TRASSIR

TRASSIR Neuro Detector

Detector and object classification module

Detection of people and vehicles, as well as animals and birds in the video stream to ensure the safety of the site and effective business intelligence
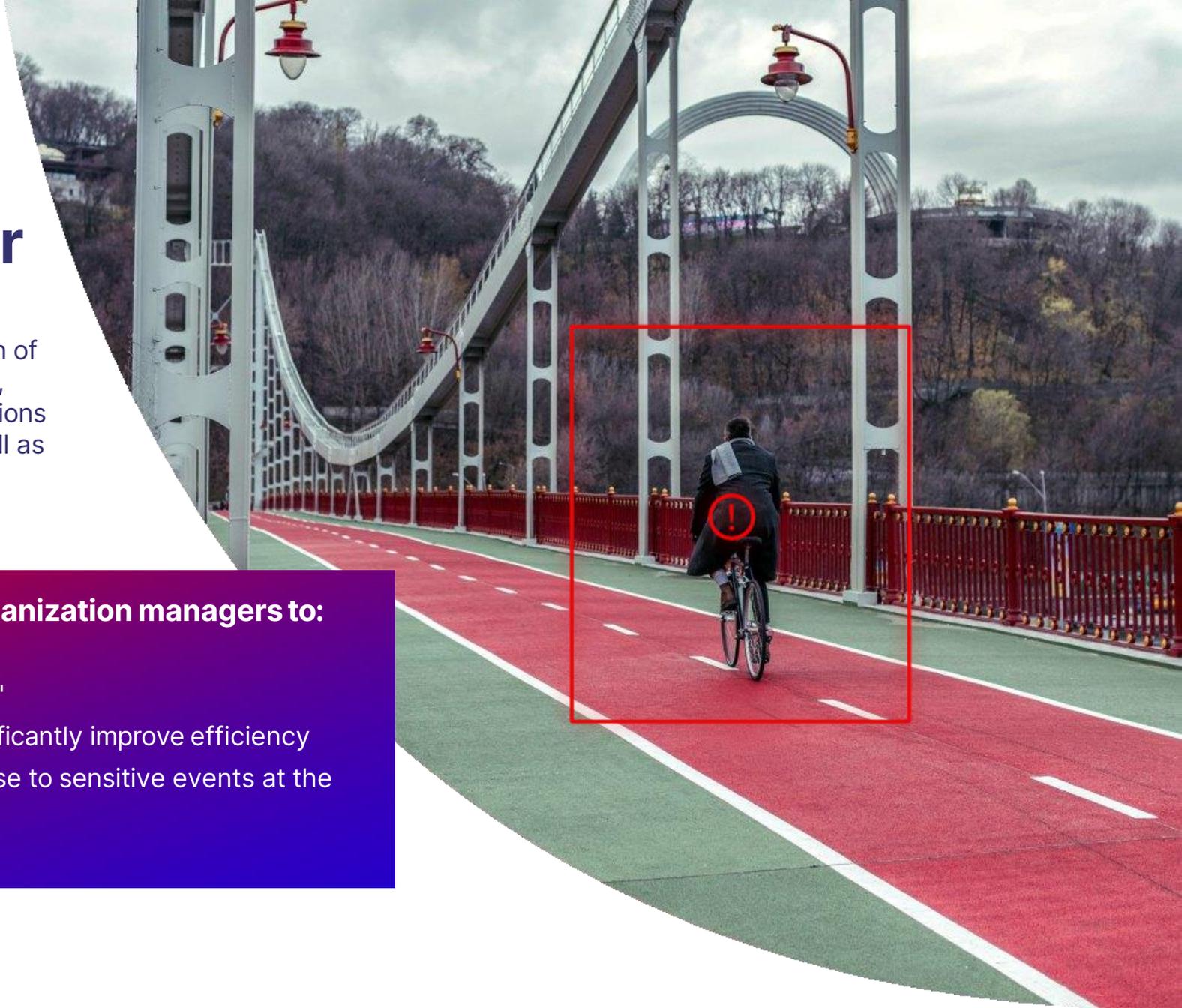
TRASSIR Neuro Detector

Smart video analytics module that supports detection and classification of monitored objects in selected zones, their counting, and sending notifications in the event of a trespassing, as well as alerting the managementof critical situations

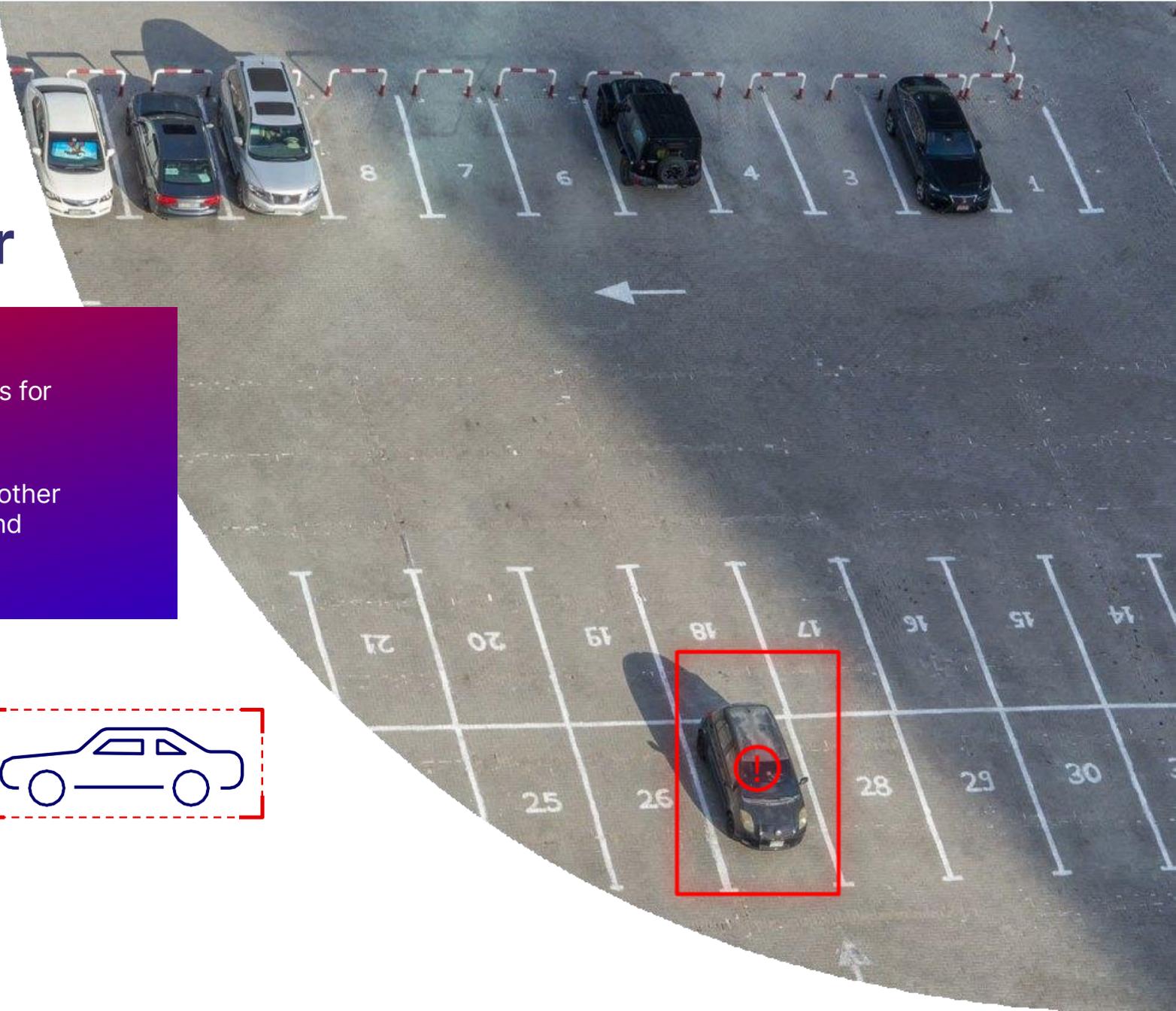**It is designed to allow the organization managers to:**
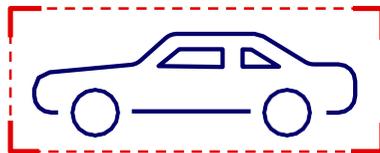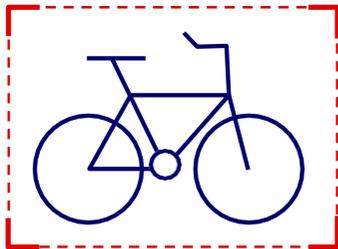
● Improve control of the territory

● Control access to "sterile areas"

● Assist security services to significantly improve efficiency

● Act in a timely manner in response to sensitive events at the site

● Eliminate false alarms

TRASSIR Neuro Detector

How does it work:

- The neural object detector allows for highly accurate recognition and classification of objects

- The module avoids triggering on other moving objects, such as trees and animals (as opposed to a motion detector)
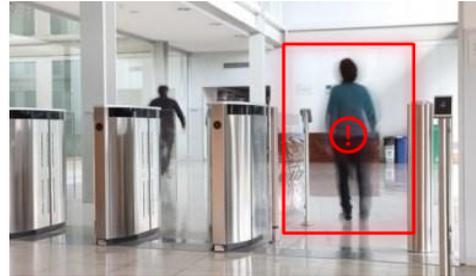
Neuro Detector usage scenarios

Improving access control to restricted areas

Up to 16 detection zones in the frame per channel, as well as the option to generate a schedule helps delimit access zones for various classified objects and receive notifications in case of trespassing in the specified zones

Staff performance monitoring

Alarms upon entry into sterile areas can ensure safety at the site and exclude the imposition of fines on the organization. Settings for areas mandatory to be visited help to monitor the performance of employees

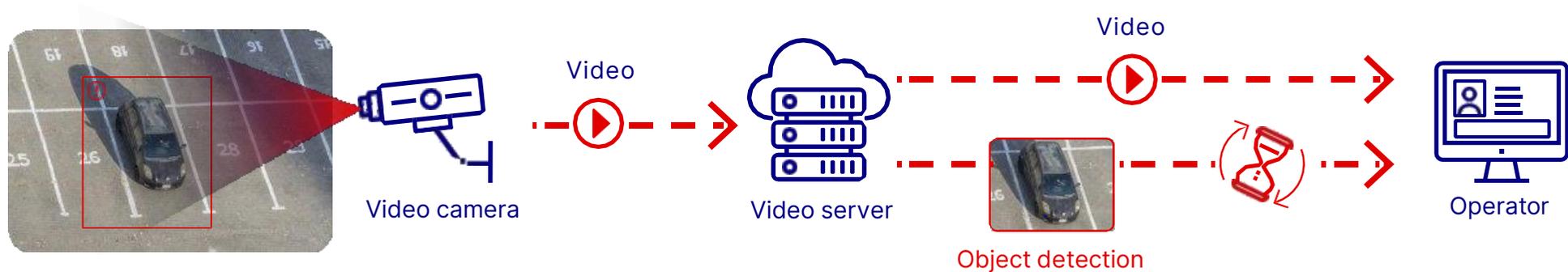**Optimization of staff workload**

Option to view alarms remotely, minimizing false alarms reduces the number of personnel needed to monitor facilities

Counting objects

Counting people, bicycles, cars in zones with an option to send the metadata by SDK for business optimization, convenience and control.

Solution architecture. How does it work?

Video camera → Video → Video server → Video / Object detection → Operator

Reaction scenarios:

1 **Notifications in the TRASSIR interface**

2 **Report export:**
- Frequency of occurrence of incidents
- Smart search for events in the archive using the built-in function
- Active Search

3 **Integration with on-site systems:**
- API integration
- Data export in XLSX and CSV
- Data access using SQL
- Option to customize notifications and reports using Python

4 **Notifications:**
- SMS - notifications
- Email – notifications
- Telegram

Solution functionality. How does it work?

1 The detector automatically detects and classifies the object in the video stream

2 If the marked zones and boundaries are violated, an alarm will be triggered. A message for the offender is played

3 Notifications are sent to the TRASSIR operator interface as well as to e-mail, SMS and Telegram

7 Managerial decisions are made to optimize the control service

6 Reports are generated

5 Data on recorded events is entered in the statistics

4 Measures are taken to eliminate problems that may have

![TRASSIR]

Areas of application

Security services

Households

Public services

Business centers and offices

Enterprises

Warehouses

Solution benefits

Precision and security

The use of deep learning networks allows the most accurate recognition and classification of objects

Increasing site

Neuro Detector works effectively at any time of the day and at remote sites, allowing a greater number of risk zones to be covered than would be possible with human resources

TRASSIR VMS management

A local system for easy management of cameras and servers. It allows monitoring the health of the servers, and ensures the reliability of the archive record

Operator interface

Enables monitoring of the situation in real time, prompt notification of critical situations and generation of reports

Benefits and investment

Changing the model for controlling risk areas from employing a large number of personnel for patrolling tasks to a visual check of alarms by the operator and a security response only to confirmed incidents

Integration

The necessary set of mechanisms for integration with hardware

Independence

Option to use the module with most third-party equipment

TRASSIR CMS management system

A corporate solution for managing tens of thousands of servers and hundreds of thousands of cameras within a single system. System health monitoring.
Access restrictions. Consolidated video analytics data collection

Modification

Option to expand functionality and create customized solutions

You may also be interested in:

1 **Heat Map on Map** – module for generating a module for generating amap of people movement in a given area

2 **Direction Detector** – module for detecting the movement of a person or a vehicle in a prohibited direction

3 **ActiveDome +Neuro** – a combination of modules for capturing objects that appear in the frame with tracking and face detection

4 **Wear Detector** – module for detecting the presence of workwear or uniforms on a person

5 **Face Mask Detector** – module for monitoring the use of face masks in public places

6 **HardHat Detector** – module for detecting the presence of a hardhat on a person's head

7 **Crowd Detector** – optional TRASSIR module for detecting excessive crowds of people

8 **Face Recognition** – a TRASSIR software add-on for recognizing and searching peopleusing a preconfigured face database, as well as for counting unique faces and demographic analysis

9 **AutoTRASSIR** – license plate recognition module

Neuro Detector. Stories of success

Eastern Europe's largest plant specializing in the production of corrugated cardboard materials has decided to upgrade its security system. The area of the plant is approximately 35,000 m²

Industry: Manufacturing | Region: Romania

Key objectives of the project:

- installation of a video surveillance system;
- organization of people detection and face recognition system;
- integration of video surveillance with ACS;
- organization of a license plate recognition system

Implementation results:

- With the hereduce the number of security personnel while significantly increasing the level of security at the site
- The security lp of TRASSIR technologies it was possible to budget was cut by 25%

Neuro Detector. Stories of success

An international network of large
(up to 10,000 m²) shopping centers, specializing
in wholesale sales of food and non-food
products to businesses in Germany, Poland,
Romania and Russia came to realize the
inefficiency and obsolescence of the current
security system

Industry: Retail | Region: Romania

Key objectives of the project:

- Improving the performance of video surveillance operators;
- Ineffective surveillance of the store area at night. detecting movement in the protected area and alerting security personnel;
- Detecting persons and determining their involvement in the facts of unlawful acts;
- Automation of the process of allowing vehicles into the store unloading zones using the license plate numbers entered in the database.

Implementation results:

- The solution is fully integrated into 6 stores. Following the results of successful implementation, 12 more stores will be equipped with the solution in the near future. Currently each system is local, but after all sites are equipped, the customer plans to centralize the system and create a unified monitoring center based on Trassir CMS;
- The company's investment of €3 million has already paid for itself within the first year of implementation;
- Staffed security posts were reduced;
- Optional: The Queue Detector solution helped relieve the cash registers during peak hours.

Contacts

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Hardware catalog

VMS Catalogue

Success stories