TRASSIR Neuro Counter
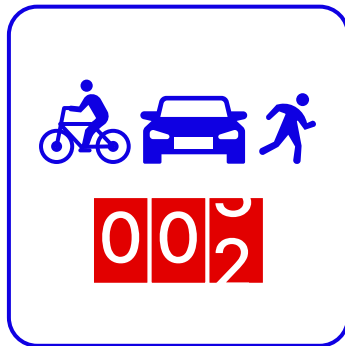
Neural network for counting objects
High-precision detection, sorting by category

TRASSIR NEURO COUNTER I BASE FUNCTIONS
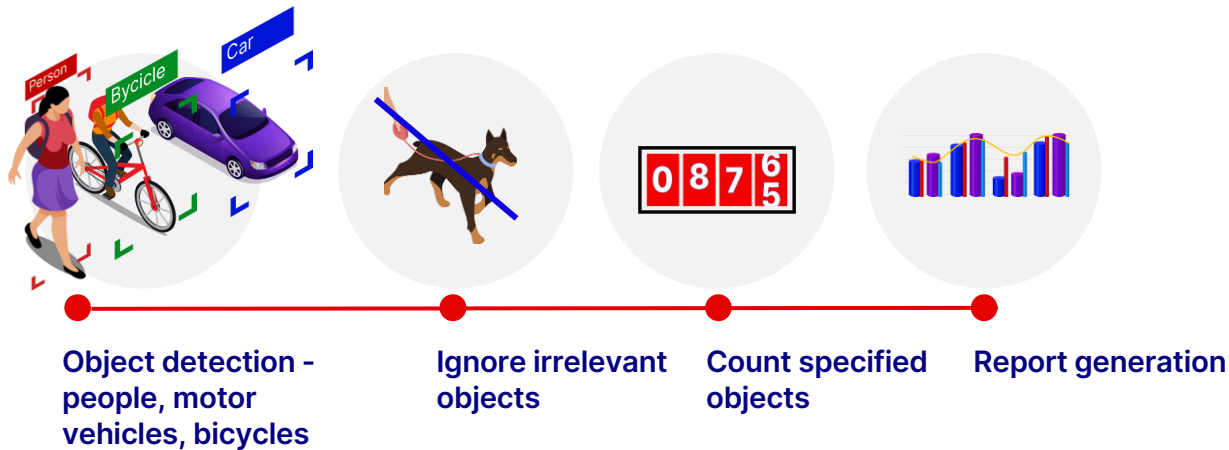
Allows you to count people, cars, and two-wheeled vehicles in the frame.

TRASSIR Neuro Counter is designed primarily with the goal of conducting business analytics for retail.

The principle of operation is based on deep learning neural networks which reduce false positives to zero.

HOW IT WORKS: ZONE BOUNDARIES/VIRTUAL LINES SET BY THE OPERATOR

- Counts objects that cross virtual lines going in either direction;

- Report generation.

Object detection - people, motor vehicles, bicycles

Ignore irrelevant objects

Count specified objects

Report generation

TRASSIR NEURO COUNTER I FEATURES

Intelligent detector with high accuracy detects objects crossing boundaries in a zone specified by the operator, sorts by category, counts objects and tracks movement

16

Operator can designate up to 16 lines per channel on the screen for counting

Configuring response scenarios according to the direction in which the line was crossed

Excludes personnel from reports based on uniforms or clothing color when used together with the Wear Detector module

Determine the direction in which boundaries are crossed

Formation and unloading of graphical and tabular reports for a given period for further processing

Security: works with Active Dome to provide tracking of object movement in a specified area

Features can be extended using Python scripts.
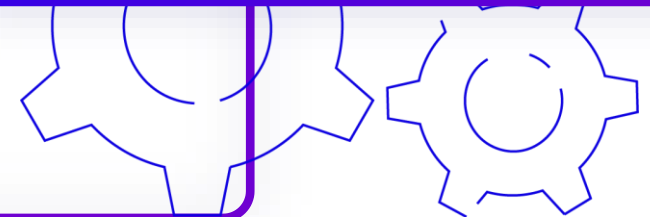
TRASSIR NEURO COUNTER I TECHNICAL FEATURES

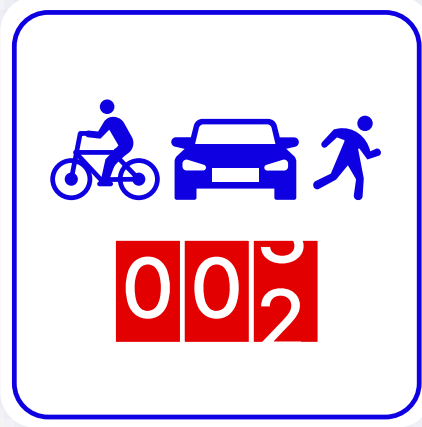**Works on NVRs from the TRASSIR NeuroStation line**

Licensing on a per-channel basis

- Works with Fisheye cameras;
- Works within a wide range of camera view angle;
- Can filter objects by size.

Works with TRASSIR Cloud

TRASSIR NEURO COUNTER USE SCENARIOS

SCENARIO #1 I Counting number of visitors

Task

Count the number of store visitors during certain hours to optimize personnel work schedules.

Solution

Install CCTV at the store's entrances. Connect to **Neuro Counter**. Operator configures zone boundaries: store entrances are indicated by lines.

Effect

Client (store manager) receives a report on the number of store visitors, distributed by time of day. The report allows you to optimize the number of staff in order to eliminate downtime or lack of personnel during periods of visitor influx. Increases sales, customer loyalty, and profits.

SCENARIO #2 I Evaluating effectiveness of outdoor advertising

Task

Evaluate the effectiveness of updated outdoor display cases by counting the number of visitors who showed interest and entered the store.

Solution

Video surveillance cameras are installed at the entrance to the store, **Neuro Counter** is connected. The operator adjusts the boundaries of the store entrance and movement on the street past the front door.

Effect

The smart module counts the number of visitors who entered and exited, as well as the number of potential customers who passed by. The client receives a report with objective indicators on the effectiveness of updated outdoor advertising.

SCENARIO #3 I Conversion rate
(integrated with TRASSIR Active POS system)

Task

Evaluate the conversion rate by calculating the ratio of customers who entered the sales area to the number of purchases made.

Solution

- CCTV cameras are installed at the entrance to the sales area;

- **Neuro Counter** is connected to the **ActivePOS** intelligent module for control of cash transactions, store entrances are indicated by lines;

- Includes the "Sales Conversion" report in the "Business Analytics" module, which analyzes data from **Neuro Counter** and **ActivePOS.**

Effect

Client automatically receives an accurate calculation of conversion to purchase.

TRASSIR Neuro Counter: Neural
Network Object Detector

Scenario #4 I Assessment of traffic in area where an outlet is located

Task

Calculation of traffic in the area of a potential outlet opening before capital investment.

Solution

External video surveillance camera is installed, **Neuro Counter** is connected. The operator adjusts the boundaries for traffic counting.

Effect

The neuroanalytics module counts the number of potential customers who have passed by.The customer checks the location before investing significant capital (5-10 million).

SCENARIO #5 | "Safe City" - traffic counting

Task

As part of the "Safe City" project, count the number of cars and two-wheeled vehicles passing in each direction per day.

Solution

CCTV cameras are installed at intersections, **Neuro Counter** is connected, and a line is specified in each lane, marking the boundary for crossing a given zone. The module is configured to detect and count cars and two-wheeled vehicles.

Effect

Client receives an accurate report on the number of cars and two-wheeled vehicles passing in each direction.

TRASSIR NEURO COUNTER I SOLUTION BENEFITS

Cost effective

- Smart module is compatible with 99% of cameras from other vendors
- More cost-effective than visitor counting sensors
- Operates in places where sensor installation is not possible

Precise evaluation

- Visitor numbers
- Conversions
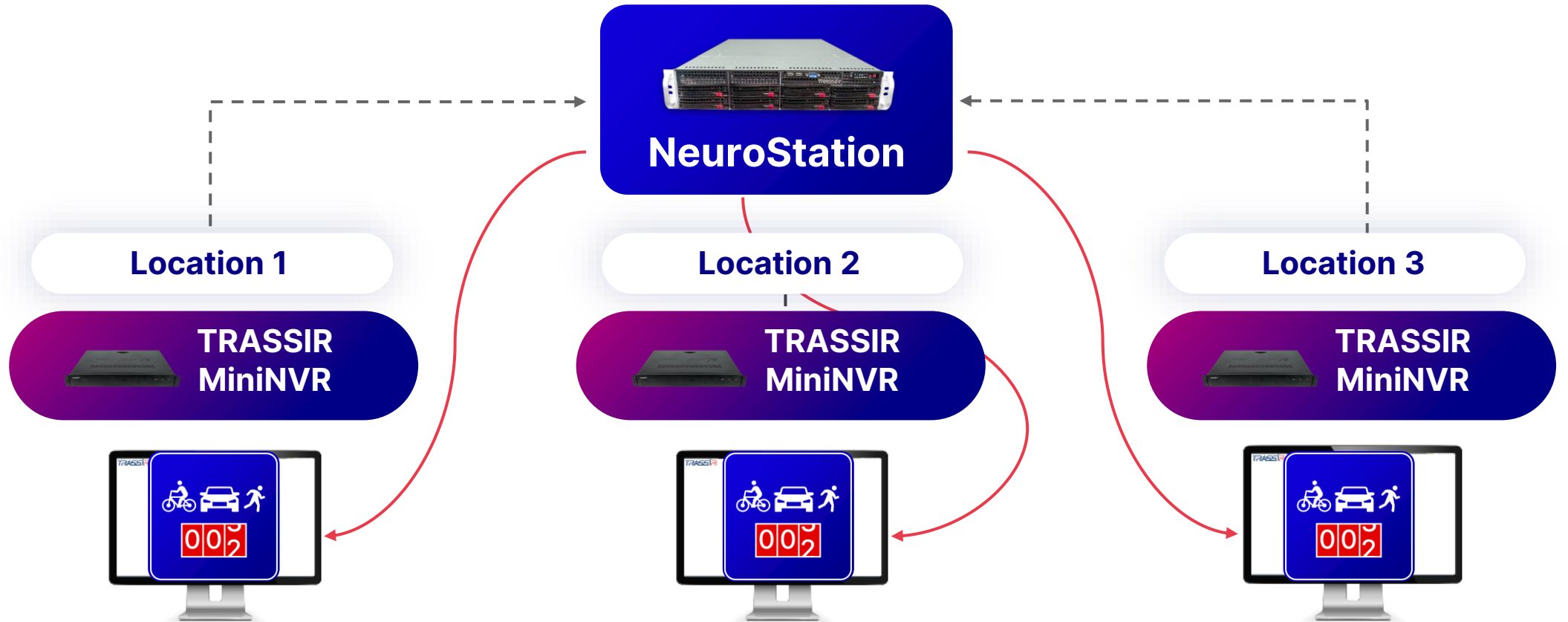- Effectiveness of advertising media
- Automobile traffic

Automation

- Works together with other analytics modules
- Can be easily integrated with external sensors via HTTP API and using "dry contacts"
- Configure response scripts to work with third-party devices

Local, Email, Telegram notifications

TRASSIR Neuro Counter: Neural
Network Object Detector

OFFLOAD ANALYTICS BUDGET AND TRAFFIC SAVINGS

NeuroStation

Location 1

TRASSIR MiniNVR

Location 2

TRASSIR MiniNVR

Location 3

TRASSIR MiniNVR

1 TRASSIR NeuroStation server to connect up to 26 stores

trassir.com

welcome@tglobal.ae