

TRASSIR[®]

TRASSIR TODAY



Experience in CCTV
surveillance

SINCE 2002

5000+

loyal customers
around the globe

3

R&D centers

42

countries with TRASSIR
installations



Why TRASSIR?



Compatible with 99% of cameras

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

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

Pre-sale demo and training

Our engineers demonstrate system functions and conduct training sessions and webinars

Highly customizable

Complete customization for specific projects using rules and Python scripts

Technical project supervision

Dedicated technical manager on project base

Easy predictable TCO

Lifetime licensing, firmware updates, free technical support

Turnkey solutions

Complete end-to-end video surveillance systems of any size

WIDE RANGE OF SOLUTIONS FOR VARIOUS INDUSTRIES



BANKING



WAREHOUSES



HORECA



EDUCATION
INSTITUTIONS



RETAIL



MANUFACTURING
ENTERPRISES

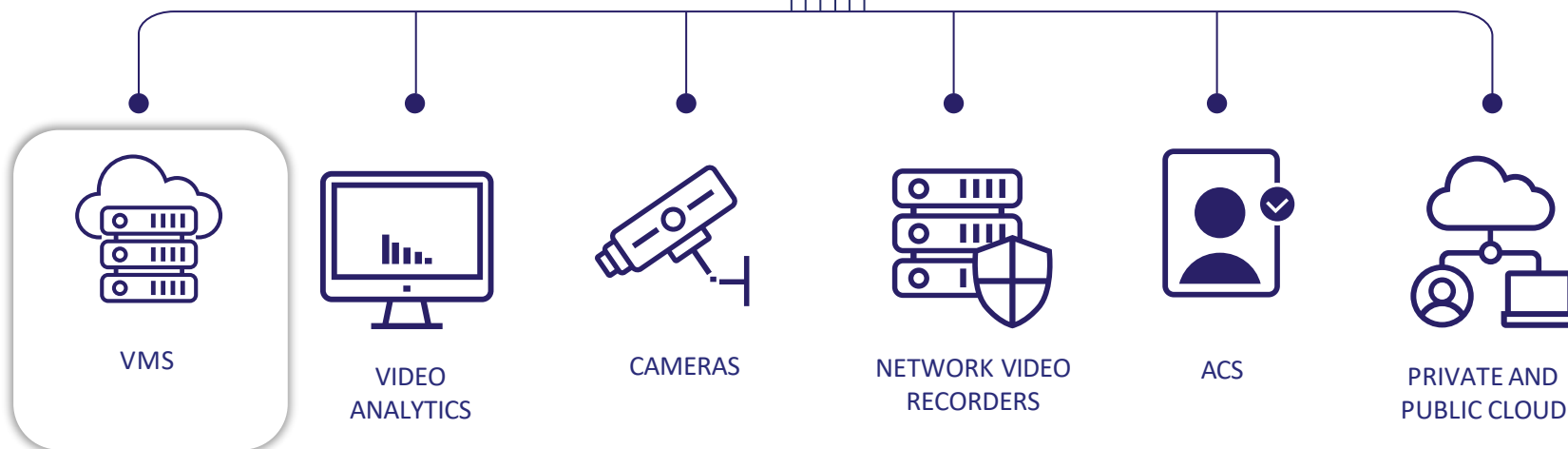


SMART
CITIES





6 in 1



NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

Stable software to manage the monitoring and video surveillance system for businesses of any size

- Internal scripting system with nearly unlimited system automation capabilities
- Convenient and adaptive interface that can be customized to fit tasks
- Configure devices, cameras, and video recorders in the TRASSIR interface
- Flexible user rights management system
- Integration with access control systems, security and fire alarm systems, intercom etc
- Simultaneous video recording on multiple hard drives
- Record, export, and view streams in multithreading mode
- Interactive maps
- Send push notifications to email, Telegram, Mobile application and TRASSIR Cloud
- Failover
- Compatible with 99% of IP cameras on the market: full ONVIF, RTSP etc support
- Automatic performance monitoring
- Easy access via client apps for web, desktop and mobile
- API/SDK/Access to SQL DB for integration with other systems
- Archive and stream encryption

TRASSIR VMS advanced features



TRASSIR OS on TRASSIR servers: video surveillance server performance and security



TRASSIR CMS: extensive video surveillance system management solution for large scale projects



Video analytics processing on GPU for maximum return on investment



Efficient and quick search for events in the archive



Advanced neural network video analytics

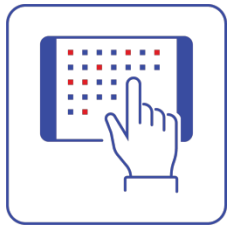


Key features included in TRASSIR VMS

- Easy scalability
- Compatible with 99% of cameras
- Essential video analytics

Multiplatform:

- TRASSIR OS
- TRASSIR for Windows
- TRASSIR for Linux



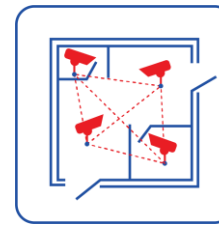
TRASSIR
Event Search



TRASSIR
MultiSearch



TRASSIR
ActiveSearch+



TRASSIR
Plans



TRASSIR
Client



TRASSIR
Sound Detector



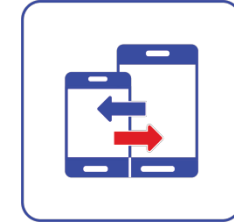
TRASSIR
Sabotage
Detector



TRASSIR
Fire & Smoke
Detector

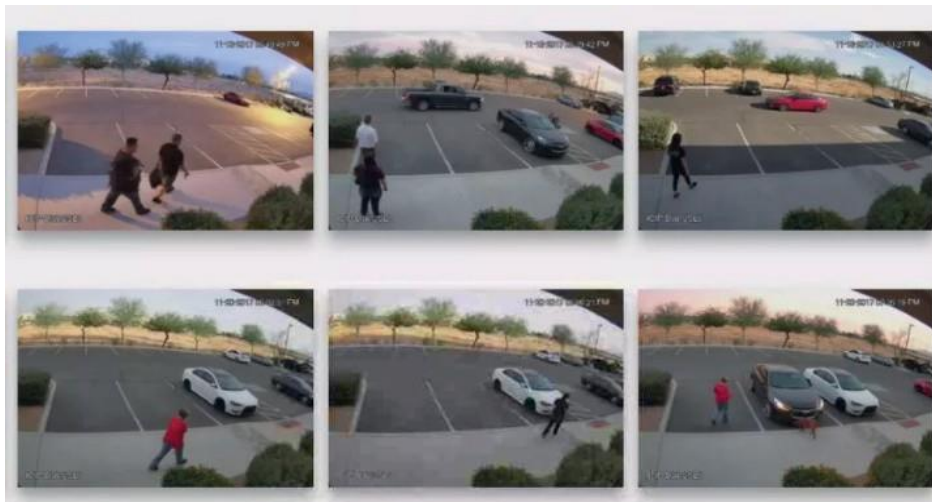


TRASSIR
Heat Maps



TRASSIR
Mobile Client

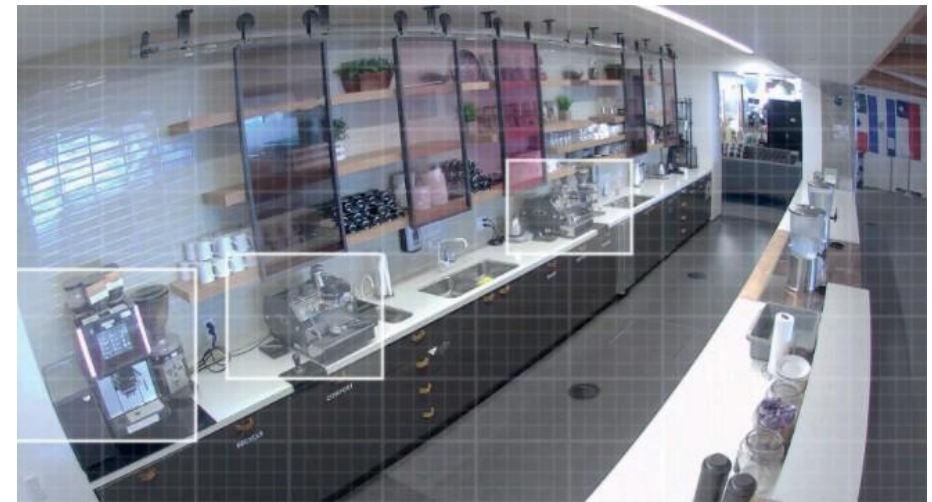
Essential video analytics



TRASSIR MultiSearch

is designed for efficient video analysis of large video databases

- Simultaneous video playback from the time and areas indicated by the operator
- Up to 5 independent video fragments can be launched simultaneously



TRASSIR ActiveSearch+

is an interactive archive search system using metadata

- Navigation through databases of all sizes to find necessary video data
- Ability to specify a search area in the image
- Minimal use of resources

Essential video analytics



TRASSIR Fire & Smoke Detector

image analysis allows smoke and fire to be detected faster than by fire sensors

- Incident response: draw the operator's attention with audio signals or messages, sirens, dry contact management, etc
- Fire protection in open spaces



TRASSIR Sound Detector

detects loud sounds and starts recording based on an indicated sound threshold

- Flexible trigger threshold settings
- Video starts recording before motion starts and informs operator of the incident

APPLICABLE IN:

Concert venues | Manufacturing enterprises

Essential video analytics



TRASSIR Sabotage Detector

automatically detects problems with the camera image

- Incident response: draw the operator's attention with audio signals or messages, sirens, dry contact management, etc.
- Reports image issues: loss of camera focus, change in angle of view, lens flare or covering, link interruption, signal loss



TRASSIR Heat Maps

thermal analysis of video images

- Dynamic mode - any moving object on the screen is highlighted with a warm tail area: the more activity recorded, the more intense the color.
- Static mode - accumulates activity map highlighting on video «cold» and «hot» areas



6 in 1



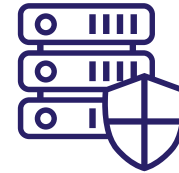
VMS



VIDEO
ANALYTICS



CAMERAS



NETWORK VIDEO
RECORDERS



ACS



PRIVATE AND
PUBLIC CLOUD

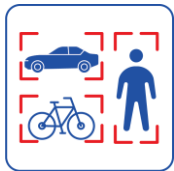
NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

Wide range of server-based AI video analytics

TRASSIR develops unique video analytics systems using artificial intelligence. This is a convenient tool to track what is happening at facilities and immediately receive notifications about important events. Our solutions help owners with different types of businesses, from factories to local shops.



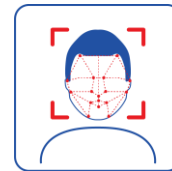
TRASSIR
Neuro Detector



TRASSIR
Neuro Counter



TRASSIR
Direction
Detector



TRASSIR
Face Recognition 2.0



AutoTRASSIR
(LPR)



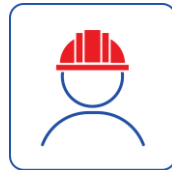
TRASSIR
ActiveDome



TRASSIR
Workplace
Detector



TRASSIR
Wear Detector



TRASSIR
HardHat
Detector



TRASSIR
Staff Tracker



TRASSIR
ActiveStock



TRASSIR
Bag Counter



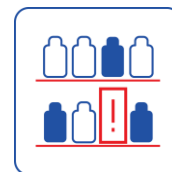
TRASSIR
Crowd Detector



TRASSIR
Queue
Detector



TRASSIR
Face Mask
Detector



TRASSIR
Shelf
Detector



TRASSIR
ActivePOS



TRASSIR
Heat Map
on Map

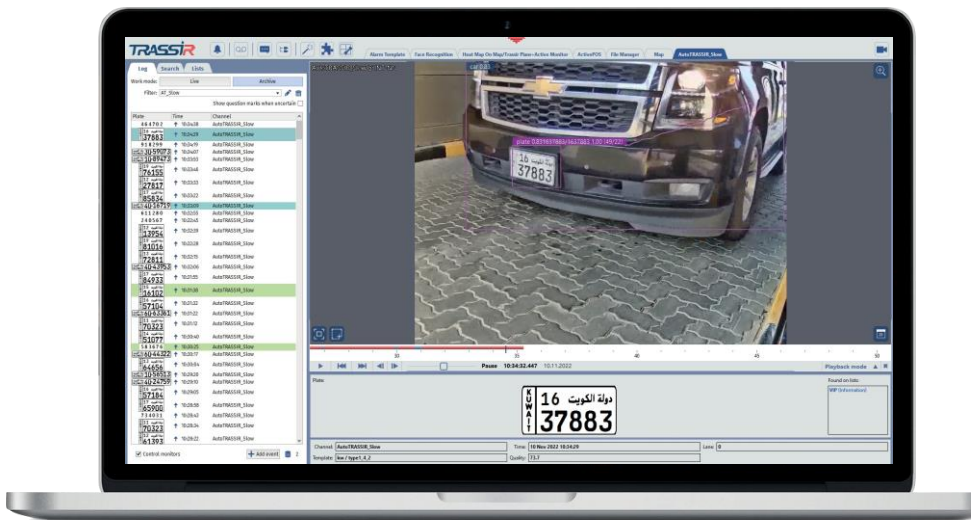
AutoTRASSIR



AutoTRASSIR (LPR)

is designed to automatically recognize license plates in the camera's view

- Highly accurate license plate recognition
- Identifies vehicle class: motorcycle, passenger car, minivan/van, truck, bus
- Recognizes two-line numbers
- Recognizes license plates in difficult conditions
- 25 countries supported including GCC
- Camera independent
- Quick search of license plate numbers in archive
- Real time ban\white listed vehicle identification and notifications



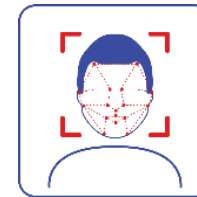
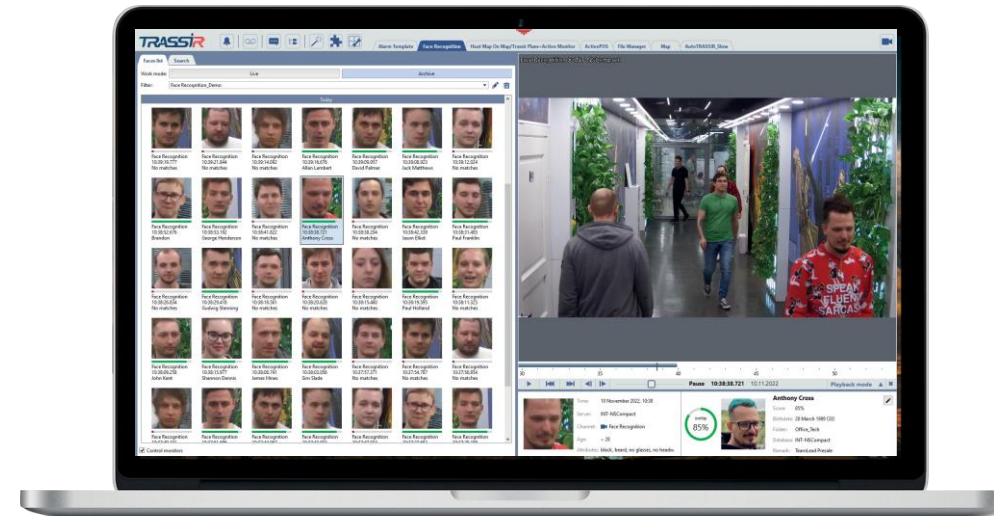
APPLICABLE IN:

To monitor and control vehicle flow (public and private parking lots or garages, checkpoints) To control automobile traffic on any road

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

Key features:

- 99,8% accuracy
- Enables obtainment of facial attributes for advanced analytics and searches based on specific parameters (race, age, sex, hair colour, beard, moustache, glasses, headwear, protective mask, etc)
- Build your customer profile
- The face database can be accessed from a local or remote TRASSIR server with options to copy, import and synchronise the face database
- Intergration with ACS
- Attendance and shift monitoring



TRASSIR Face Recognition

intelligent face recognition and search module using a pre-configured database of people (residents, staff, etc.).

- Prevent access of undesirable people to the facility
- Detects special guests (VIP) to improve the customer service

APPLICABLE IN:

Hotels and Restaurants | Schools | Clinics |
Sport facilities | Banks | Industrial | Smart City



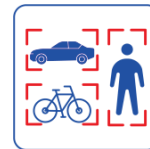
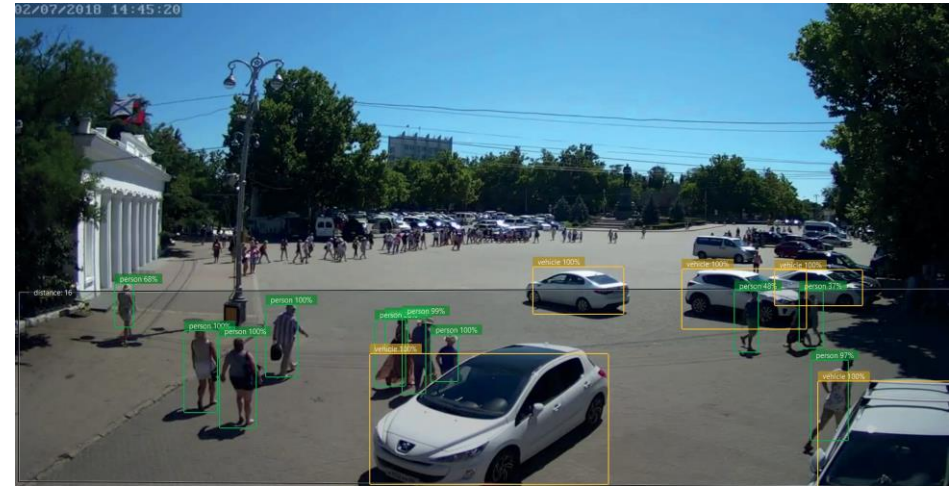
TRASSIR Direction Detector

allows detection of any movement toward prohibited areas by people, cars, or bicycles

- Up to 16 lines per channel can be supported at one time to monitor movement
- Highly accurate object recognition
- Alert system via notification bars, emails, Telegram, Mobile application and TRASSIR Cloud

APPLICABLE IN:

Public places | Transportation | Airports | Train stations



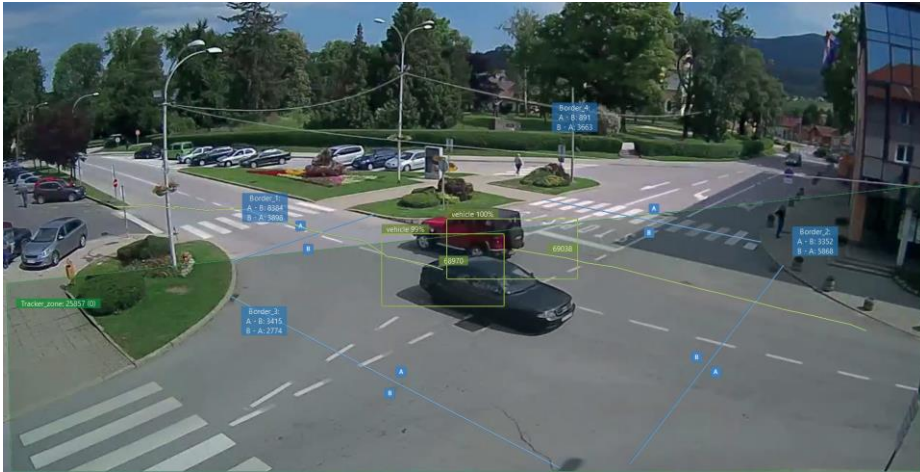
TRASSIR Neuro Detector

allows detection of intrusions into protected areas by unauthorized people, cars or bicycles using advanced filters to eliminate false positives

- Highly accurate object recognition
- Up to 16 trigger zones or lines per channel can be set
- Alarm notification via email, Telegram, Mobile application and TRASSIR Cloud
- Customization available upon request

APPLICABLE IN:

Manufacture | Construction | Retail | Warehousing | Transportation | Smart City | Industrial



TRASSIR Neuro Counter

is an intelligent video detector that provides counting of unique objects in a specified area

- Counts people, cars and bicycles
- Counts objects crossing a designated line - up to 16 lines per channel can be supported simultaneously
- Direction counting

APPLICABLE IN:

Retail | Transportation | Public places



TRASSIR Crowd Detector

is an intelligent detector for excessive crowding of people with a configurable trigger threshold using neural networks

- Automatic reporting on: number of people, minimum time spent in the crowd, etc
- Highly accurate object recognition

APPLICABLE IN:

Public places | Stadiums | Schools | Train stations |
Manufactures

Video analytics to control safety



TRASSIR HardHat Detector

enables HSE compliance for industrial and construction projects

- Highly accurate object recognition
- Definition of hardhats and clothing color



TRASSIR Wear Detector

is an analytical module detecting staff use of PPE based on garment color

- Various color classifications for different types of employees

APPLICABLE IN:

Manufacturing | Warehouse



TRASSIR Active Stock

used for event-based video monitoring of warehouse operations

- Provides regulation of potential disputes, determines responsibility for availability of goods, and investigates cases of damage in the warehouse
- Offline and online monitoring available
- Event search: numbers of reporting documents, product name, quantity, cell IDs, pallet, customer or organization name, and more

APPLICABLE IN:

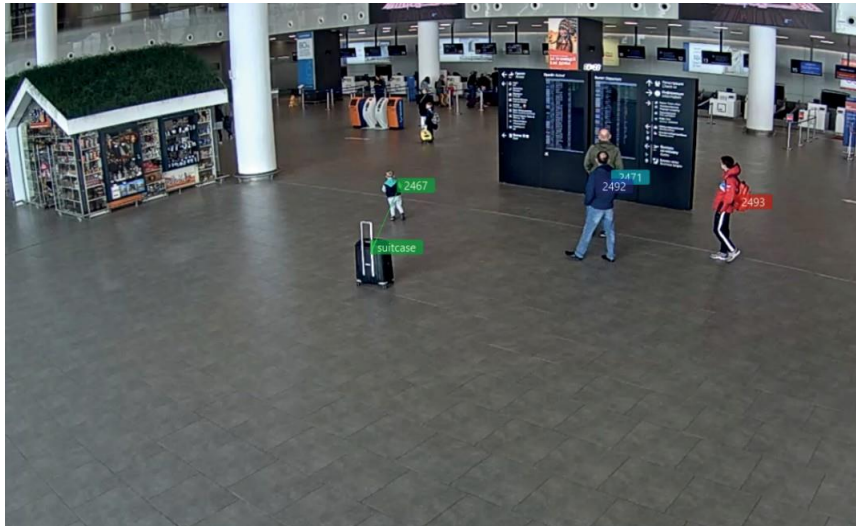
Retail | Warehousing | Manufacturing



TRASSIR Bag Counter

a module that allows bags or objects similar to bags on the conveyor to be automatically counted

- Eliminates errors associated with manual counting of shipped goods, resulting in a reduction of financial losses due to errors or fraud by staff
- In addition, the module can automate the process of shipping a certain amount of goods. The operator can enter the necessary number of items for shipment. After goods are unloaded, the conveyor stops automatically

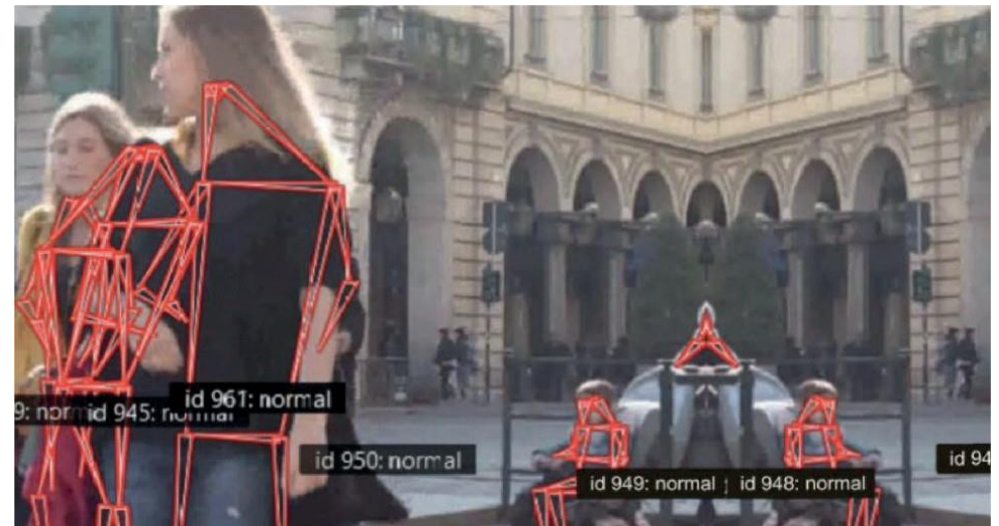


TRASSIR Neuro Left Object Detector

is designed to detect abandoned and forgotten things. Detect interactions with the object by third parties. The detector determines the class of abandoned object: suitcase, backpack, box (and objects similar in shape), bag, duffle (large sports bag) or handbag (usually a small lady's bag)

APPLICABLE IN:

Airports | Train stations | Streets



TRASSIR Pose Detector

detects and classifies people's postures. For instance, it can help identify and track unusual behavior

Currently supports recognition for the following set of poses:

- ✓ sitting
- ✓ lying down
- ✓ raised right hand
- ✓ bending over
- ✓ raised left hand
- ✓ both hands raised

The detector can be trained to recognize other poses if necessary



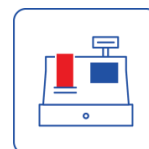
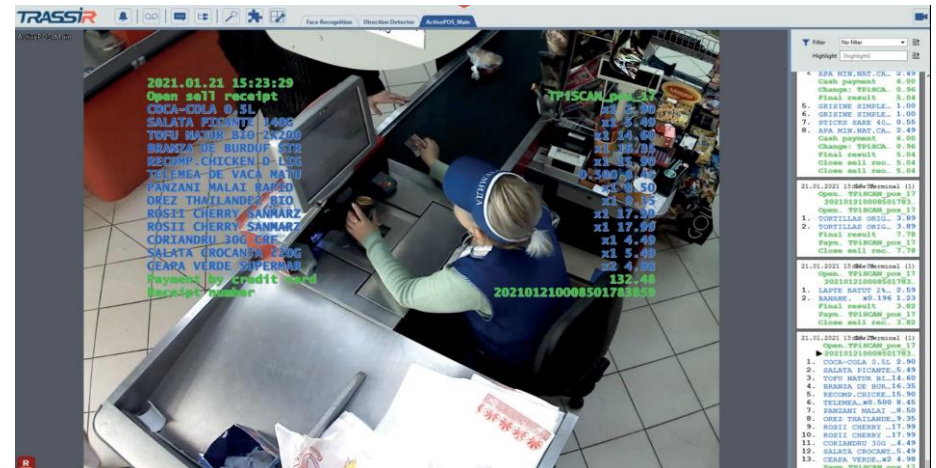
TRASSIR Queue Detector

is an intelligent video analytics system using neural networks designed to count people in a queue

- Automatic reporting: number of people in the queue, time spent in the queue
- Notification module for when queue length is exceeded

APPLICABLE IN:

Retail | Banks



TRASSIR ActivePOS

intelligent cash control module

- Helps decrease both planned and unplanned POS losses
- TRASSIR ActivePOS - includes more than 60 detectors for predefined loss scenarios. These include: cashier fraud, cashier error (unintentional losses), detection of sub-par service standards, violations cash management services regulations (determined by law). Generates reports on: total losses (divided by cashier or cashbox), cashier and analyst KPIs. Requires connection with cashbox system. Integration with third party POS systems

APPLICABLE IN:

Supermarkets | Restaurants | Gas Stations |

Pharmacies | Fast Food | Boutiques



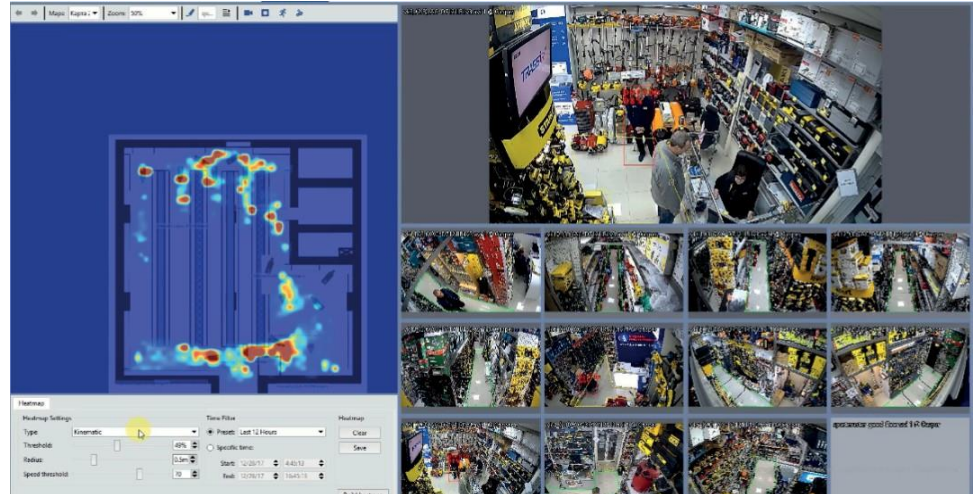
TRASSIR Shelf Detector

enables intelligent video analytics using neural networks designed to identify empty/occupied shelf spaces

- Shelves merchandise monitoring
- Out-of-shelf notification
- Automatic reporting to forecast customer demand for certain SKUs[®]
- Automatic monitoring of staff performance

APPLICABLE IN:

Retail



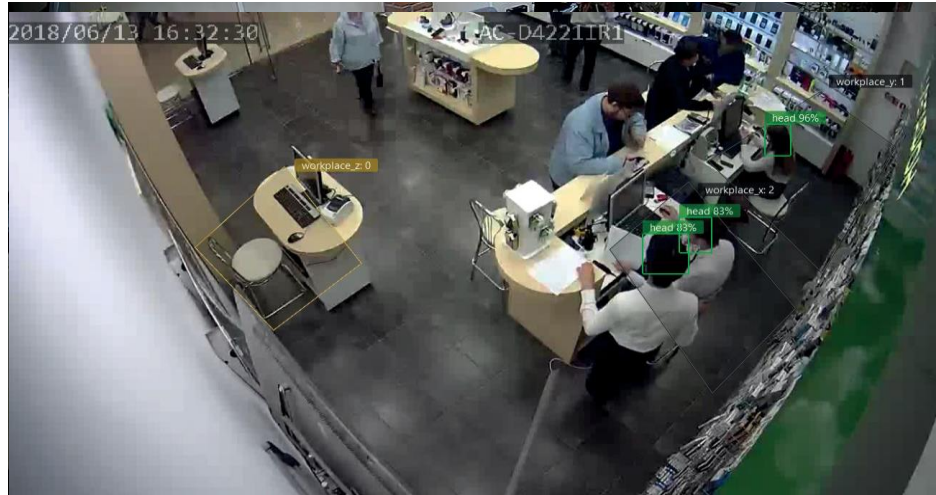
TRASSIR Heat Map On Map

is an advanced thermal image analysis technology

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

APPLICABLE IN:

Retail



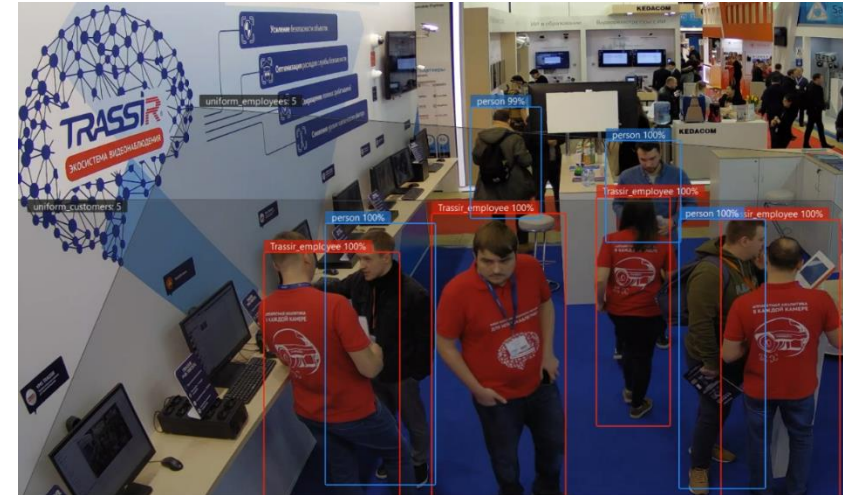
TRASSIR Workplace Detector

tracks a person's absence from the workplace

- Alarm notification in cases of worker absence
- Daily reporting on employee's real time on- and off-site

APPLICABLE IN:

Retail | Manufacturing | Construction



TRASSIR Staff Tracker

allows employees work performance to be inspected to increase customer service level

- Tracks the availability of required personnel in service areas
- Keeps a record of customers left unattended, reports on service quality
- Real time alerts when customer service standards are violated

TRASSIR

6in1



VMS



VIDEO
ANALYTICS



CAMERAS



NETWORK VIDEO
RECORDERS



ACS



PRIVATE AND
PUBLIC CLOUD

NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

TRASSIR's vast experience and deep understanding of both the security systems market and the needs of its customers have enabled us to create a truly advanced line of TRASSIR cameras to meet the high demands of users. All TRASSIR products can be successfully implemented at facilities of any scale



Value for money

- Advanced video surveillance technologies at affordable prices from budget segments to advanced levels



Quality image

- Up to 120db True WDR
- Up to 0.001 Lux sensitivity
- Up to 8MP resolution



Cutting-edge technology

- High-performance
- last-generation codecs (H.265, H.265+);
- Full-color night recording without switching to black-and-white mode (FTC cameras);
- Hardware analytics.

Eco

Affordable cameras with basic features

Trend

Professional video cameras for various task levels

Pro

High-performance video cameras with a wide range of features

Ultra

High-performance video cameras with a wide range of features

WDR

DWDR
105 dB

RWDR
120 dB

RWDR
120 dB

RWDR
120 dB

Resolution

2MP/4MP

2MP/5MP/8MP

2MP/5MP/8MP

2MP/5MP/8MP

Audio



Local storage



Onboard Video Analytics



AI

AI

Alarm In/Out



In some models



Warranty

2 years warranty

5 years warranty

5 years warranty

5 years warranty

TRASSIR Video Cameras. Eco line



**Affordable cameras with basic features -
a line for typical video surveillance tasks**

- ✓ Resolution 2MP/4MP
- ✓ Hardware analytics
- ✓ Indoor/outdoor models

- ✓ Affordable price
- ✓ 2 years warranty

TRASSIR Video Cameras. Trend line



Professional video cameras for various task levels -
line for security and monitoring in complex systems

- ✓ Resolution 2MP/5MP/8MP
- ✓ Two-way audio
- ✓ Basic hardware analytics

- ✓ Built-in archive: recording reliability
- ✓ 5 years warranty

TRASSIR Video Cameras. Pro line



High-performance video cameras with a wide range of features -
line for major projects

- ✓ High image quality
- ✓ Two-way audio
- ✓ Basic/advanced hardware analytics
- ✓ Built-in archive: recording reliability
- ✓ Option to integrate with access control systems
- ✓ 5 years warranty

TRASSIR Video Cameras. Ultra line

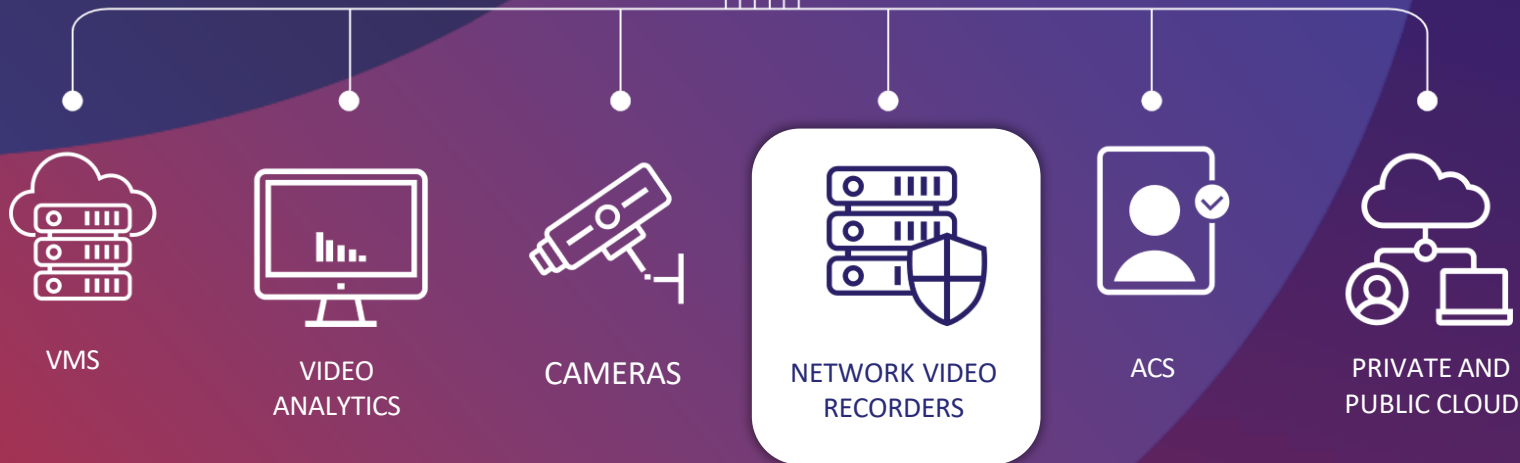


High-performance video cameras with a wide range of features - line for major projects

- ✓ High image quality
- ✓ Two-way audio
- ✓ Basic/advanced hardware analytics
- ✓ Built-in archive: recording reliability
- ✓ Option to integrate with access control systems
- ✓ AutoIRIS
- ✓ 5 years warranty

TRASSIR

6in1



NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

Line of network servers



UltraStation series

Number of cameras:
Up to 256

Support:
All TRASSIR analytics modules RAID
0, 1, 5, 6, 10, 50, 60
HotSwap Redundant power supply units
HotSwap HDD 3.5"
Connect up to 2 UltraStorage

Actual archive size:
38.2TB - 465.66TB

Comes with:
16/24/36 HDD 3.5"
2 power supply units
TRASSIR Neuro Detector
Camera licences



Neuro Station series for analytics

Number of cameras:
16/32/48/64/128/160

Support:
All TRASSIR analytics modules Up to
4K resolution
H.265+/H.265/H.264 MPEG4

Comes with:
TRASSIR Neuro Detector



MiniNVR series

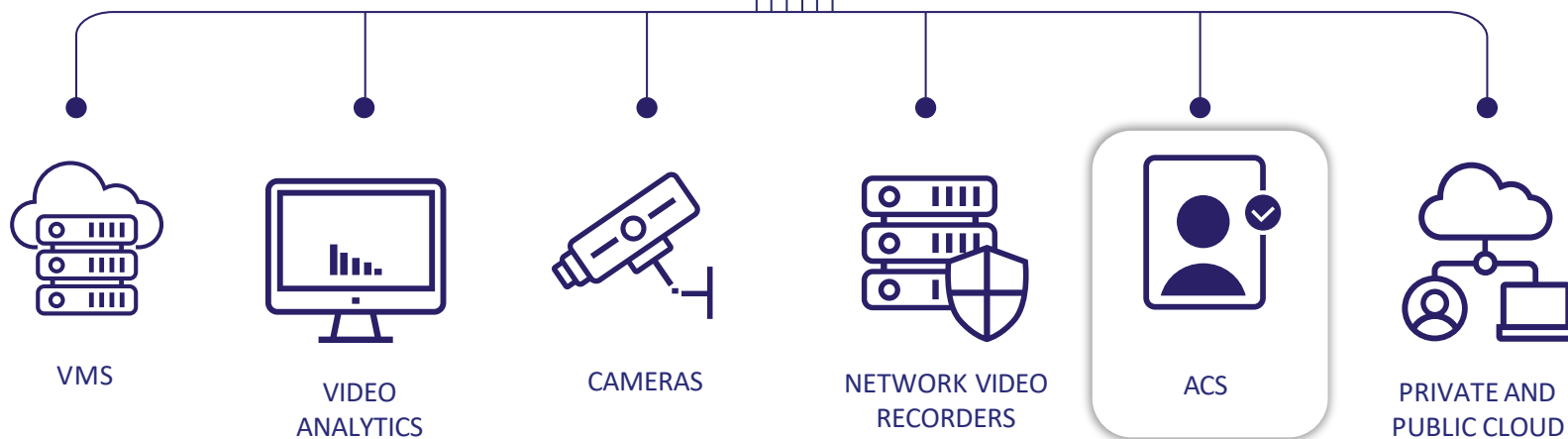
Number of cameras:
4/8/16/24/32

Support:
With/without PoE
H.265+/H.265/H.264 MPEG4

Comes with:
AnyFree/AnyIP camera licences



6 in 1



NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

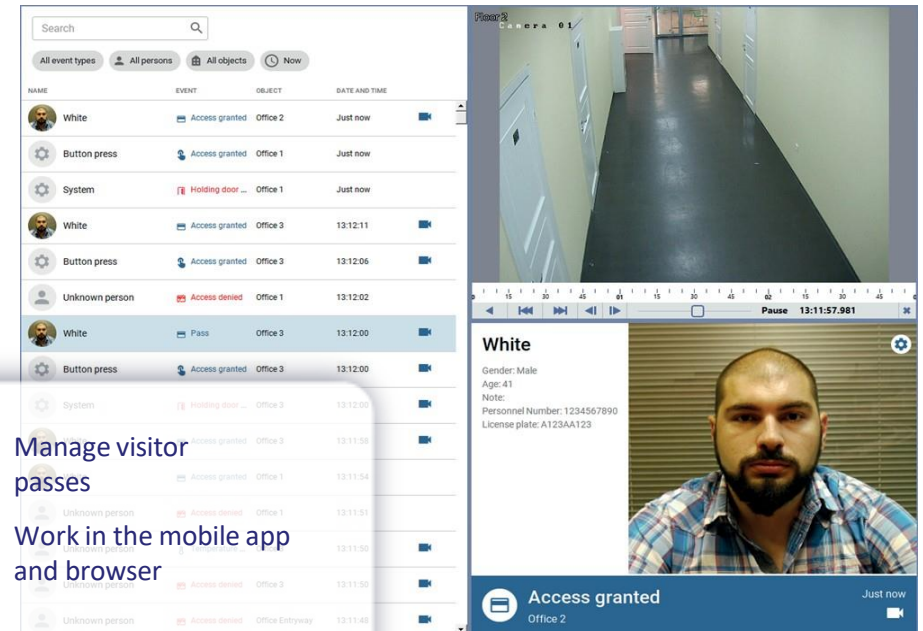
MACHINE LEARNING

Proprietary access control and management system on the TRASSIR platform

The system includes access management, event registration and building analysis reports, employee work hour monitoring. The video analytics and intercom integration capability provides all the benefits of access control systems and smart video surveillance together in the TRASSIR platform. Proprietary line of access control equipment: low-cost network controllers and readers.

Possibilities

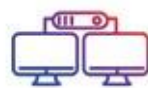
- Human resource management
- Access level configuration
- Flexible work and access schedules
- Temperature-based access control
- Equipment setup and management
- Building analysis reporting
- Photo/Video identification
- Multi-factor authentication
- Configure flexible responses to system events
- Manage visitor passes
- Work in the mobile app and browser



Advantages



Comprehensive solution



One server for one system - VMS and ACS on one server

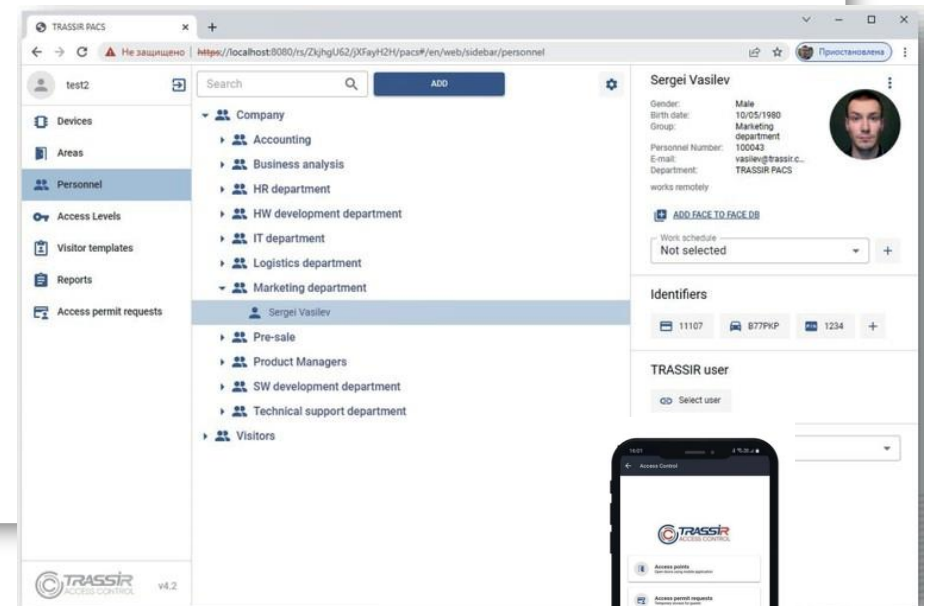


Transparent pricing

*Supported hardware: TRASSIR and third - party vendors

Key differences from other access control systems

- Multivendor ACS
(TRASSIR, HikVision, HiWatch, ZkTeco, TrueIP)
- Integrated security system
(CCTV, video and event analytics, fire alarm system, ACS, intercom, cloud technologies)
- Client customization available
(Rules, Scripts, Open API)
- Economy and simplicity
 - No need for an additional server
 - One license for all features and a user-friendly interface



Types of IDs



Cards



Fingerprints



PIN-codes



Faces



Temperature



License plate numbers



6 in 1



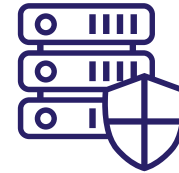
VMS



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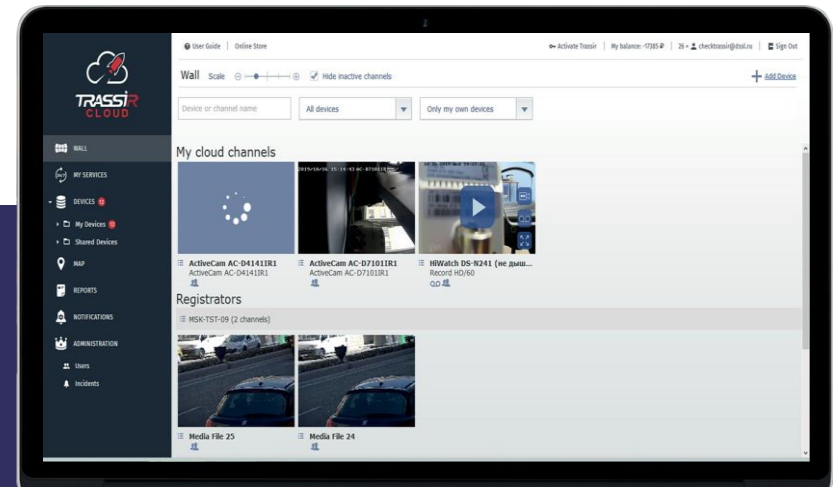
NEURAL NETWORKS

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TRASSIR Cloud

Cloud-based video surveillance as an efficient, all-purpose tool for setting up systems of any scale. TRASSIR Cloud CCTV is a carrier-grade plug-and-play value-added service developed for telecoms/ISPs/Enterprises to extend their service portfolio, grow userbases, and secure additional revenue streams through cloud-based video surveillance for SMB and private subscribers



TRASSIR CLOUD characteristics according to its partners

95% Quick setup

99% Good technical support

87% Convenient software

90% Easy to learn

80% Competitive pricing

White Label partnership program

- A new revenue generation channel
- A new user communication channel
- Expanded eco-system, digital transformation
- Set up custom plans and product-based 'promo packages' as tools for boosting sales
- No need to pay for service development: using the TRASSIR cloud product we will identify user needs and customize the servers together

TRASSIR CMS

Extensive video surveillance system management solution created for the closed IT loop of large customers



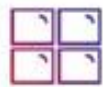
Unified user management, LDAP



Centralized server management and updating



Video surveillance equipment health monitoring



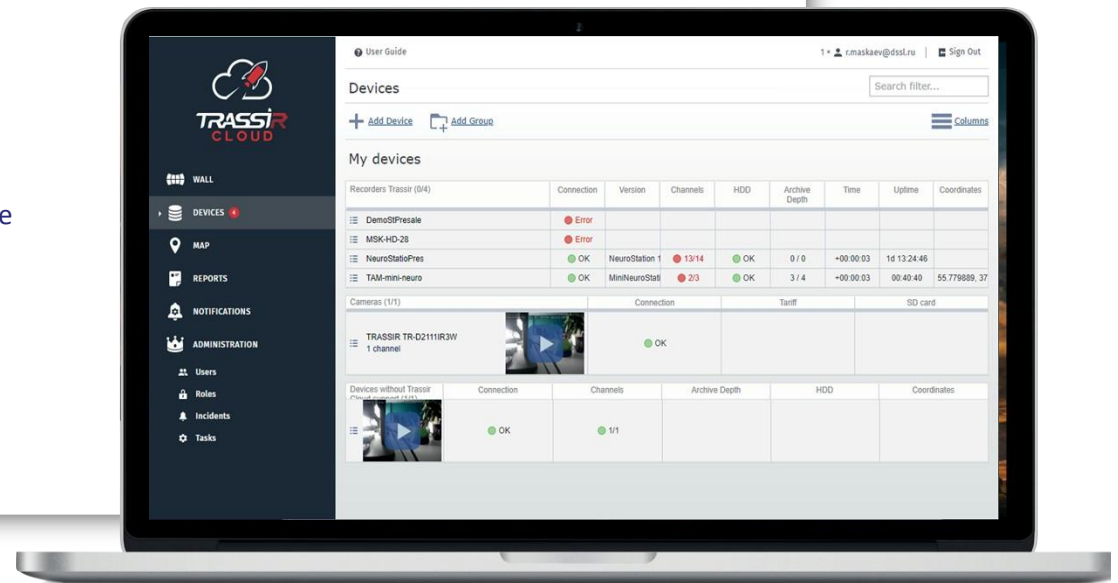
Access to both web interface and mobile app



Internet traffic saving



Situation centre



TRASSIR CMS is designed for



Over 1000 devices



Multiple locations



When 24/7 system monitoring is required

OUR CLIENTS AND PARTNERS ACROSS THE GLOBE



CERTIFICATION

TRASSIR equipment meets 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



trassir.com



welcome@trassir-global.com

