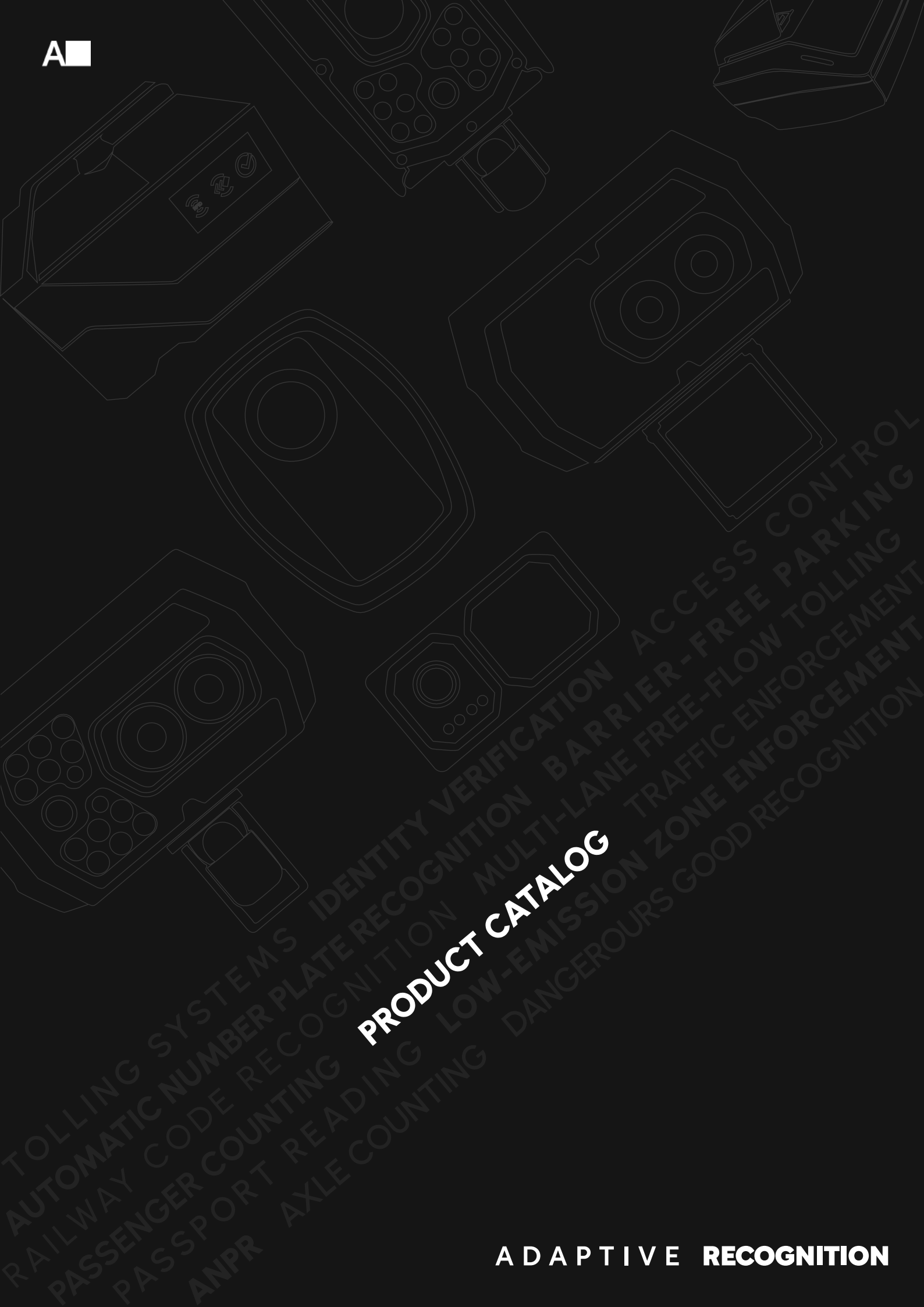




PRODUCT CATALOG

ADAPTIVE RECOGNITION

Setting Standards & Exceeding Expectations

In the world of image processing technology, we stand as pioneers, defying expectation 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 -
Vision Technology that Exceeds Expectations.**

Contents

03

Passport Readers and ID Scanners with OCR & Authentication Software



Osmond L and R
Osmond N
Osmond Kiosk
Combo Smart Kiosk
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Software Add-Ons
AutoFill Application for ID Data

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



Carmen® FreeFlow ANPR Engine
Carmen® GO
Carmen® Cloud
Carmen® Mobile
Carmen® MMR
Carmen® Nano ANPR

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Carmen® Industrial Code Recognition Software Libraries



Carmen® Container Code Recognition
Carmen® ADR Dangerous Goods Code Recognition
Carmen® Railway Code Recognition
Carmen® Commercial Vehicle Code Recognition

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Cameras & Devices for All Type of ITS Applications, Road Toll, Smart Cities, Logistics and Speed Enforcement



Vidar Camera
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Vidar PAX Camera
Lynet ANPR-MMR Camera
Lynet Speed Camera
SI – The Portable Speed Camera
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SmartPort
SmartRail

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ANPR Devices for Access Control, Parking and Urban Traffic



Einar ANPR Camera
Carmen® BOX
Globessey Data Server (GDS)

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About Adaptive Recognition Company Overview



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Our Offices
AR Product Information Center
Social Media

Passport Readers & 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.

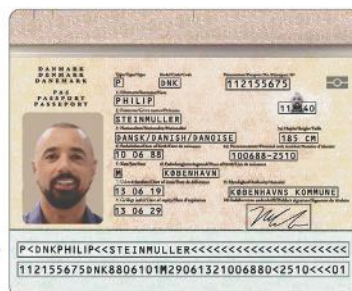


Visit our website
for more information



Osmond L and R

ID Scanners with USB Interface



Identity Document RESULTS

NAME: PHILIP STEINMULLER
Date of BIRTH: 1988-06-10
PLACE OF BIRTH: COPENHAGEN
Nationality: DANISH
Sex: Male
Document number: 112155675
Valid: from 13/06/2019 to 13/06/2029
Personal number: 0068802510
Images, RFID data ...



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 visualizing hidden optical elements for effective fraudulent document detection. The included software SDK allows easy integration into any system.

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)
- Jura IPI, letterScreen security visualization, RFID-chip/smartcard reading

Scan for the
product page



Scan for the
product video



Easy usage with USB

Speedy document reading

Worldwide document support

Osmond N

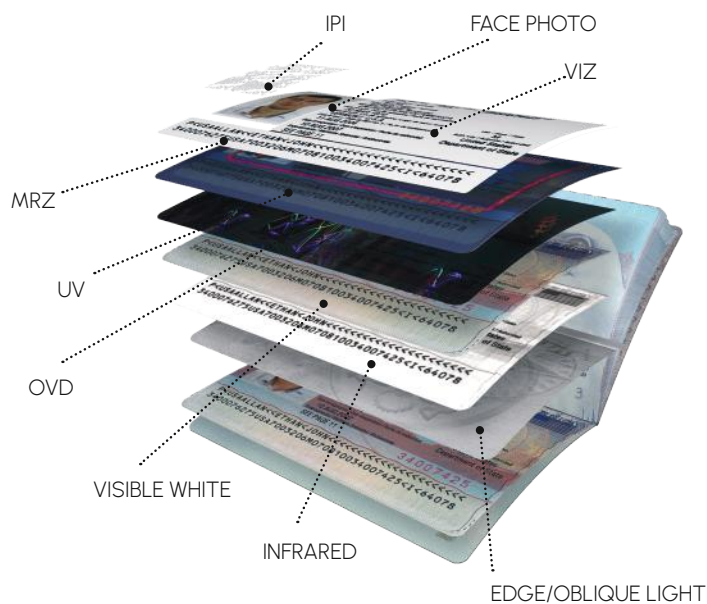
Standalone ID Scanner



DATA CONNECTION



RESULTS





Telco



Banking



Law
enforcement



ID quality
assurance



Border control
& Immigration

3 years
manufacturer's warranty

Models Enhanced with Dual Interface

Streamlined Connectivity, Maximized Security

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. 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, fraudulent document detection, and RFID and contact chip / smartcard reading.

Main Highlights

- Standalone operation with no installation needed, selectable network 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

Scan for the
product page



Scan for the
product video



Ethernet & USB modes

Speedy document reading

Worldwide document support

Osmond Kiosk

ID Scanner Designed for Built-in Use



Identity Document RESULTS

NAME:

JANE CITIZEN

Date of BIRTH:

1984-06-07

Nationality:

AUSTRALIAN

Sex:

Female

Document number:

PW0900286

Valid:

from 01/03/2024 to 01/03/2034

Type:

P

State:

AUS

Images, RFID data

...



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

Deliver Superior Self-Service Experience

The Osmond Kiosk is designed for seamless integration into various self-service environments like border & immigration e-gates, ATMs/VTMs, airline check-in & hotel check-in kiosks, payment stations and more. It enhances end-user experience with its intuitive automatic document detection and reading mode that quickly scans the document, as well as reads and verifies all optical and digital data in one single step. It is capable of efficiently scanning and accurately reading identity cards, passports, driver's licenses, residence permits, visas, boarding passes, as well as electronic identity documents with chips such as e-passports, e-IDs and more. Engineered for adaptability, the Osmond Kiosk fits effortlessly into various kiosk designs, but it can be used also as a desktop scanner. It comes with a comprehensive Software Development Kit for quick system integration, and can be used in Windows, Linux and other environments.

Osmond KIOSK has been designed for time-critical self-service applications where you need to read and verify identity documents with advanced document fraud detection within the shortest time possible.

Main Highlights

- Large scanning window with scratch-resistant glass for comfortable self-service document placement
- Maintenance-free operation and easy integration
- Lightning-fast scanning and data reading with built-in hardware acceleration for time-critical ID reading and authentication applications
- Automatic optical data reading, MRZ and VIZ OCR, barcodes, including QR codes and boarding pass reading
- Automatic optical authentication for detecting fraudulent documents
- Automatic RFID chip reading of electronic identity documents with data cross-verification, fraudulent chips and manipulated chip data detection
- Automatic detection and extraction of printed face photos from ID documents and digital face photos from chips for face-verification applications
- USB and dual-interface, USB + ethernet versions, APIs for local USB and ethernet use
- QR code and other ID/2D barcode recognition from paper and mobile phones
- Compliant with various middleware, commercial and governmental systems, as well as global Entry/Exit System (EES) regulations

Scan for the product page



Scan for the product video



Enhanced self-service experience

Easy integration

Automatic scanning

Combo Smart Kiosk

Built-in Passport & ID Reader



Identity Document RESULTS

NAME: JANE CITIZEN
Date of BIRTH: 1984-06-07
Nationality: AUSTRALIAN
Sex: Female
Document number: PWD900286
Valid: from 01/03/2023 to 01/03/2026
Type: P
State: AUS
Images, RFID data ...



Vending machines



E-gates



ID quality assurance



Liquor & tobacco shops



Border control & Immigration

3 years
manufacturer's warranty

Enhanced ID Authentication Self-Service with True Convenience and Security

Physical Integration without Compromises

Designed for seamless integration into self-service stations like ATMs/VTMs, airline check-in & hotel check-in kiosk, payment stations, Combo Smart Kiosk features a reversible frame for installation from either side and versatile mounting options accommodating various kiosk designs. It is ideal for a broad range of projects with customizable options to meet specific requirements. Equipped with automatic image processing capabilities, it offers quick and accurate optical data reading via OCR and barcode decoding from identity cards, passports, driver's licenses, residence permits, boarding passes and more, and well as advanced identity document fraud detection.

Main Highlights

- Easy and convenient for end users with large scanning window
- Simple installation with various mounting options into any self-service kiosk setups
- Super-fast scanning and data reading for time-critical ID reading applications
- Automatic optical data reading, MRZ and VIZ OCR
- Automatic reading of boarding passes, QR codes and other ID/2D barcodes from paper and mobile phones
- Automatic optical authentication for detecting fraudulent ID documents
- Automatic detection and extraction of printed face photos from IDs, passports and other ID documents for face-verification applications
- Comprehensive Software Development Kit for quick integration



Scan for the
product page



Scan for the
product video



Simple kiosk integration

User-focused operation

Full-page reading

Combo Scan

Full-Page ID-1 and MRZ Scanner



Identity Document RESULTS

NAME: MÄNNIK CARL
Date of BIRTH: 2010-01-01
PLACE OF BIRTH: COPENHAGEN
Nationality: ESTONIA
Sex: MALE
Document number: B0276809
Valid: to 21/02/2027
Personal Code: 47101010033
...



Casino
gaming



Visitor
management



Corporate
receptions



Car rental



Night clubs

3 years

manufacturer's warranty

A USB-Powered Universal Scanner that Fits Into Your Palm

Supercharge Your Data Entry Workflow

Combo Scan is a compact, fully automated ID and passport MRZ reader designed for data entry. Forget typing: place the ID on the scanning window to automatically capture MRZ (machine readable zone) and VIZ (visual inspection zone) of ID documents and transfer data to reservation forms, contracts, customer files, and more.

Combo Scan captures high-resolution images and processes them for the best OCR results. The no-moving parts design ensures maintenance-free operation. The scanner operates on a single USB, requiring no external power supply. The device comes with a 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.

Main Highlights

- 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 ID/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)

Scan for the
product page



Scan for the
product video



MRZ reading and ID scanning

Ultra-compact size

Portable, USB-powered

for VIZ Reading and Authentication



[Signature]



IDUTOAAA123456599999999R<<<<<<
8001014F2606015UT0<<<<<<<<<<7
MUESTRA<SAMPLE<<CARMEN<<<<<<<

SURNAME
MUESTRA SAMPLE

NAME
CARMEN

NATIONALITY
UTO

VALIDITY
01 06 2026



Banking



Law enforcement



Various KYC programs



Telco offices



Border control & Immigration

1 year

software update included

VIZ Reading and Authentication

Read All Data Fields on Documents

Use the VIZ module to read and process all printed data on identity documents, including address, names with accents, diacritics and other data fields that are part of the visual inspection zone (VIZ), originally not designed for machine processing by the document issuer.

Use the Authentication module for advanced optical ID document fraud analysis that helps detect fake or manipulated documents, ideally for KYC and other high-security applications where it is critical to verify the authenticity of the 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 widespread documents of a geographical region or the world.

Main Highlights

- Advanced verification of document-specific security features
- Worldwide document coverage
- Pattern and geometry analysis
- Continuous updates with new document types
- Seamless integration through API
- International 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.

Scan for the
product page



Scan for the
product video



VIZ reading

Authenticity verification

Global coverage

AutoFill Application for ID Data

Transfer into PMS and Other Systems

AUTOFILL 3.6.2 (O:2|R:2021-10-13|L:2022-12-31)



AUTOFILL
App From Filler



Name:

JUDITH STEINMULLER

Sex:

FEMALE

Nationality:

DANISH

ID number:

10068802510

Doc. number:

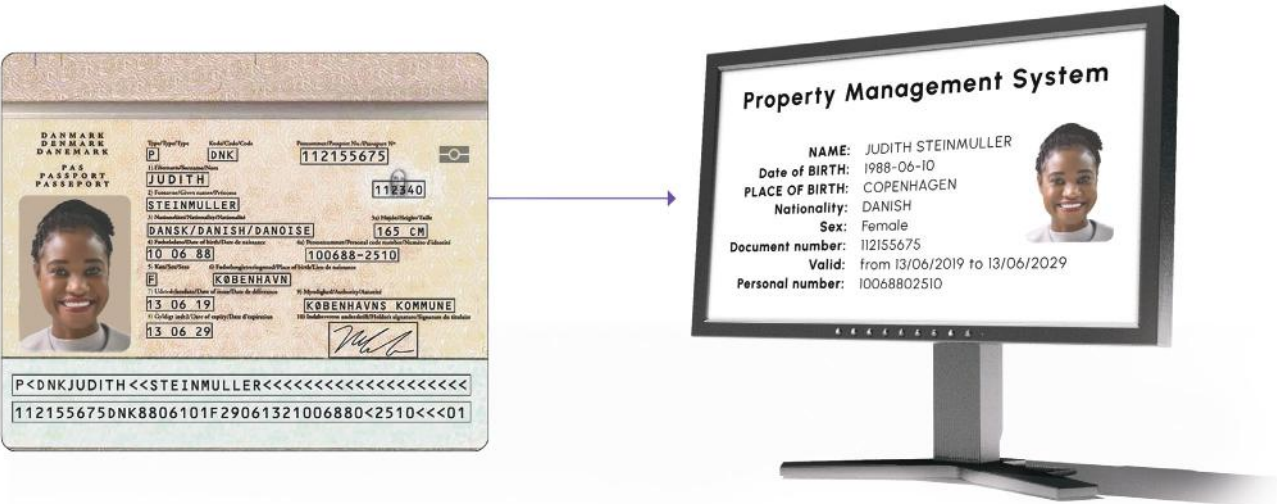
112155675

☒ Automatic mode

Resend

Document data

Type: Passport 2019





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 the system you want to send data to, keeping integration efforts to a minimum, saving time and money. There are two possible options to transmit data: by a web browser (via plugin) or a separate application (via keyboard and mouse emulation).

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
- Send data to 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 send data to any host application

Scan for the
product page



Scan for the
product video



Easy transmission of data

Handles data from multiple pages

Works with browsers and applications

Carmen® ANPR Software Family

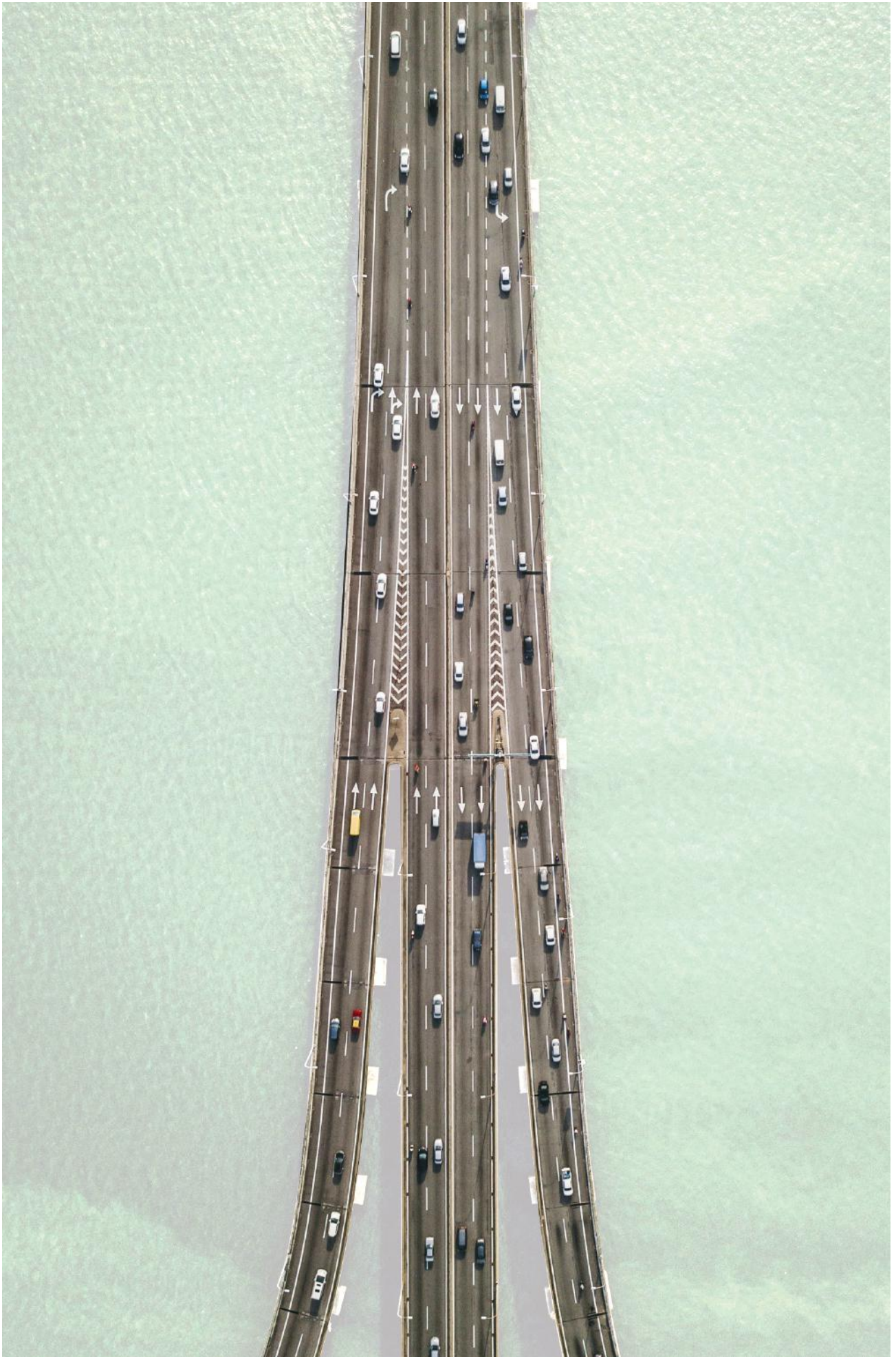
for On-Premise or Cloud Applications

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

Experience uncompromising performance with the Carmen® ANPR Software Family, the definition 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 vehicle identification.



Visit our website
for more information



Carmen® FreeFlow ANPR Engine

with Software Development Kit



DK CK 99 785

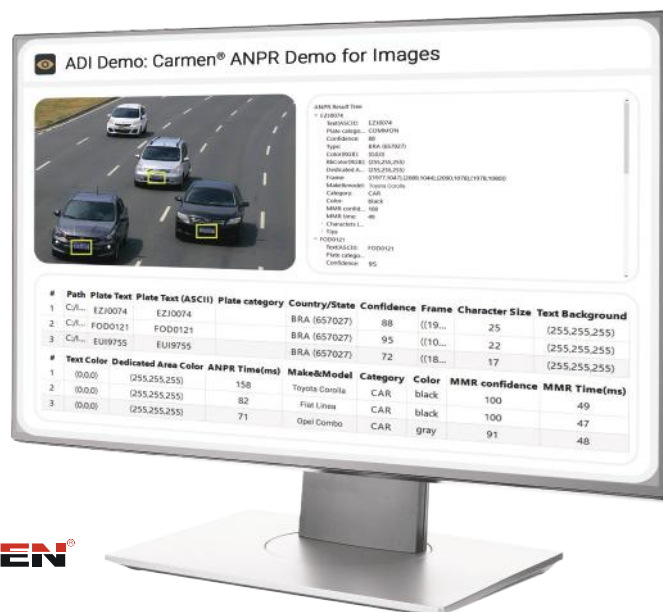
Plate text: **CK99785**
 Country: DENMARK
 Main backg. color: YELLOW
 Main font color: BLACK

40
3175

ADR Code: **40 3175**

DK CU 22 069

Plate text: **CU22069**
 Country: DENMARK
 Main backg. color: WHITE
 Main font color: BLACK



CARMEN®



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

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 tolling and speed enforcement
- Camera-independent software, sample programs and quick support response
- Global coverage with local customization options: 38,000+ plate types recognized from 160+ countries
- Country, state or province, plate type and plate color recognition
- Optional vehicle make, model, color and category recognition (MMR), dangerous goods and IMO codes recognition
- ANPR results from video stream and still images

Scan for the product page



Scan for the product video



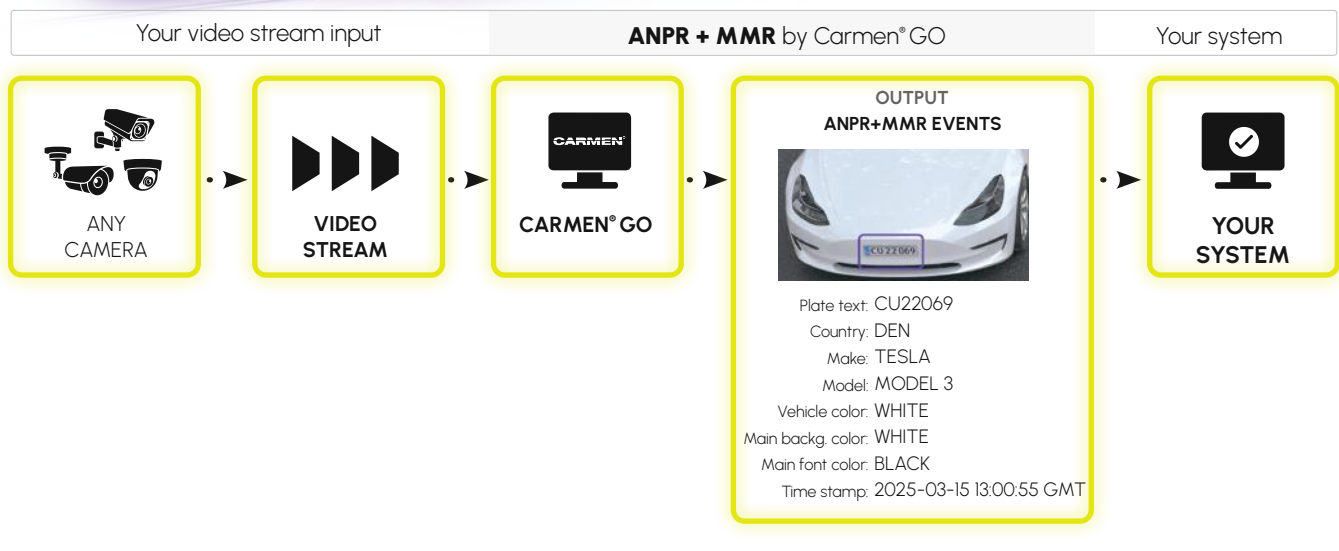
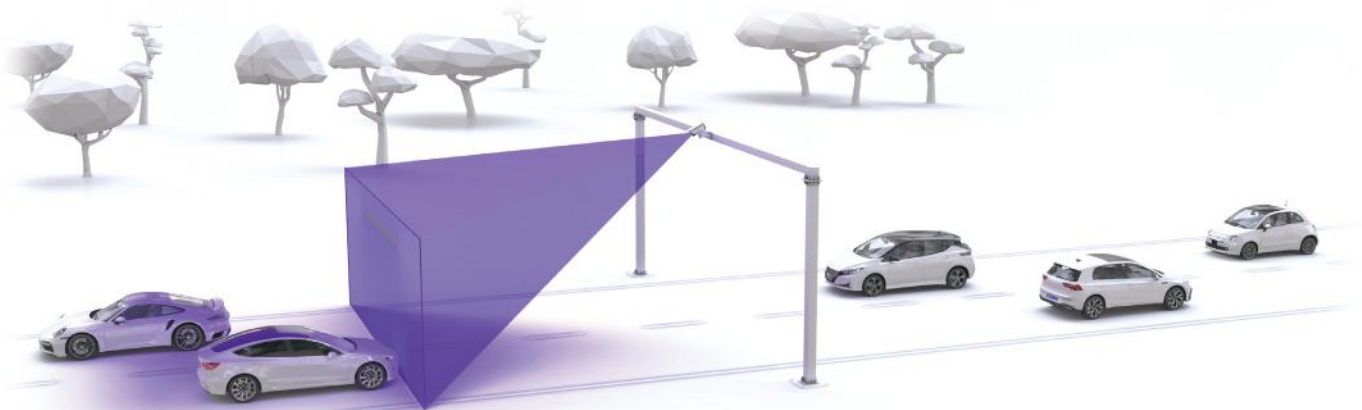
AI-based global ANPR & MMR

Successful globally

Regular engine updates

Carmen® GO

ANPR & MMR from Camera Streams



Powered by
CARMEN®



Tolling
system



Video
analytics



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 seamless 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 it 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
- Built-in advanced detection algorithm
- Various output formats: CSV datafile, FTP upload and/or internal database (available through REST API)

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product page



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product video



AI-based global ANPR & MMR

Camera-independent

Easy integration via API

Carmen® Cloud

Software as a Service (SaaS)



CONTAINER CODE:

ISO 6346: ☒ **ECAU 100299 22G1**

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

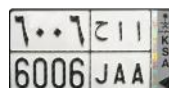


Plate text: **٦٠٠٦ ج ا ا 6006 JAA**

Country: **SAUDI_ARABIA**

Dedicated Area Color: **WHITE**

Main backg. color: **WHITE**

Dedicated Area Color: **WHITE**

Main font color: **BLACK**



Plate text: **7MD2405**

Country: **USA**

State: **MARYLAND**

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 87 7929 096-8



Video analytics



Traffic monitoring



Parking systems



Gas stations



Tolling system

Always

up-to-date

Instant ANPR Results from Any Image, Anywhere in The World

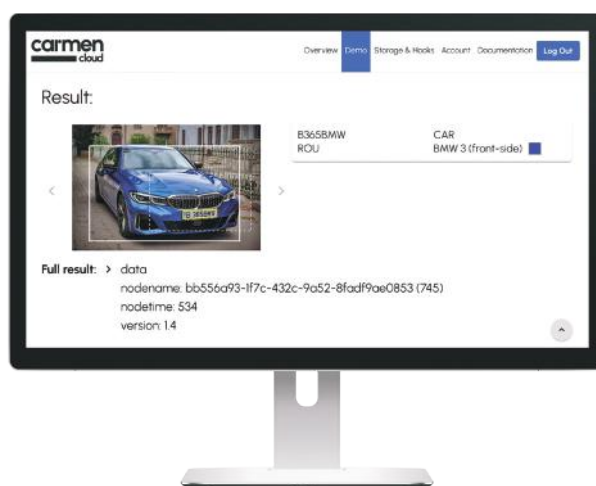
Create an ANPR System Within 1 Hour

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. Our advanced license plate recognition SaaS service is also available for deployment in your preferred environment — whether it's on your own servers or within your private 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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product page



Scan for the
product video



SaaS with cloud server

Camera-independent

Quick integration via API

Carmen® Mobile

Android App for ANPR & MMR



CARMEN®



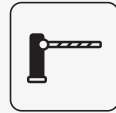
Traffic security
monitoring



Video
analytics



Law
enforcement



Access
control



Smart city
ITS systems

Always

up-to-date

Your Pocket-Sized, On-the-Go Application for Vehicle Recognition

Turn Your Mobile Phone into an ANPR Device

Carmen® Mobile is a ready-to-use application for reading license plates with an Android phone. The app works with any Carmen® Cloud subscription, including the free trial. It either uses the phone's camera to recognize vehicles or it can process images/videos stored on the phone. You can easily integrate this application with your own Android app. Improve parking enforcement with seamless Lynet ANPR camera integration, both day and night. Connect up to four Lynet cameras to your Carmen Mobile application, delivering instant, multi-lane coverage with no extra setup - ready to work within minutes.

Uniquely on the market, Carmen® Mobile can collect ANPR 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, parking control, on-street parking enforcement, wanted vehicle 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

Scan for the
product page



Scan for the
product video



Simple integration

Several monthly pricing plans

SaaS with secure data

Carmen® MMR

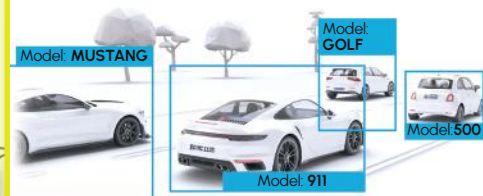
Software Add-On



Make identification



Model selection



Color recognition



Vehicle identification



License plate recognition





Tolling system



Traffic security monitoring



Traffic monitoring



Car rental



Gas stations

1 year

software update included

Vehicle 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 smart 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, generation, dimensions (based on catalog data) 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
- Regular updates
- 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®



Scan for the product page



Scan for the product video



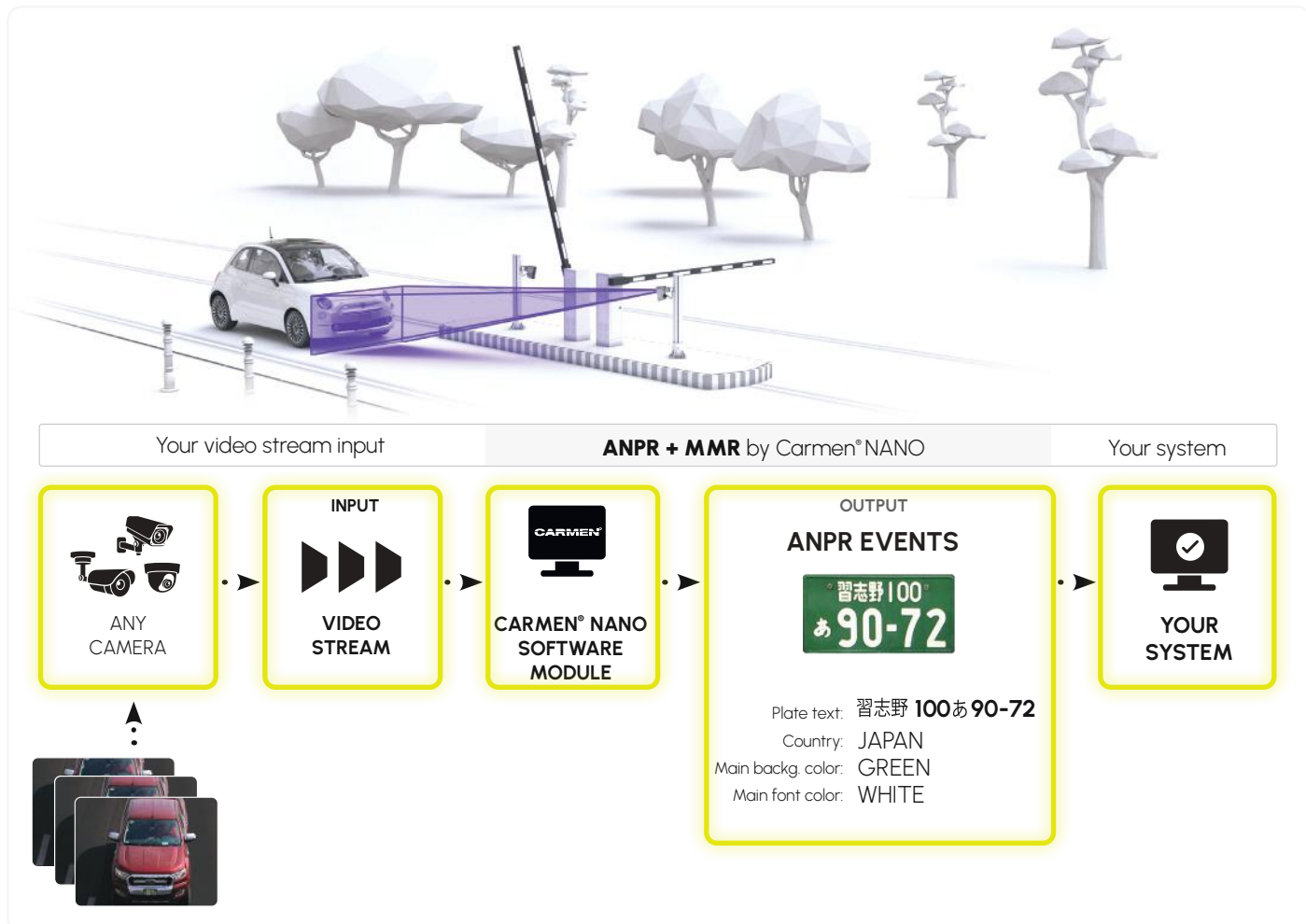
Regional MMR engine

Recognition with high accuracy

Cloud or on-premise solution

Carmen® Nano ANPR

for NVIDIA Jetson-Based Computers



CARMEN®

NVIDIA



Access control



Video analytics



Traffic monitoring



Tolling system



Smart city ITS systems

1 year

software update included

Jetson Nano-based ANPR and MMR Software for IP Cameras

Upgrade any IP Camera with ANPR and MMR

Carmen® Nano ANPR is a software module especially developed for NVIDIA® Jetson Nano-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 Nano 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

The Ultimate Code Recognition Solution for Streamlined Operations

Experience seamless precision with the Carmen® OCR Software Library, designed for effortless tracking and identification. From container and railway codes to dangerous goods and commercial vehicles, Carmen® sets the standard for unmatched accuracy and reliability. Simplify logistics, ensure compliance, and enhance safety across industries with Carmen® — the ultimate choice for dependable code recognition.



Visit our website
for more information



Carmen® OCR Software Library

for Container Code Recognition

ISO6346 code recognition



Left side image



Top side image



Right side image



OCR result:

ECAU 1002998 22 G1





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

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.

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

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Scan for the
product video



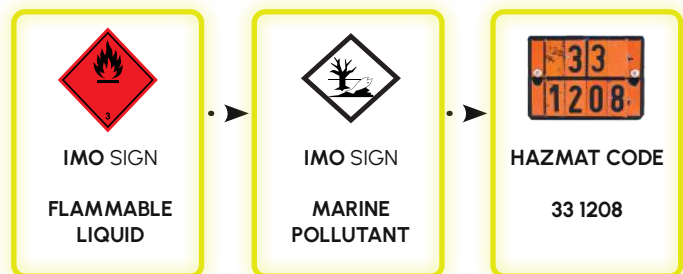
Accurate reading of global codes

Scalability to large systems

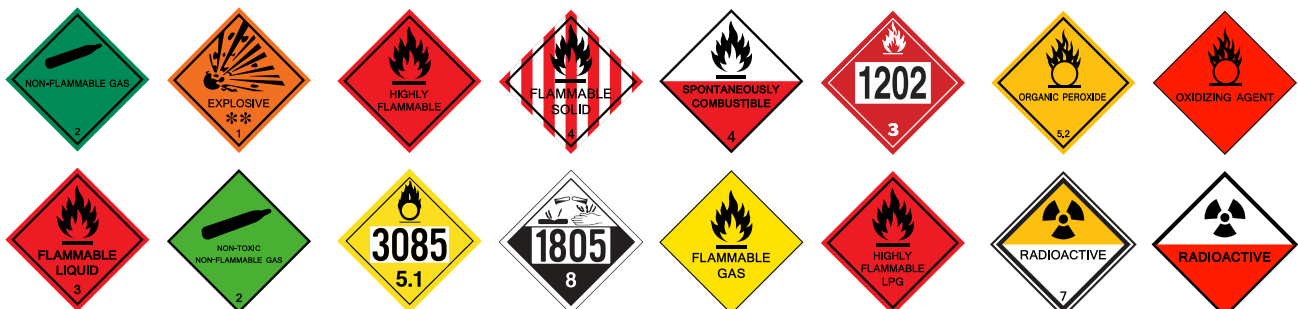
Easy integration via API

Carmen® ADR Software Library

for Dangerous Goods Code Recognition



Powered by
CARMEN®





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
- ASCII and Unicode output formats
- Supports multiple operating systems

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Scan for the product video



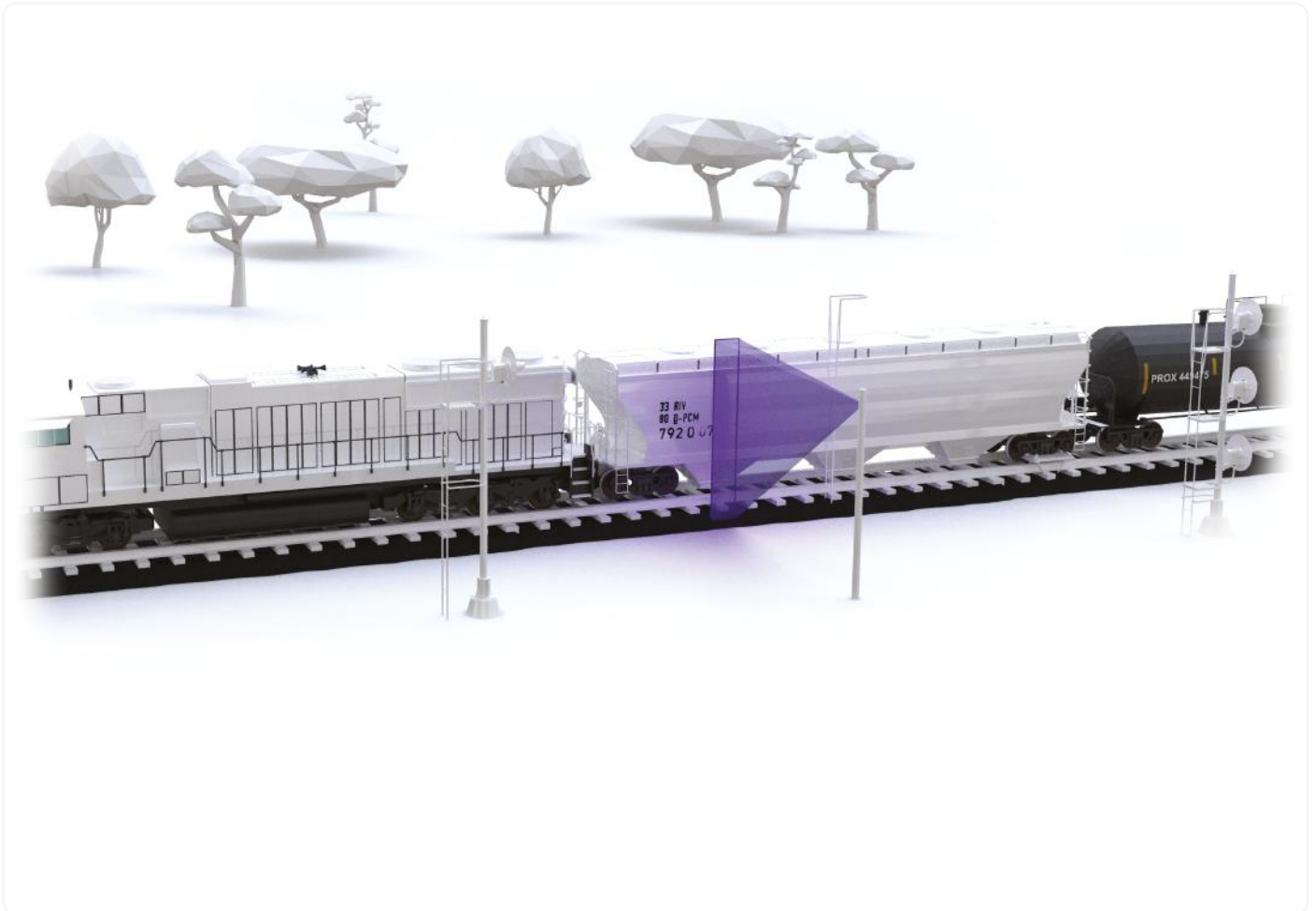
Global coverage of hazmat symbols

Fast & reliable reading

Easy integration & scalability

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
- 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

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Global coverage of railway codes

Camera-independence

Easy integration & scalability

Carmen® OCR Software Library

for Commercial Vehicle Code Recognition



Powered by
CARMEN®

USDOT 432165

USDOT RESULT:
432165



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

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product page



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Accurate reading of USDOT numbers

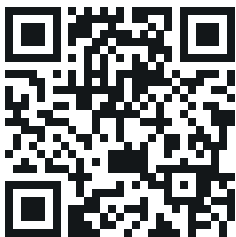
Easy integration & scalability

Camera-independence

Cameras & Devices for All Type of ITS Applications, Road Toll, Smart Cities, Automated Logistics 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.

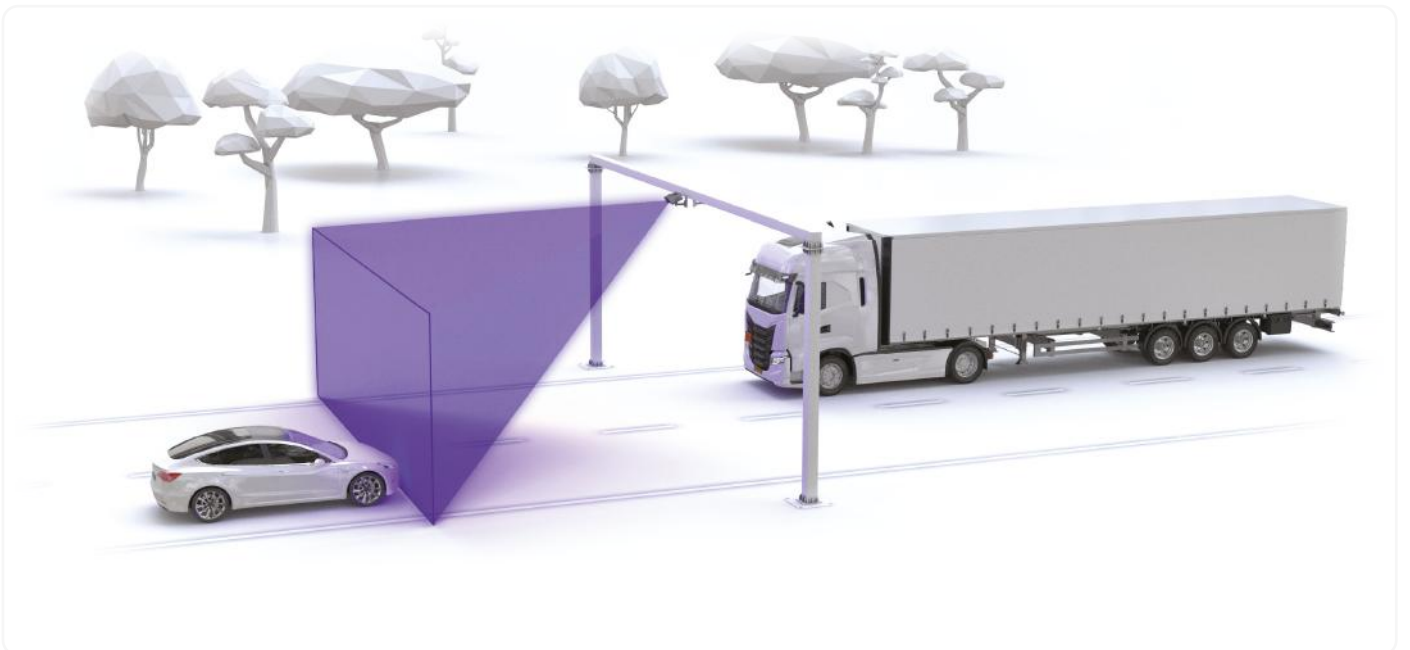


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for more information



Vidar Camera

for All Types of Traffic Monitoring





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

Accurate Vehicle 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

- Vehicle detection up to 320 km/h (200 mph)
- 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 overview 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

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ANPR-ready camera with remote control

Leading performance & high security

Multilane detection & laser-triggering

Vidar Smart ANPR Camera

with Embedded Processing



CU 22 069

Plate text: **CU22069**
Country: DENMARK
Main backg. color: WHITE
Main font color: BLACK

京 P8928

Plate text: **京P8928**
Country: CHINA
Main backg. color: BLUE
Main font color: WHITE



Powered by
CARMEN[®]



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) are available by default and dangerous goods code recognition are optionally available.

Main Highlights

- Vehicle detection up to 320 km/h (200 mph)
- Accurate onboard ANPR with worldwide coverage, 99.9% vehicle detection rate with laser triggering
- Models available for multilane detection: make, model, color and category (MMR) 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

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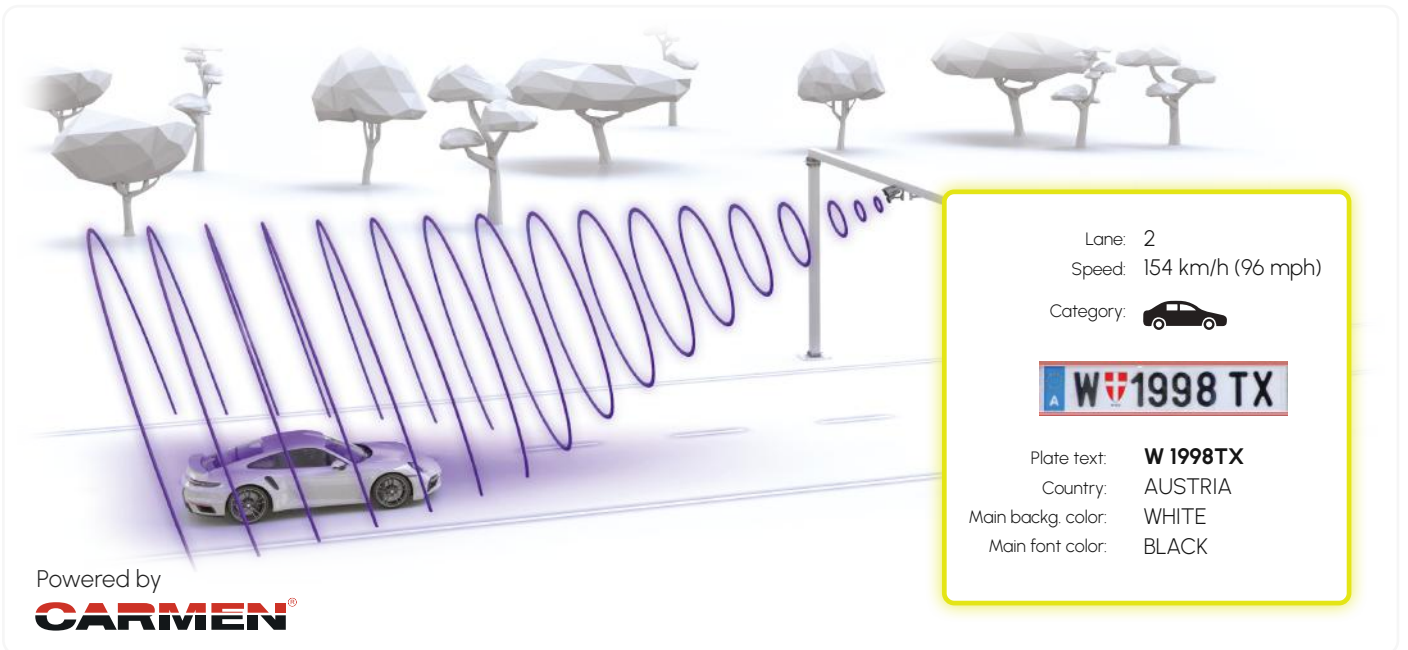
4 cores dedicated for ANPR & MMR

Accurate onboard ANPR with worldwide coverage

Built-in laser module

Vidar Speed Camera for Speed Measurement

with Advanced Traffic Analysis Capabilities





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 Capabilities

Vidar Speed cameras incorporate all the advanced features of the Vidar Smart models and are equipped with a multilane, multi-object tracking 4D radar. These cameras excel in vehicle categorization and deliver certifiable speed measurements, with the radar module certified by the Swiss Federal Institute of Metrology (METAS). Additionally, the entire speed camera system is certified for use in multiple EU countries.

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 or indirect access via GDS, certified in multiple countries.
- Resistance to physical impact and weather, IK10 and IP67 certified, 100% aluminum cast design
- Multilane, object-tracking 4D radar for triggering & speed detection
- Can be installed on both gantries and poles, adapting to the existing infrastructure.
- 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

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product video



Stationary smart speed camera

Multilane tracking

Certified up to 320 km/h (200 mph)

Vidar Axle Camera

for Vehicle Axle Counting



AXLE NUMBER:

5

CATEGORY:





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

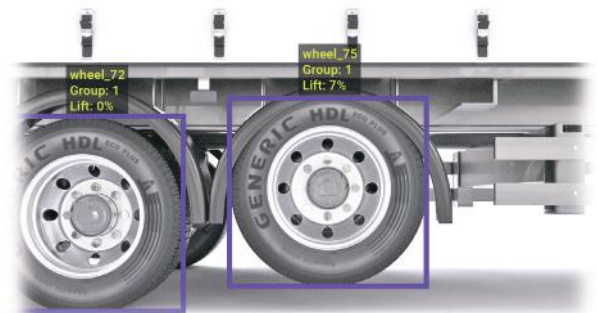
Complete Line Scan Images through Advanced Vehicle Analysis Capabilities

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
- Images containing entire object regardless of length
- 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
- Twin wheel detection, 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



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Axle counting of trucks with any length

Vehicle categorization

Standalone with local storage

Vidar Container Camera

for Container Code Recognition



ISO6346 code recognition

Powered by
CARMEN



Left side image



Top side image

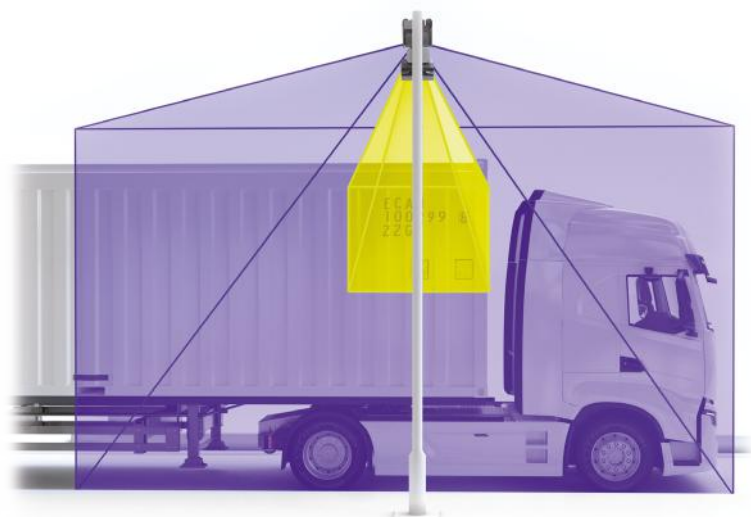


Right side image



OCR result:

ECAU 1002998 22 G1





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

Automate the Identification of Container Codes with OCR Technology

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, ILU and UIC 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
- Onboard recognition for standalone systems
- Extra close-up installation possible (1.5-3m / 4.9-9.8 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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product video



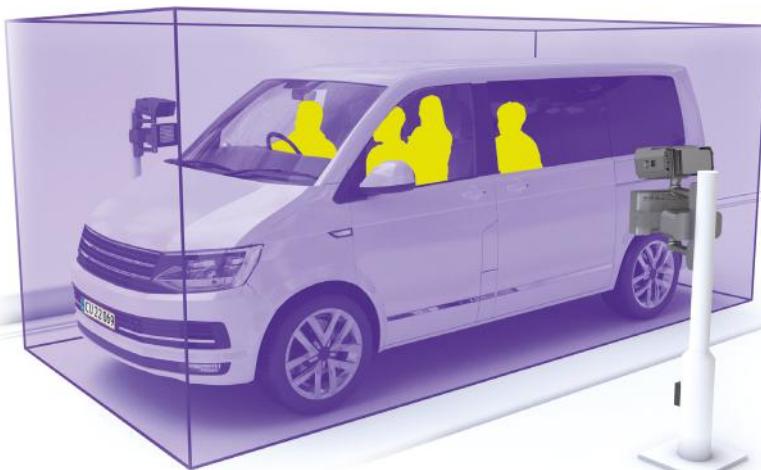
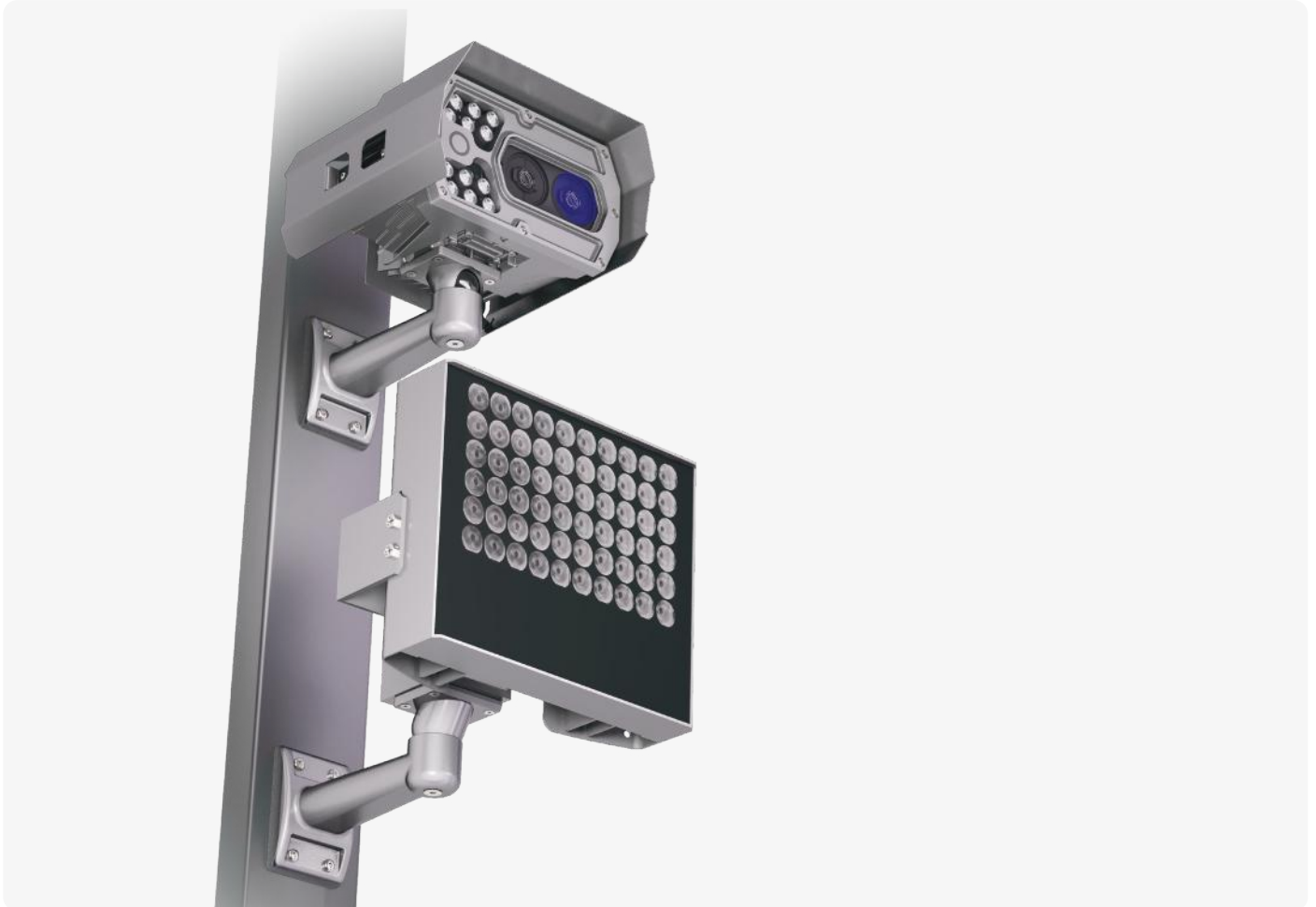
Accurate container reading

Extra close-up installation

Global and EU standards

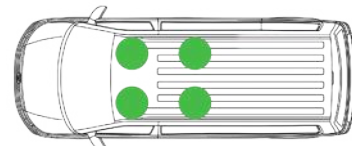
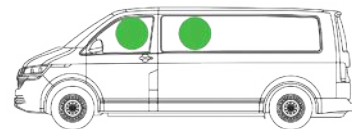
Vidar PAX Camera

for Passenger Counting & Identification



Powered by
CARMEN

PASSENGER COUNT: **4**



NUMBER PLATE: 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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product page



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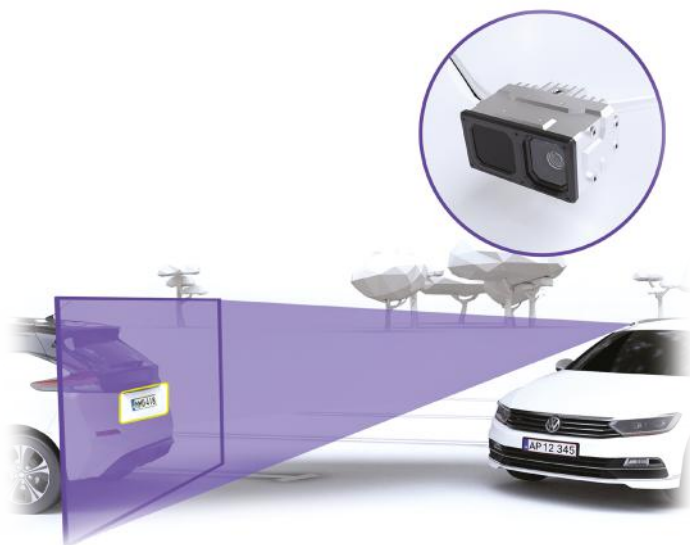
AI-based passenger counting

Accuracy thanks to special devices

Strong data security

Lynet ANPR-MMR Camera

for Mobile Vehicle Data Capturing



Powered by
CARMEN

ANPR RESULT:



Plate text: **MMG418**

Country:: FINNLAND

Main backg. color: WHITE

Main font color: BLACK

Timestamp: 2024-04-03

MMR RESULT:



Make: **NISSAN**

Model: **LEAF**

Color: **WHITE**

View point: **REAR**

Category: **CAR**

BodyType: **HATCHBACK**





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 On-the-move License Plate Recognition

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) even at highway speeds. The camera runs on PoE+ (super easy to integrate) and has an additional GPIO port. It comes in two variations: a fixed optics TELE option and an Automatic Zoom/Focus version to adapt all environments. With built-in integration to Carmen Mobile, Lynet camera is ready for enforcement on the move - no extra setup or third-party integration needed. Connect up to four Lynet cameras to your Carmen Mobile application for comprehensive, real-time monitoring in minutes.

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
- Day/Night operation: ensures reliable performance in varying lighting conditions, from full daylight to complete darkness
- 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
- Fixed TELE or automatic zoom/focus optics to cover all scenarios

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product page



Scan for the
product video



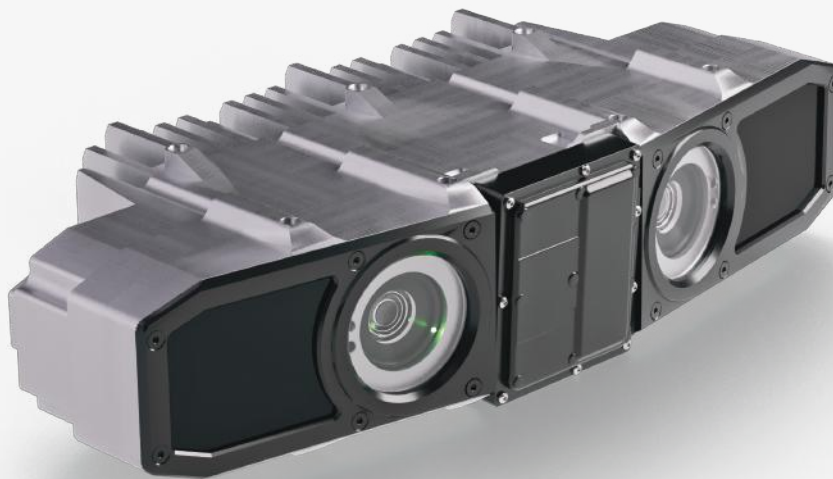
Ultra-small mobile ANPR camera

Onboard with seamless integration

Lightweight and fits into small spaces

Lynet Speed Camera

for Mobile Speed Measurement



Speed limit Zone



154 km/h (96 mph)

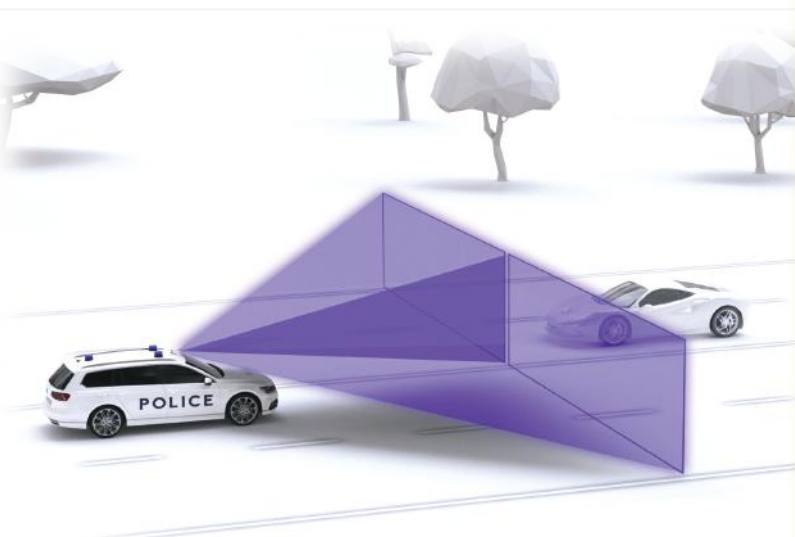
Make and Model: FERRARI F8

Color: RED

Category: CAR

Plate text: 10234

Country: UAEAD



Powered by
CARMEN



Speed
enforcement



Traffic security
monitoring



Traffic
monitoring



Law
enforcement



Tolling
system

3 years
manufacturer's warranty

Mobile Speed Enforcement Camera with Dual Optics 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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product page



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Onboard speed measurement camera up to 320 km/h

Recognition of 4 lanes on the move

Accurate tracking, ANPR & MMR

S1 – The Portable Speed and Enforcement Camera



Powered by
CARMEN[®]

Speed: 193 km/h (120 mph)

Category: 

 **CU 22 069**

Plate text: **CU 22 069**

Country: DENMARK

Main backg. color: WHITE

Main font color: BLACK



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 from a 1.2 km (0.75 mi) distance. S1 and its central application (GDS) also detects several other traffic violations. The system can measure speed simultaneously across up to three lanes, even with different speed limits assigned to each lane. For the S1 model, purchasing the GDS is required, as integration is handled through its SDK.

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 300 km/h (186 mph), laser-based speed measurement up to 250 m
- Complete, court-admissible event data packages
- Live data transfer through 4G/Wi-Fi
- Built-in laser triggers with advanced precision
- 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

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product video



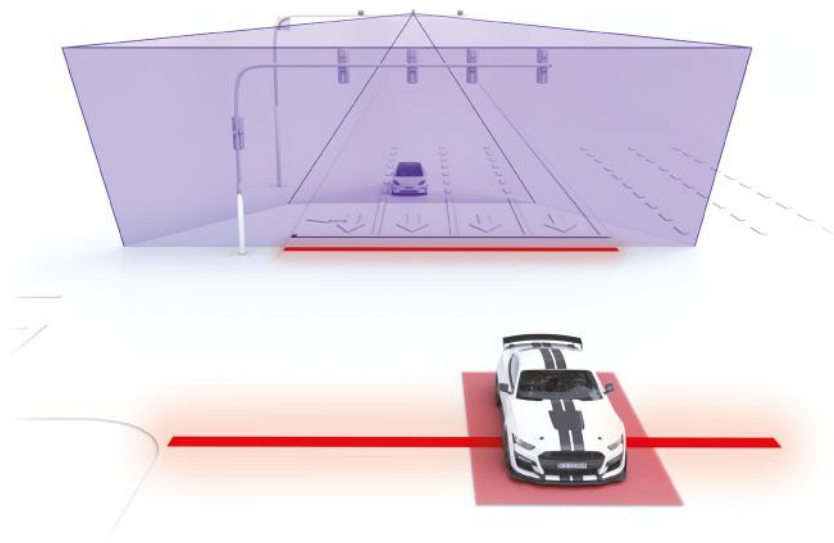
Certified speed measurement

Quick setup & portability

Secure live data transfer

Enforce BOX

for Automatic Detection of Traffic Violations



RED STOP ALERT!



CU 22 069

Make and Model: FORD MUSTANG

Category: CAR

Plate text: **CU22069**

Country: DENMARK

Main backg. color: WHITE

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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 4 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

Scan for the
product page



Scan for the
product video



Traffic violation detection

Easy integration & scalability

Accurate recognition on 4 lanes

SmartPort

for flow transparency & automation

PRECONFIGURED SCENARIOS



PRE-GATE



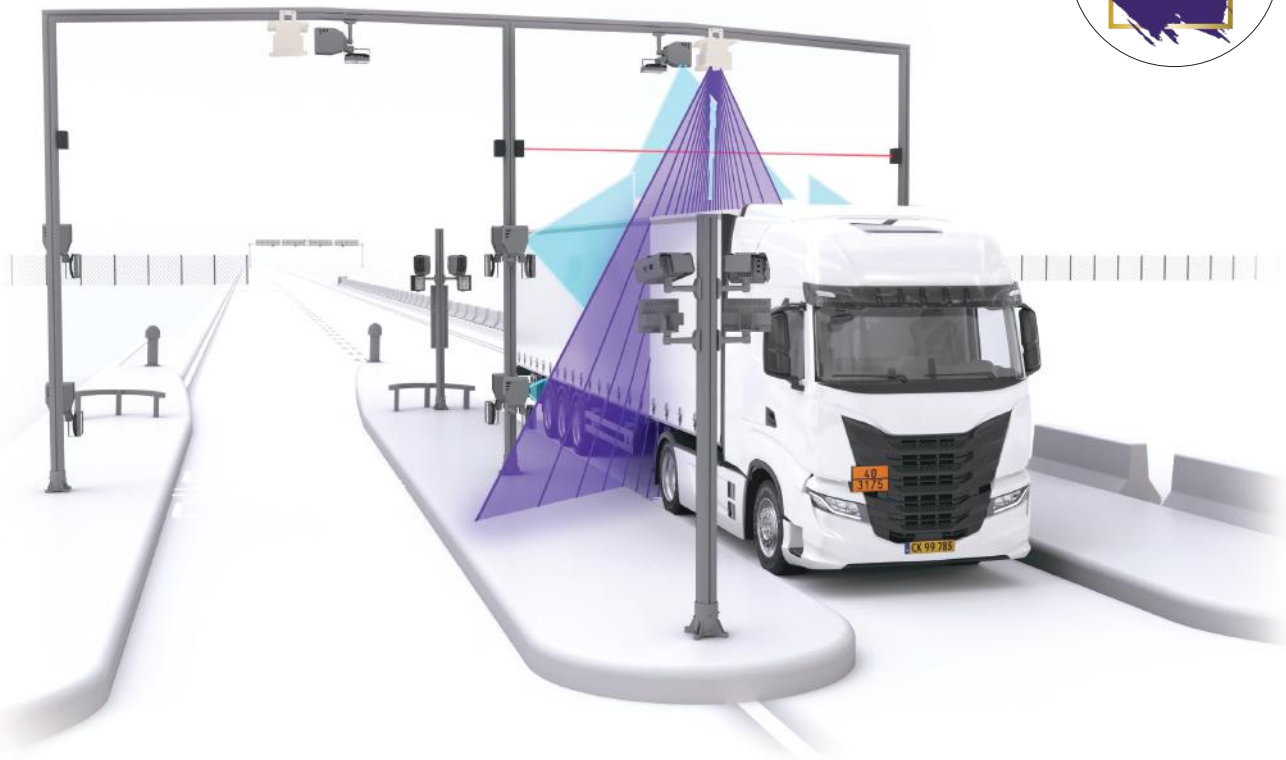
FREIGHT GATE



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

Freeflow 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

Scan for the product page



Scan for the product video



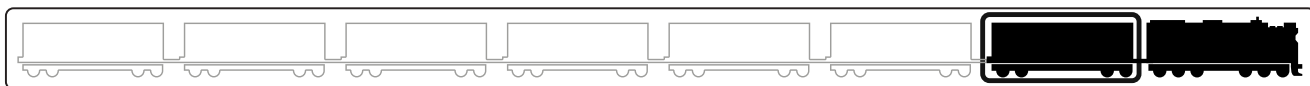
Accurate cargo traffic tracking

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

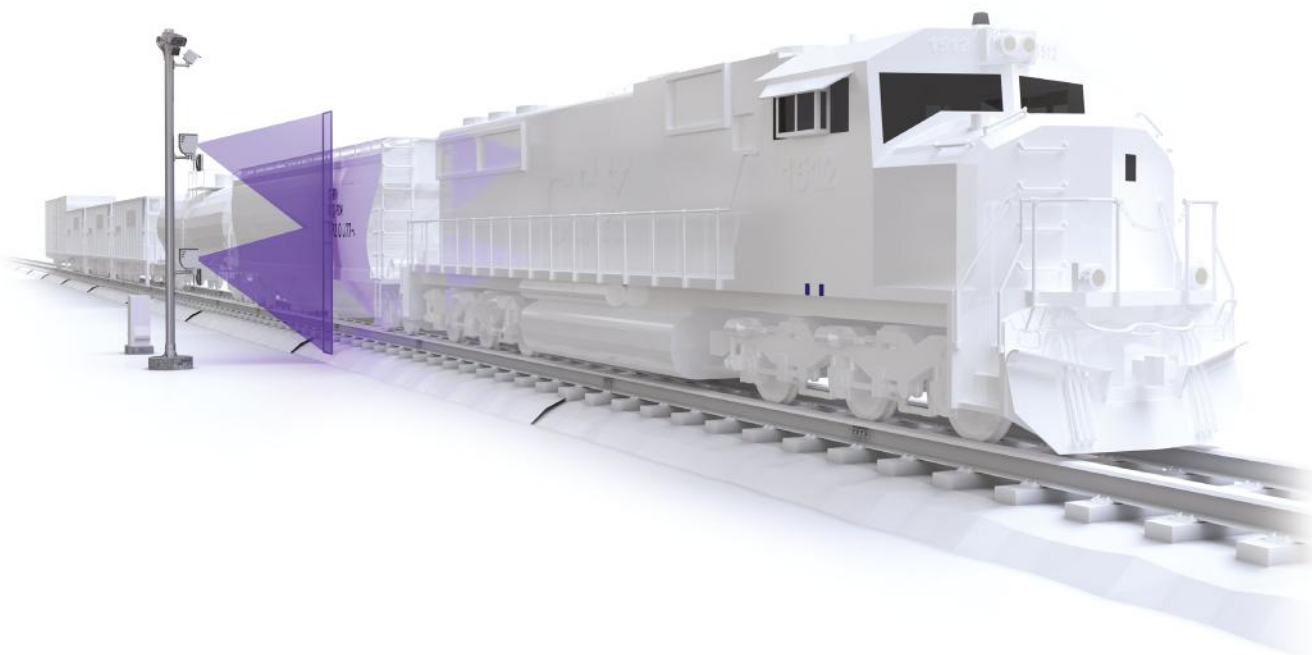


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Border control



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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product page



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Accurate cargo traffic tracking

Scalability to large sustainable systems

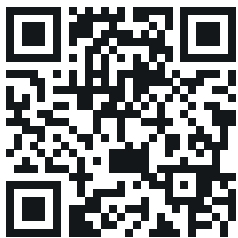
Easy integration & compatibility

ANPR Devices for

Access Control, Parking and Urban Traffic

Every Entry Secured, Every Exit Simplified

Our high-performance ANPR/LPR products are designed to surpass the expectations of parking integrators and service providers. They are essential components of a seamless parking experience, whether for free-flow systems, barrier setups, or gated access. We place a strong emphasis on ease of installation, reliable operation, and efficient performance under all conditions.

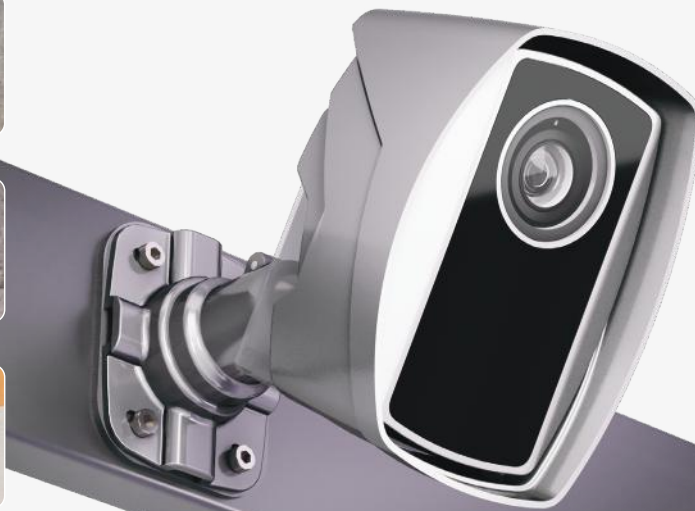


Visit our website
for more information



Einar ANPR Camera

for Access Control, Parking & Urban Traffic Monitoring



Powered by
CARMEN[®]

 **DK-5211-AR**

Plate text: **DK5211AR**
Country: **SENEGAL**
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Timestamp: 20.03.2025, 13:15:41



Plate image:



ANPR image:



Video preview:



Parking
management



Access
control



Smart city
ITS systems



Airport and
harbor
logistics



Retail
shops

3 years
manufacturer's warranty

Easy Install PoE+ Camera with Onboard ANPR

Build a Parking System with a Triggerless ANPR

Einar is three ANPR/LPR cameras combined into one: a free-flow parking camera, an access control camera, and a camera for urban traffic. It meets the expectations of any partner looking for a robust, reliable ANPR camera that can read and analyze vehicle data at speeds up to 80 km/h (50mph). Einar is available in four versions, featuring different optics with detection ranges from 1.5 meters up to 80 meters, and equipped with either IR or white LED lighting.

Einar stays ahead of the curve with its robust aluminum housing, fast and reliable performance, direction detection, and motorized zoom. Its ability to cover two lanes simultaneously, along with simple and flexible installation options, meets the demands of modern free-flow and stop-and-go parking systems, as well as urban environments. Thanks to its onboard Carmen® engine, Einar excels in delivering accurate results. In the competitive landscape of cameras providing vehicle data, this exceptional device is a reliable tool for maximizing revenue.

Main Highlights

- Built-in ANPR/LPR and MMR capabilities for versatile vehicle identification
- Direct control of barriers and gates from the camera for seamless access management
- Powered by the onboard Carmen® engine for fast and accurate data processing
- Plug & Play design for easy installation and handling, single PoE+ cable operation
- Expandable memory via external microSD card
- Native integration with a growing number of systems, easy integration into any system
- Vehicle detection including direction detection up to 80km/h (50mph)
- Secure data transfer via HTTP, HTTPS, FTP, SFTP
- Playback and search functions
- Up to 10 years of warranty

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product video



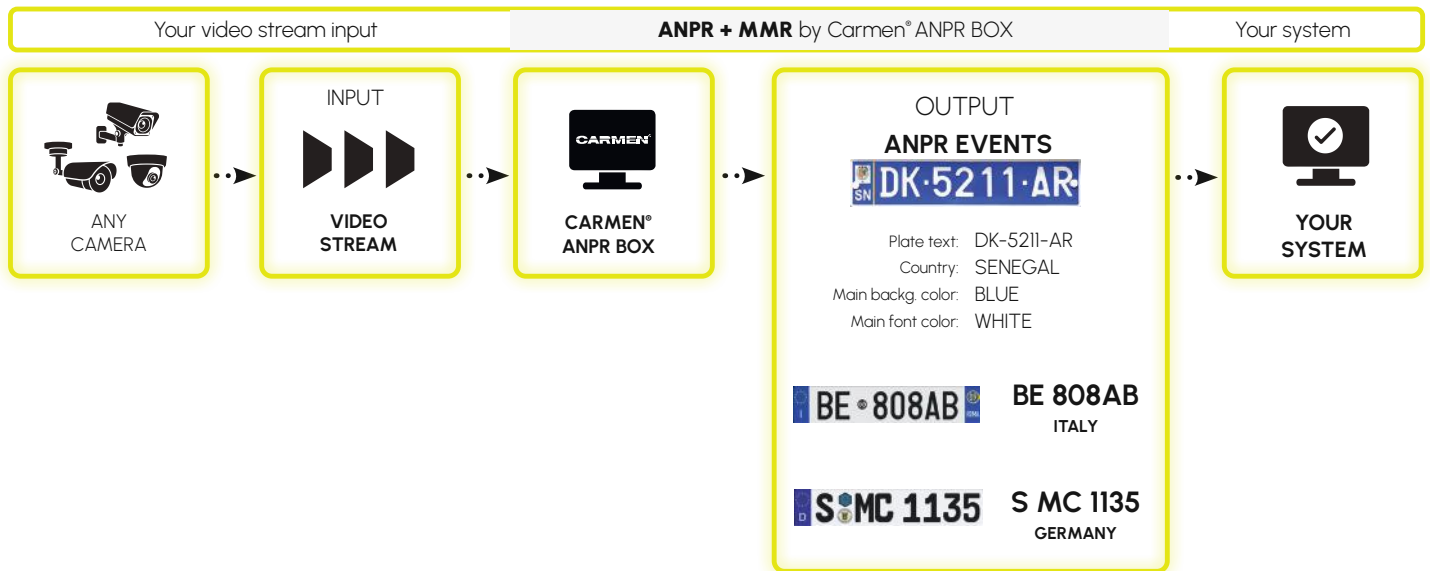
Parking camera with global coverage

Smart, compact, small size

Easy integration & compatibility

Carmen® BOX

Turn Any Camera into an ANPR/LPR Camera





Congestion
charging



Gas
stations



Traffic
monitoring



Commercial
vehicle
applications



Vehicle
access control
systems

1 year

software update included

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 ANPR/LPR and MMR (make, model, color, and category) features. The IP video stream is forwarded unaltered to your database, supplemented with ANPR and MMR data.

The device provides accurate vehicle 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
- Easy installation and handling with intuitive graphical interface to handle multiple cameras
- Video included in the event package
- Easy integration into any system
- Easy streaming with direct link
- Onboard and cloud-based plate recognition powered by Carmen®
- ANPR data and event displayed in the same image
- Whitelist support for access control

CARMEN®

NVIDIA



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product video



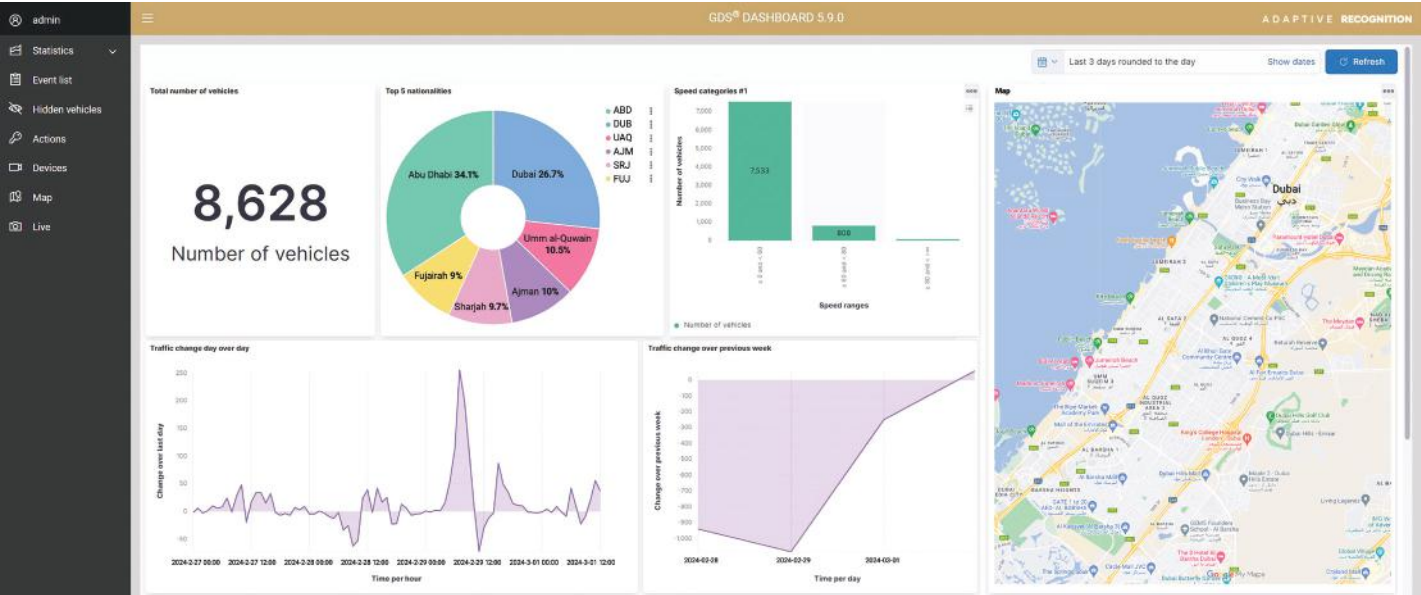
AI-based global ANPR & MMR

Camera-independent

Easy integration & compatibility

Globessey Data Server (GDS)

Data Collection and Visualization Middleware
for Traffic Records and Identity Documents



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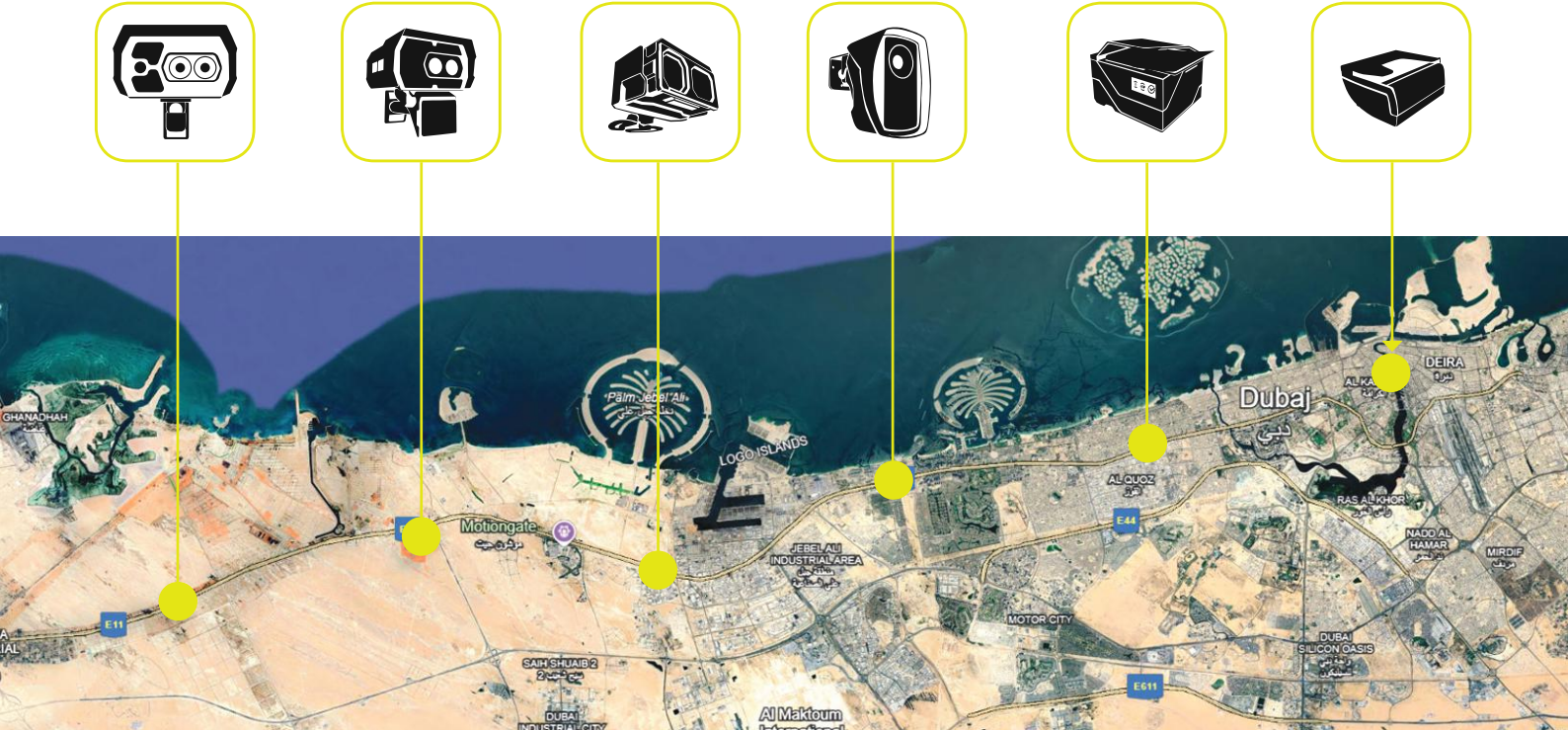
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Plate text: A10234
Country: UAE
State: DUBAI



Name: AHMED ABDULLA
Nationality: UAE





Border control



Traffic analytics



Railway logistics



Vehicle access control systems



Harbor logistics

1 interface

for all your AR devices

Centralized Data Hub for Next-Level Insights

Scale Your System Effortlessly

Globessey Data Server (GDS) is a server-side system component, and a useful tool for the back-end system provider that offers distributed operation and is capable of receiving and transmitting recordings generated at endpoints. System integrators could use it as an easy-to-connect interface between their application and the client devices.

GDS functionalities include data replication between multiple sites, redundant storage of event data, basic and complex data queries and notifications, such as allowlists, registration of smart devices and status monitoring. Intuitive data visualization features are available, including heatmaps, filters, and even statistics, which can be created using the aggregated information.

The Globessey Data Server is a universal data collection and visualization middleware that comes with an advanced front-end GUI and works out-of-the-box with Adaptive Recognition ANPR cameras and identity document readers. 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 compatible with all AR camera products and ID scanners
- Operates on both Windows and Linux systems
- Reports, statistics (BI functions), and custom alerts and notifications (via email, SMS, webhook and GDS native protocol)
- Documented OpenAPI and SDK samples are available
- The application includes advanced features for visualizing data and a map module that displays camera and ID scanner statuses
- Easy data export, simple integration to any back-end system
- Native integration and management of various endpoints
- Rapid search and database operations
- Users can access and analyze traffic data using common web-browsers on any system and display size
- Health & status data of the host server and all clients, including Map view
- Resource-efficient architecture with practical scalability



Scan for the
product page



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product video

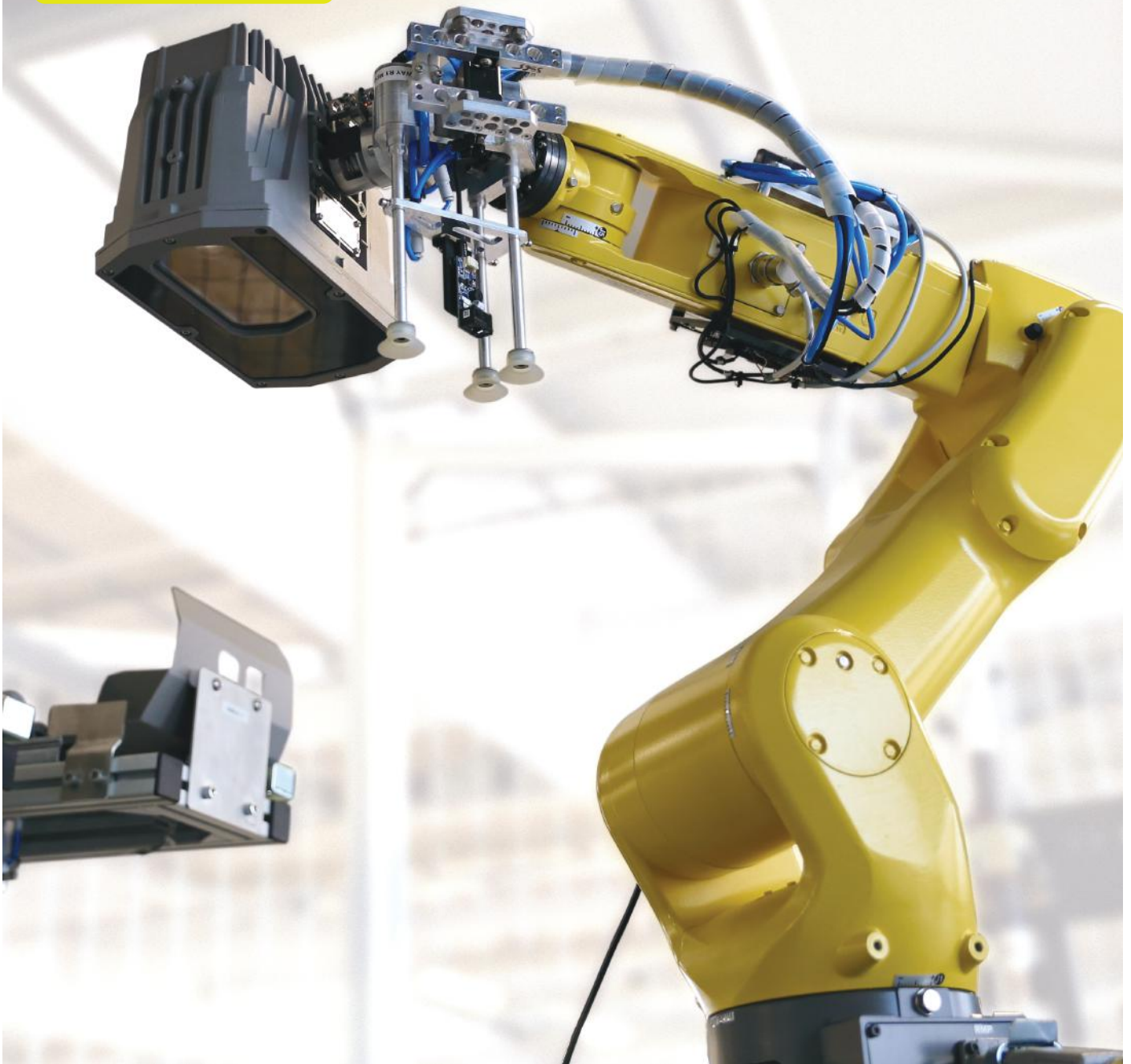


Cross-platform

Live notifications

Exports & reports

**30+
Years of
Experience**



Behind every exceptional imaging solution is a symphony of human ingenuity and robotic precision. Our state-of-the-art manufacturing process combines expert craftsmanship with advanced automation to deliver high-performance ANPR cameras and ID readers that meet the highest standards of quality and performance.

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.



VIDAR: An all-in-one intelligent camera for ANPR/LPR, Make & Model, and Hazardous Material Sign Recognition. A culmination of more than two decades of R&D, VIDAR is built for performance and security.



OSMOND: High-Performance Passport Reader & ID Scanner that Verifies Passports & IDs in Seconds. Designed for thorough authentication while upholding the highest security standards

Our Product Portfolio

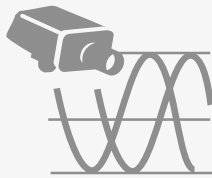
At the forefront of our product portfolio lies Carmen®, a globally renowned and highly versatile automatic license plate recognition (ALPR/ANPR/LPR) software. Carmen® seamlessly adapts to diverse needs, available as a software library, Plug & Play application, or cloud-based software as a service (SaaS).

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.



Speed Enforcement



Traffic Analytics



Tolling System



Law Enforcement



Access Control



Traffic Security Monitoring



Smart City ITS Systems



Border Control & Immigration



ID Quality Assurance

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.

38000+
Plate Types
Recognized



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, as shown on the left.



280.000+

installations based
on our OCR products
worldwide

Our Corporate Policy and 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.



300+
employees



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.

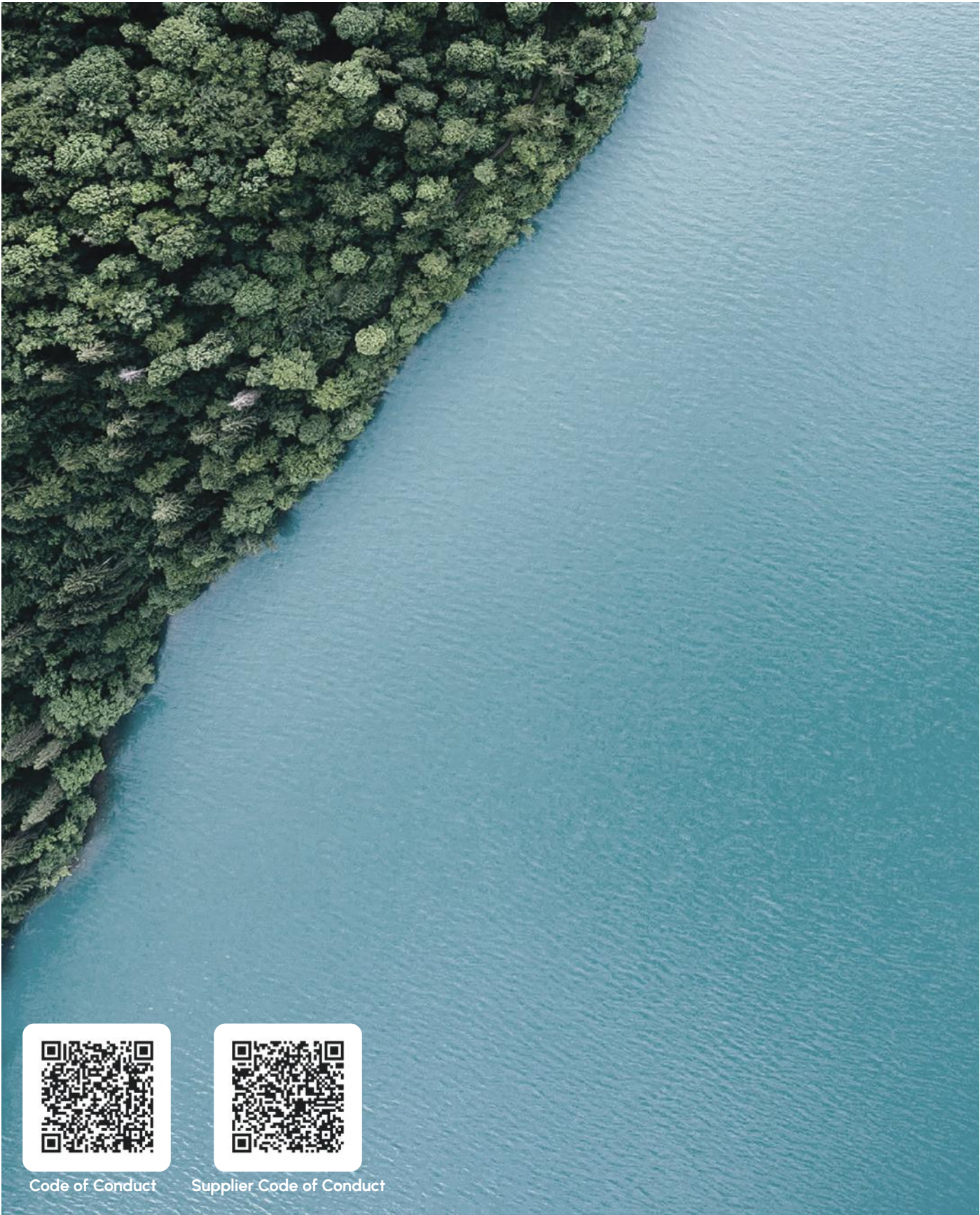
Our cameras boast incredible performance while offering high-tech features such as built-in laser-triggering and full remote control.

" 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
Director

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





Code of Conduct



Supplier Code of Conduct

Our Commitment to Corporate Sustainability

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.



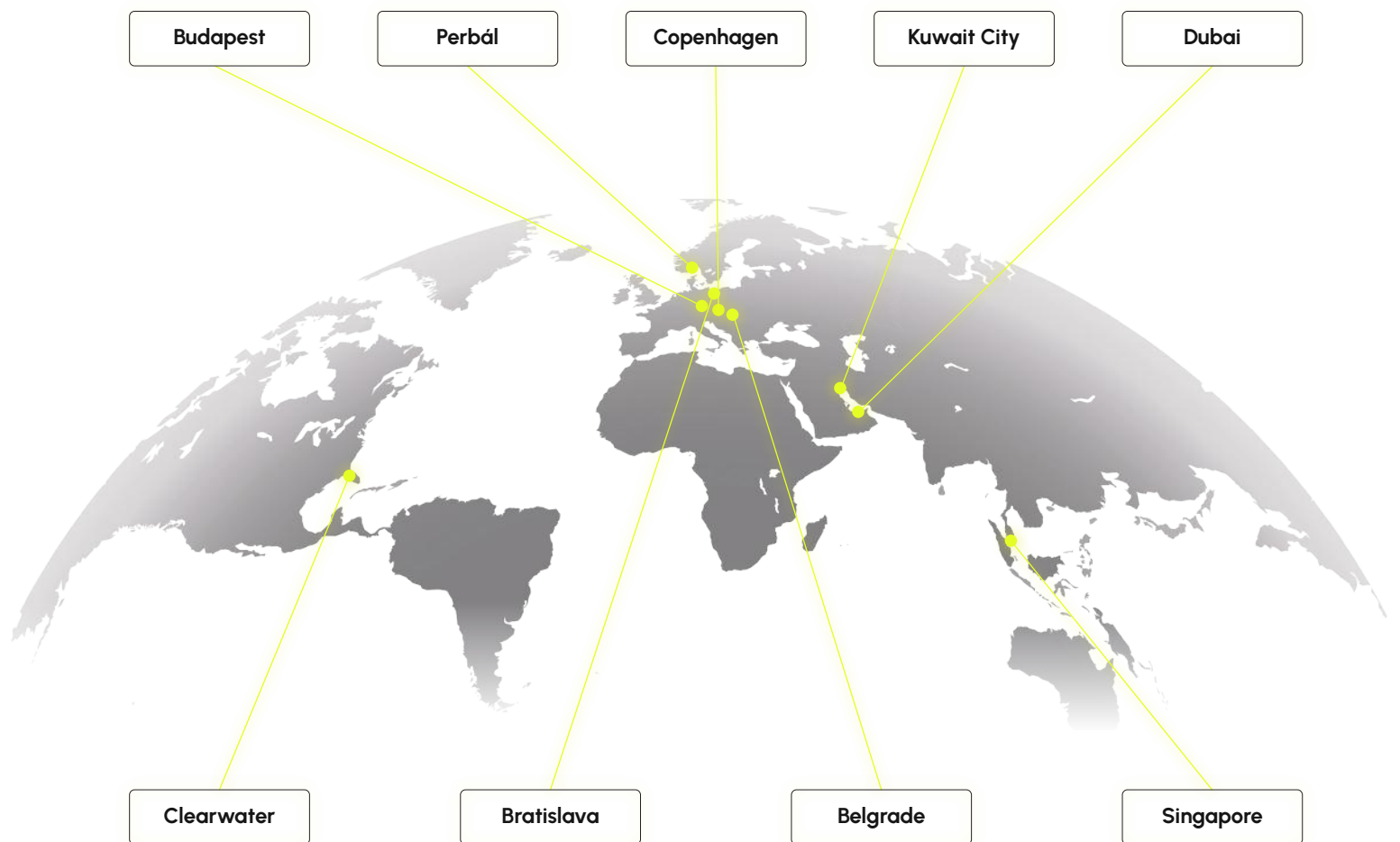
Contact

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



General contact

Our Offices



Social Media

LinkedIn



linkedin.com/company/adaptive-recognition/

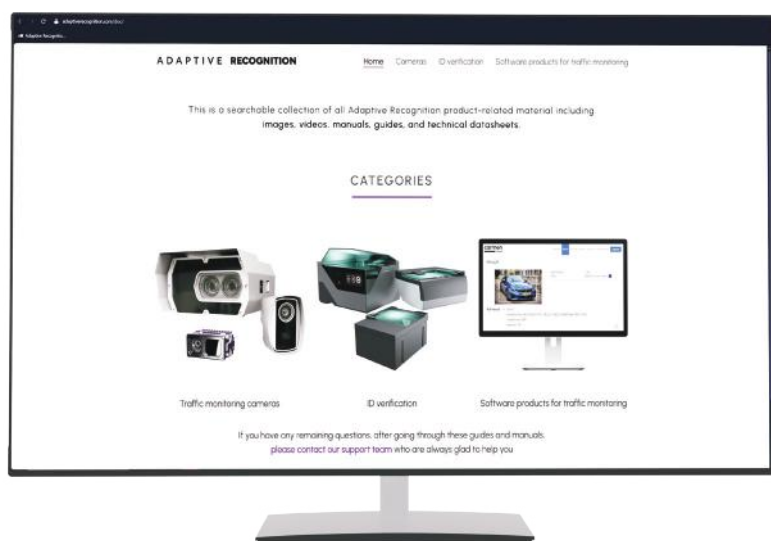
YouTube



youtube.com/c/AdaptiveRecognitionVideos

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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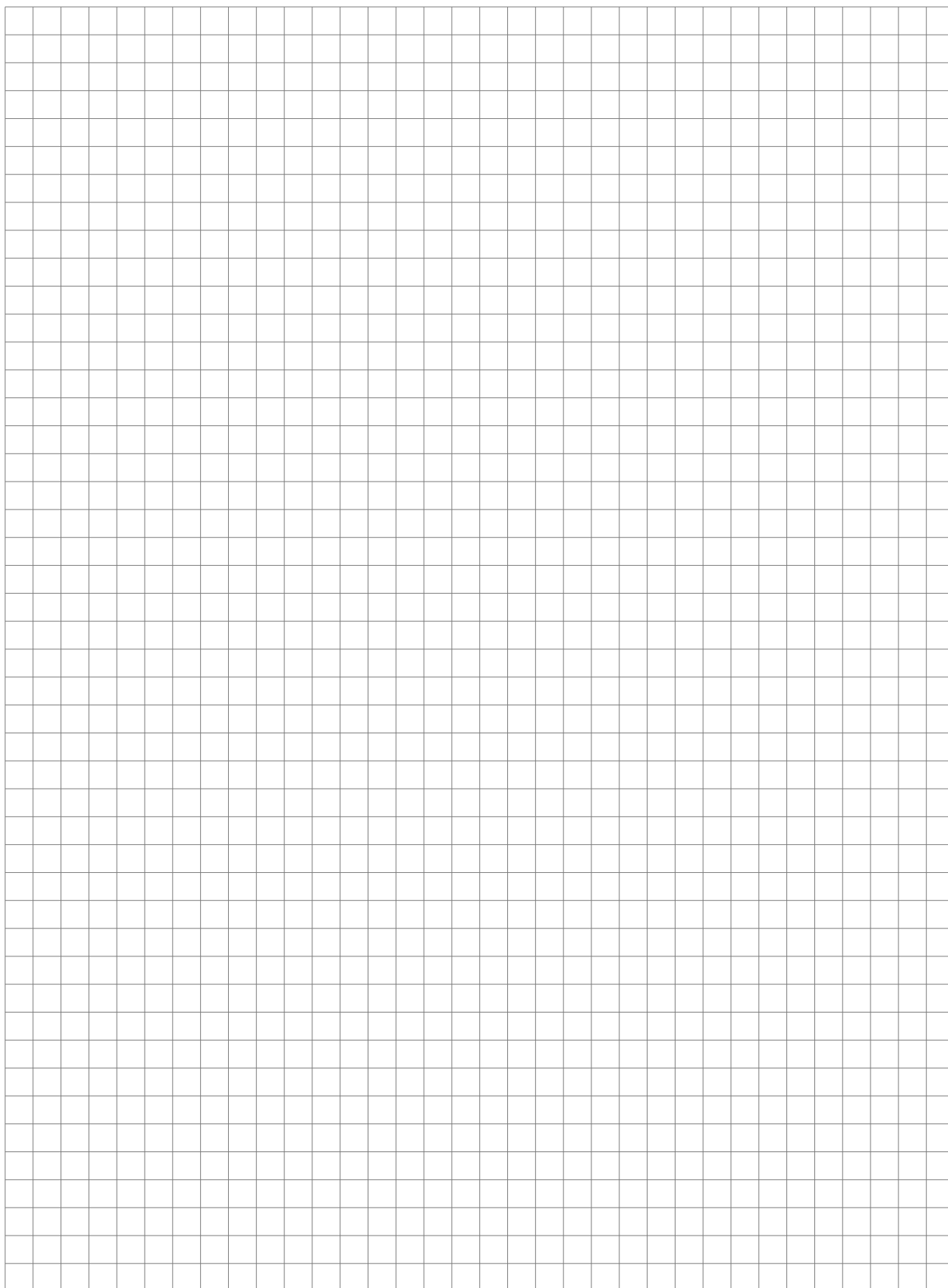
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Your Notes, Our Next Steps

Jot down any questions or ideas you have—let's discuss them together!

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin gray lines. There are 20 columns and 20 rows of squares, creating a total of 400 square units. The grid covers the entire area of the page, leaving no margins or other markings.



ADAPTIVE RECOGNITION

WWW.ADAPTIVERECOGNITION.COM