist support for access control

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CARMEN®

NVIDIA



AI-based global ANPR & MMR

Camera-independence

Easy integration & compatibility



Congestion charging



Gas stations



Traffic monitoring



Commercial vehicle applications



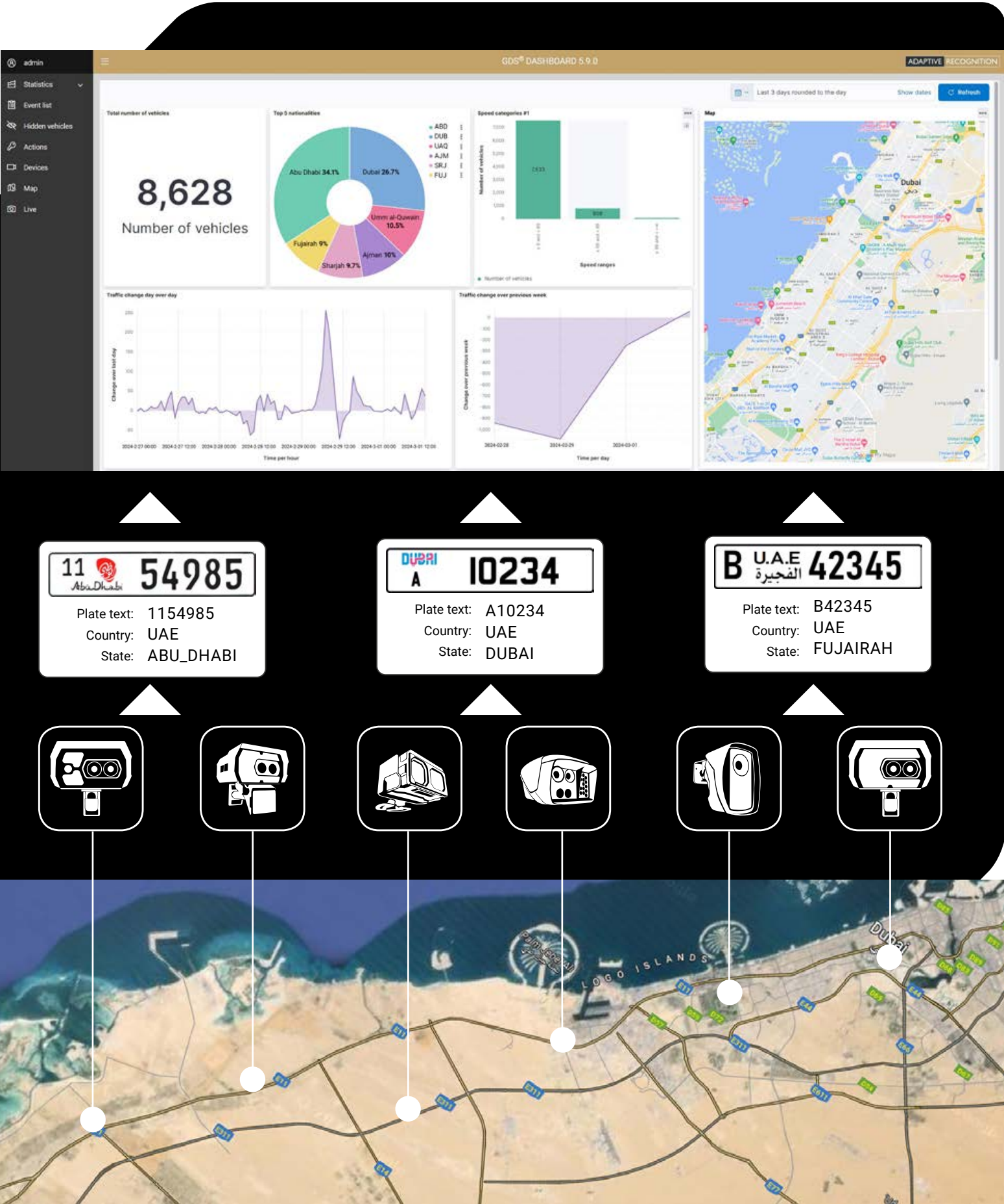
Vehicle access control systems

1 year

software update included

GDS Data Server and Middleware

Universal Traffic Data collection and visualization
middleware for backend system providers



Border control



Traffic analytics



Railway logistics



Vehicle access control systems



Harbor logistics

1 year

software update included

Combined Data Server and Middleware

for Data Collection and Visualization

GDS is an optional system component, and a useful tool for the back-end system provider that offers distributed operation and is capable of receiving, encrypting, and retrieving recordings generated at endpoints. System integrators could use it as a unique interface between their application and all the endpoints.

GDS functionalities include redundant storage of event data, basic and complex data queries and notifications — such as allowlists, registration of endpoint devices, status monitoring, etc. — and intuitive data visualization features (heatmaps, filters, statistics).

Data replication between multiple sites of the Production Environment can be also performed by GDS.

GDS is a universal traffic data collection and visualization middleware for backend system providers that comes with an advanced front-end GUI and works out-of-the-box with Adaptive Recognition ANPR cameras.

Being based on the industry-leading ELK stack, GDS is a combination of a database layer, authentication and transaction layer, and a front-end layer in one complete package that is tested end-to-end.

Main Highlights

- Natively integrated with all AR smart camera products, and 3rd party cameras can be added as well
- Installer for Windows and LINUX operating system Documented
- OpenAPI is available, SDK samples are available it includes advanced data visualization capabilities and even a map module is added showing the status of cameras the application licence also includes the fully integrated database licence
- Easy data export (PDF, CSV, XLS formats are supported), easy integration to any back-end system
- Native integration and management of the endpoints (Vidar Speed, Traffic Spot, Mobile Spot)
- Rapid search and database operations
- Reports, statistics (BI functions), notifications (email, SMS)
- Users can access and analyze the traffic events using standard browsers
- Health monitoring & MAP view
- Allowlist function



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Easy deployment

Query operations, action lists

System independent - works with browsers

About Adaptive Recognition:
A Legacy of Innovation, a Passion for Progress

Since our founding in 1991, Adaptive Recognition has been at the forefront of image processing technology, constantly pushing the boundaries of what's possible. Our commitment to innovation has earned us a reputation as a trusted partner for organizations seeking cutting-edge solutions that enhance safety and transform society.

Our legacy of innovation is firmly rooted in our deeply held values, where principles such as honesty, reliability, and openness are the cornerstones of our corporate culture. These values guide our interactions with our partners and customers, fostering trust and long-lasting relationships. It is our mission to empower organizations with innovative image processing technology that transforms the safety of the individual and society as a whole.



Mythical Names, Profound Meanings

Drawn to the enduring power and symbolism of Norse mythology, our company has chosen to embrace its captivating names. These names, deeply rooted in tales of bravery, exploration, and perseverance, embody the spirit of innovation and strength that propels our company forward.

Inspired by the Norse gods and heroes who fearlessly charted new territories, we too aspire to break through boundaries and challenge the established norms. By tapping into the grandeur of Norse mythology, we seek to embody the qualities that have fueled progress and creativity throughout history.

The names we have chosen are not mere labels; they are a reflection of our values and unwavering commitment to excellence. As we embark on our journey, we carry with us the spirit of Norse mythology, drawing inspiration from its timeless stories of bravery, determination, and unwavering resolve.

30+
years of
experience

Our Product Portfolio

At the forefront of our product portfolio lies Carmen®, a globally renowned and highly versatile automatic license plate recognition (ALPR/ANPR/LPR) software. Carmen® seamlessly adapts to diverse needs, available as a software library, Plug & Play application, or cloud-based software as a service (SaaS).

Complementing our software expertise, we meticulously design and develop ANPR cameras and other hardware devices specifically tailored for access control, traffic monitoring, industrial code reading, and law enforcement applications. This allows our solution provider clients to source high-quality software and hardware components for their projects from a single, trusted vendor.

Addressing the growing demand for secure identity verification, we offer innovative document readers and scanners that streamline and enhance authentication and data entry processes. Our solutions empower organizations to expedite identity verification with unparalleled accuracy and efficiency.

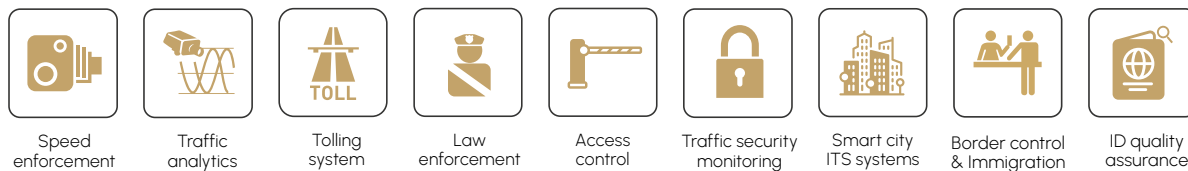


Application Areas

Our cutting-edge image processing technology seamlessly integrates into the diverse applications of our global clientele.

From traffic and security systems to identity verification and industrial code reading, our solutions play a pivotal role in the day-to-day lives of countless individuals worldwide. Our technology empowers travelers to effortlessly cross borders, motorists to navigate roads safely, and empowers organizations to verify identities securely. Whether it's helping motorists to navigate roads or facilitating efficient document processing, our solutions touch upon the daily routines that form the fabric of our society.

Our commitment to innovation and excellence has solidified our position as a global leader in image processing technology. We are driven by the passion to create solutions that make a tangible difference in the world, enabling organizations and individuals to operate with greater efficiency, security, and ease.



38 000+
plate types
recognized
... and counting

Our Clients

Our client base mainly consists of system integrators working on a wide range of private and governmental projects of all sizes. We pride ourselves on fostering long-lasting partnerships with our clients, serving as trusted advisors and delivering tailored solutions that exceed expectations. Our commitment to customer satisfaction has solidified our position as a global leader in image processing technology.

Beyond system components, we also create standalone products, such as user-friendly Plug & Play versions of our advanced software and cameras, empowering organizations to seamlessly integrate our technology into their unique workflows.

A global network of organizations relies on our technology, including:



Our Corporate Policy & Mission

We leverage 30+ years of hands-on market and technology experience to answer our customers' needs and fulfill our mission of transforming the safety of the individual and society.

Our vertically integrated operations encompass the entire product lifecycle, from research and development to design, manufacturing, and support, ensuring seamless collaboration and unparalleled quality control.

Committed to sustainable practices, our hardware is produced and assembled at our own EU-based manufacturing facility, employing cutting-edge automated processes that meet ISO standards and minimize environmental impact.

200 000+
installations based on
our OCR products
worldwide



What Makes Us Different

A team of in-house developers and engineers is in charge of keeping our software products ahead of the constant evolution of the worldwide license plate and identity document landscape. We focus on constant innovation to keep our leader position in these highly specialized market segments.

Since we own the entire product lifecycle from vision through production to support, we can quickly and efficiently respond to special requests and provide knowledgeable and dependable support to our customers through a global partner and support network. The most important measure of our success is our partners' and clients' success.

Our plate recognition software stands out by providing unparalleled worldwide coverage of international license plates.

Carmen® is the only software on the global market that can reliably handle special plate types of specific geographies.

Moreover, we are proud to offer ID reader devices with an unprecedented set of features such as Adaptive Light Control for filtering out disturbing interferences, oblique light for displaying tactile elements, and face compare.

Our cameras boast incredible performance while offering high-tech features such as built-in laser-triggering and full remote control.

" Swift adaptability to changes, common sense, and teamwork are the three pillars of success in an industry as fast-moving as image recognition. "

Laszlo Kis
CEO

300+
employees



Find out more about our company and the milestones that have defined our story.



Our commitment to corporate sustainability

ADAPTIVE RECOGNITION

Leading The Way

Adaptive Recognition is committed to leveraging technology for positive change, aligning our operations with environmental stewardship, social responsibility, and economic prosperity.

Sustainability is ingrained in our DNA, encompassing more than just environmental impact. We champion responsible business practices, promote diversity, equity, and inclusion, and empower individuals to reach their full potential.

Environmentally, we prioritize energy efficiency and sustainable practices, minimizing our footprint on the planet.

Socially, we foster an inclusive workplace that embraces diversity, equity, and inclusion, allowing individuals to thrive and contribute their unique perspectives. In business, we uphold the highest standards of integrity, promoting transparency, accountability, and ethical behavior to ensure a fair and sustainable environment for all.

For a detailed overview of our commitment to ethical and responsible conduct, please refer to our Code of Conduct, available [online](#).

You can also access our Supplier Code of Conduct [online](#).



Code of Conduct



Supplier Code of Conduct



Contact

For general and product inquiries, the simplest way to get in touch with us is by filling in the form on our homepage adaptiverecognition.com.
Alternatively, contact us through one of our regional offices.



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Social Media

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adaptiverecognition](https://linkedin.com/company/adaptiverecognition)

YouTube



[youtube.com/c/
AdaptiveRecognitionVideos](https://youtube.com/c/AdaptiveRecognitionVideos)

Twitter



[twitter.com/
ar_adaptive](https://twitter.com/ar_adaptive)

AR Product Information Center

Find all product-related information from technical datasheets, through installation guides to user manuals, how-to videos, and more.



adaptiverecognition.com/doc

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ADAPTIVE RECOGNITION

www.adaptiverecognition.com