TRASSIR®

CCTV ECOSYSTEM

TRASSIR TODAY

20 YEARS

of experience in CCTV surveillance

5000+

loyal customers around the globe

3

R&D centers

35

countries of TRASSIR installations

WIDE RANGE OF SOLUTIONS FOR VARIOUS INDUSTRIES

OUR CLIENTS ACROSS THE GLOBE

TRASSIR

Coca-Cola · Auchan Gruppo Rinascente · IMAX · Almaty International Airport · McDonald's · Burger Club

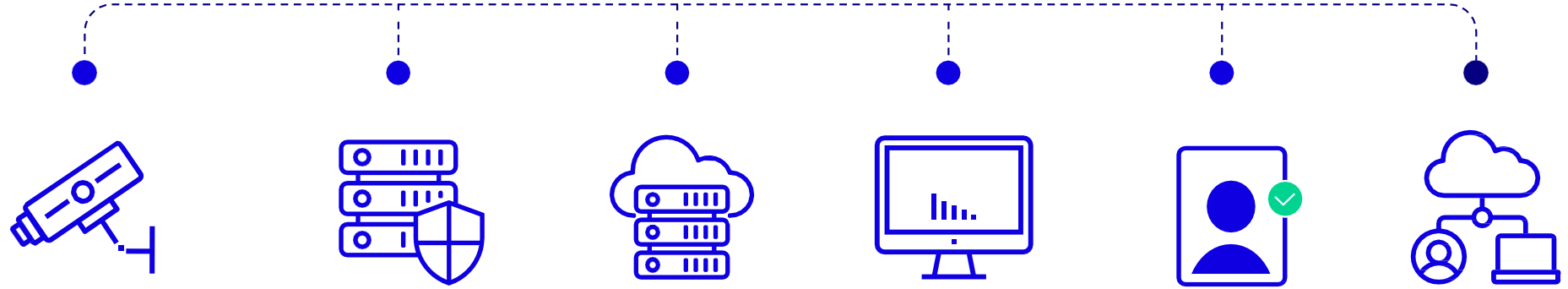
Burger King · Magnit · KFC · MMBB MICEX · Shymbulak Ski Resort · Premium Dental

X5 Retail Group · Tema İstanbul · Volvo · Azərbaycan Beynəlxalq Bankı · Favorit market · renfe AVE

SPAR · Renault · BİZİM Toptan Market · Sukhoi · Kote Marjanishvili State Drama Theatre

TRASSIR®

CCTV ECOSYSTEM



CAMERAS

NETWORK VIDEO RECORDERS

VMS

VIDEO ANALYTICS

ACS

CMS

NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

CERTIFICATION

The **TRASSIR** equipment meets the EU safety and other applicable requirements (CE certification).

- ✓ Electromagnetic compatibility (EMC)
- ✓ Low Voltage Directive (LVD)
- ✓ RoHS Directive
- ✓ Radio Equipment Directive

Additional certificates can be obtained to meet the requirements of a specific customer's case or upon a partners' request.

Why TRASSIR?

Compatibility with 99% of cameras

NVRs and analytics are compatible with 99,9% of IP-Cameras. Connection options include:

- Native integration (manufacturer protocol)
- ONVIF
- PTSP connectivity

Pre-sale demo and training

Our engineers demonstrate system functions and conduct training sessions and webinars

High degree of customization

Quick customization for a specific project using rules and Python scripts

Technical support

Agile customer service and personalized resolution of complaints

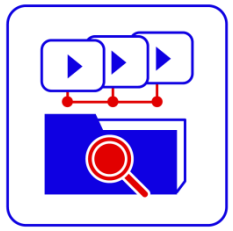
Project support

TRASSIR professionals help to build complete solutions for your projects

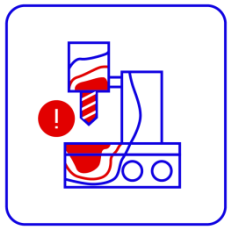
Advertising support

Printed and electronic promotional materials for partners

CORE ANALYTICS

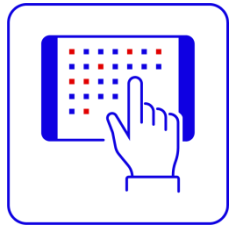


TRASSIR
Multi Search



TRASSIR
Heat Maps

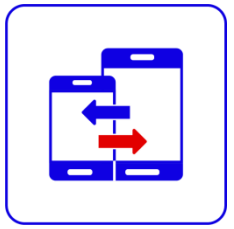
TRASSIR
Active Search +



TRASSIR
Event Search

TRASSIR
Client

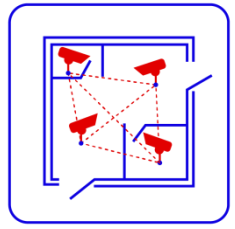
TRASSIR
Sabotage Detector



TRASSIR
Mobile Client

TRASSIR
Fire & Smoke

TRASSIR
Sound Detector



TRASSIR
Plans

CORE ANALYTICS

TRASSIR MultiSearch

Parallel playback of several fragments of different time points or areas.
Up to 7 fragments can be played simultaneously.

TRASSIR Heat Maps

Shows colored trail of each moving object. Colored trails dim over time.

TRASSIR Active Search

Interactive motion search in video archive in any selected zone.

TRASSIR Event Search

Interactive event search in the system log.

TRASSIR Client

Software application for remote access to TRASSIR servers.
Supported OS: Windows, Linux, MacOS.

TRASSIR Sabotage Detector

Video analytics module, that detects sabotage: defocusing effect/ field of vision changing, lens covering or light striking, connection fault, signal losing. Incident reaction with audio signal and/or an email, SMS or push notification.

TRASSIR Mobile Client

Mobile applications connected to TRASSIR servers directly via IP address or via TRASSIR Cloud. Live video, archive access, PTZ control, sound and other capabilities.

TRASSIR Fire & Smoke

Video analytics module that detects fire and smoke. Incident triggers an audio signal and/or email, SMS or push notification.

TRASSIR Sound Detector

Starts recording upon detecting a loud sound. Sound volume threshold can be configured.

TRASSIR Plans

Multi-level mapping software module for TRASSIR. The map reflects cameras, servers, other system objects.

TRASSIR®

Solutions for industries

Anti-Covid solutions

Intelligent video analytics to respond to pandemics

TRASSIR
Social Distance Detector

Helps keeping social distance in a crowd.

- Alert system via notification bars, sms
- Speakerphone notifications
- Configurable minimum distance

TRASSIR
Face Mask Detector

helps control if people are wearing protective masks in public areas.

- Alert system via notification bars, sms
- Speakerphone notifications
- Can be integrated with doors or turnstiles to control entrance

TRASSIR solutions: retail

Intelligent control over points of sales

TRASSIR Active POS

Helps to reduce planned and unplanned POS losses

50+
Active scenarios

10+ available live reports:
- employees' KPI
- cash transactions' KPI
- the amount of losses

Versatility:
Supermarkets I restaurants I gas stations I pharmacies I fast food cafes I boutiques I etc.

Customization available upon request

When integrated with POS, video analytics provide additional capabilities to resolves challenges of today's retail management:

- Store traffic monitoring
- Automatic sales conversion report
- Queue monitoring
- Customer flow analysis
- On-shelf availability control
- Customer activity and places of interest monitoring
- Automatic time sheets
- Employees' presence in the workplace control

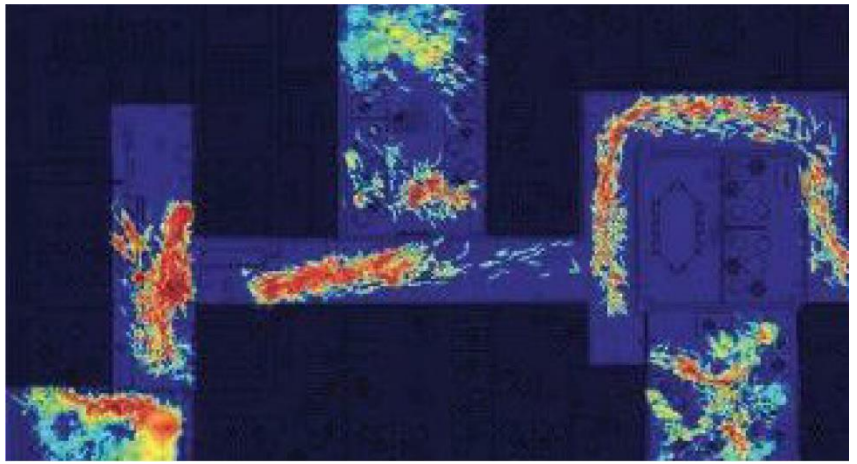
TRASSIR solutions: retail

Intelligent merchandize and visitors monitoring

TRASSIR Shelf Detector

enables intelligent video analytics based on neural networks designed to spot empty/occupied shelf spaces.

- Shelves empty spaces monitoring
- Out-of-shelf notification
- Automatic reporting to forecast the customers demand on certain SKUs®
- Automatic monitoring of staff performance



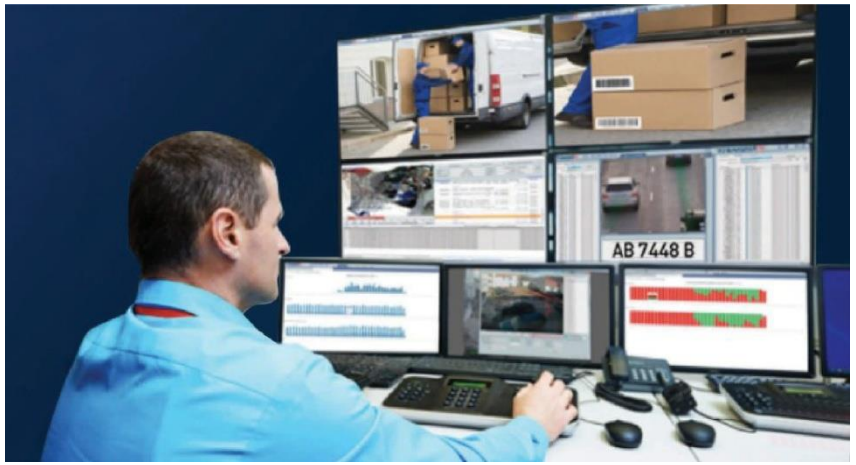
TRASSIR Heat Map On Map

is an advanced thermal image analysis technology.

- **Kinetic map** - shows the areas with high human traffic flow
- **Stationary map** - shows the areas where people are more likely to stop
- **Trajectories** - the approximate movement direction on the map

Transportation

Reliable license plate recognition for traffic control



Auto TRASSIR

is designed to automatically recognize license plates once captured by cameras

- High accuracy of license plate recognition
- Defines the vehicle classes: motorcycles, passenger cars, minivans/vans, trucks, buses.
- Recognizes two-line numbers
- Recognizes license plates from wide range of angles

APPLICATION:

To monitor/control the in-/outcoming vehicle flow (public and private parking lots or garages, checkpoints)

To control automobile traffic at all types of roads

The module's capabilities may be enhanced by integrating with third party systems (access control systems, video and audio control) and equipment (barriers, actuators, etc.).

Manufacturing

Video analytics to control safety

TRASSIR
HardHat Detector

enables HSE compliance for industrial and construction projects

TRASSIR
Wear Detector

is an analytical module detecting if staff wear their PPE based on garment color.

- Notification system: email, sms
- High accuracy of object recognition
- Definition of hardhats and clothes colors
- Customization available upon request
- Various color classification for different types of employees

Public Areas

TRASSIR Face Recognition

- TRASSIR's proprietary technology of face recognition and search in a pre-configured database of people (residents, staff, etc.).
- Prevent access of blacklisted people to a facility;
- Detects special guests (VIP) to improve the customer service.

Integration with Access Control System

keep track of all events with time reference: parking lot check-in, hotel room entrance.
- Receive all the movement statistics for both the hotel guests and the staff;
- Quickly access to all the information about the cases of entering the hotel room;
- Set the desired reaction on specific events using the built-in TRASSIR rules (scripts).

APPLICATION:

Hotels and Restaurants I Schools I Clinics I Sport facilities I Banks

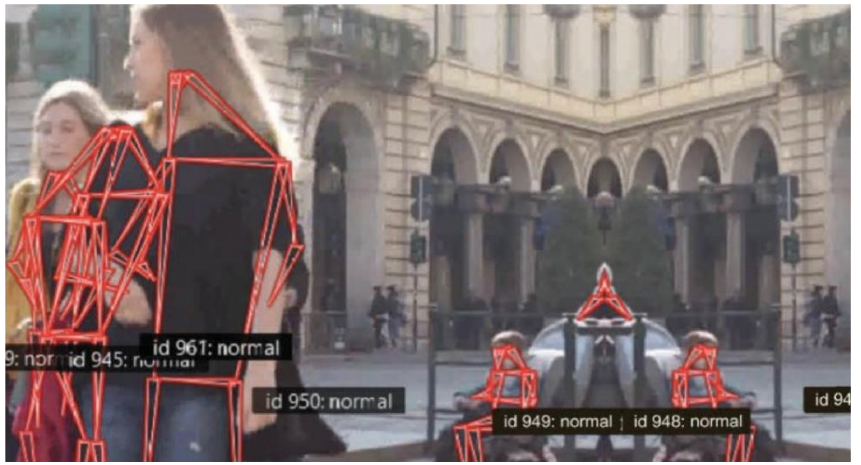
Public Areas

TRASSIR
Abandoned Object Detector

is designed to detect abandoned and forgotten things left in the areas monitored by cameras. The detector determines the class of the abandoned object: suitcase, backpack, box (and objects similar in shape), bag, duffle (large sports bag) and handbag (usually a small lady's bag)

APPLICATION:

Airports | train stations | streets



TRASSIR
Neural Pose Detector

allows to detect people's postures and classify them. For instance, it helps to track a non-typical behavior of people at ATMs, falls of people in hospitals or nursing homes, raising hands up in an armed attack.

- Recognition of the following set of poses is currently supported:
  - sitting
  - bending over
  - lying
  - raised left hand
  - raised right hand
  - both hands raised

All other postures are classified by the detector as "normal posture". The detector can be taught to determine other poses if necessary.

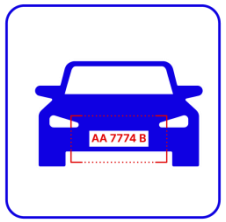
TRASSIR®

Complex Solutions

Complex solution: Smart city

Anything can happen in a large city, every minute of every day. TRASSIR delivers a complex solution to ensure everything is under control.

- Complete automated video monitoring of large areas: streets parks | public | buildings | squares
- Video analytics for urban environment
- Open system, compatible with legacy equipment

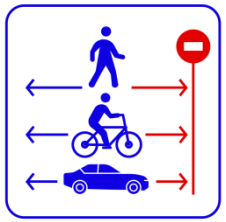


Auto TRASSIR

License plate recognition module

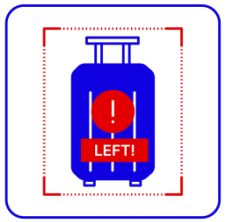
TRASSIR Neuro Detector

Detects presence of violators (people, cars, or bicycles) within protected areas



TRASSIR Direction Detector

Detects an object's movement in the prohibited direction (people, cars or bicycles)



TRASSIR Abandoned Objects

Detects abandoned or forgotten items that potentially threatens the public security

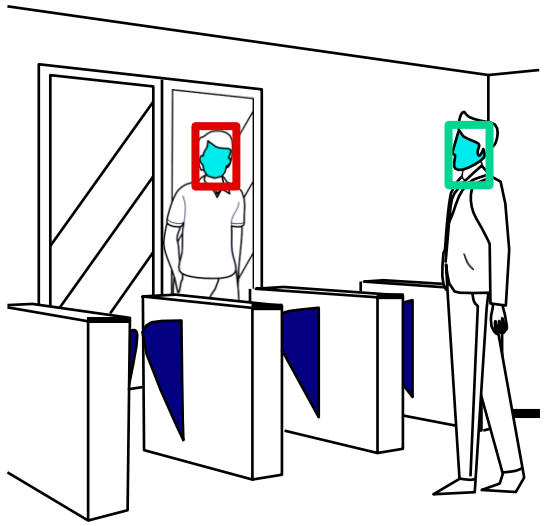
TRASSIR Parking

Counts the number of vehicles, as well as the time spent in the parking area

Complex solution: TRASSIR integration with access control system

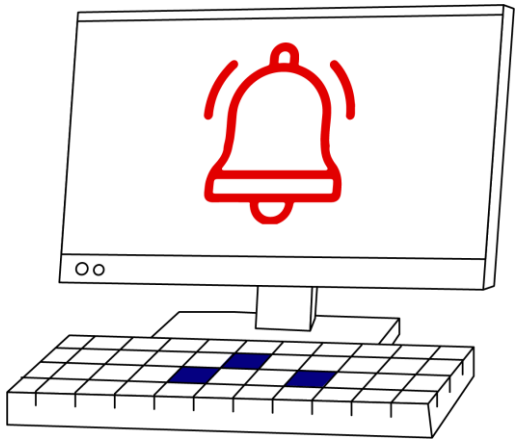
ACCESS CONTROL

- Customized rules for access authorization and restriction
- Multi-factor authentication: complex algorithms for person identification
- A convenient smart alert system



MONITORING

- Real time supervision dashboard accessible from any part of the world
- History of all events and operator's actions

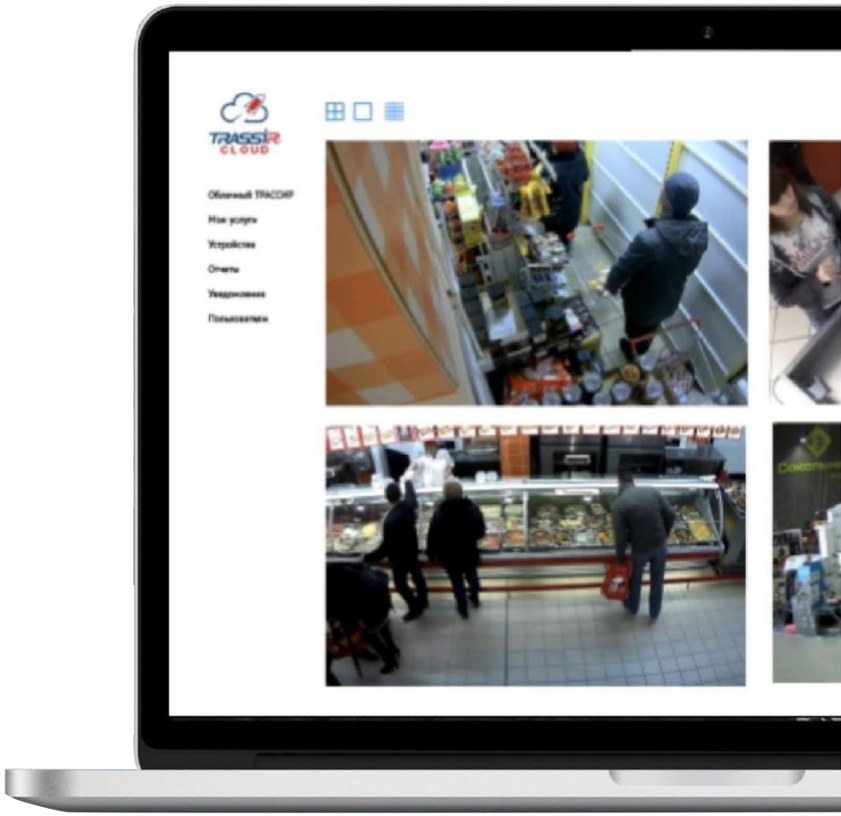


VIDEO ANALYTICS

- Face recognition, employee time record keeping, crowd detection, face masks and uniform recognition
- Non-contact access to the facility of the guests and employees in the current pandemic situation
- Regular reporting to prevent future violations

TRASSIR CMS

TRASSIR CMS is a professional cloud-based web service with record protection



ADVANTAGES

- Supports an unlimited number of IP-cameras and video servers.
- Instant alerting: e-mails or push alerts.
- Archive video storage with customizable archive depth.
- Exports video archive to the file. Video archive is stored at the Cloud and can be downloaded to any device.
- Private Cloud installation for companies that require fully-controlled on-premises video surveillance.
- Double-stream archive record: main and sub stream. Stream back-up allows to save all data even with low speed or unstable connection.

Any time. Anywhere

Access the system from a mobile device or desktop:

- **www.cloud.trassir.com**
- **Trassir app: Android | IOS**
- **Client for Windows | Linux | MacOS**

trassir.com

welcome@trassir.com