# SWARCO INTELLIGENT CAMERA SOLUTIONS

FOR SMART CITIES





## TRANSFORM YOUR CAMERA INTO AN INTELLIGENT VISUAL SENSOR

SWARCO now offers a unique camera solution so that you can select and gather the data that is most valuable to you and your municipality. The only requirements for this solution are that you install a small box with an AI processor, which is connected to an IP camera. Our solution has several different applications – for use in traffic, in car parks, or in the proximity of large buildings and shopping centers where our camera solution can help you collect relevant data. And you can define any data to be gathered. As the solution is based on artificial intelligence, this signifies that you have a product with a variety of different uses that automatically accelerate in accordance with the development and fine-tuning of algorithms.

The unique characteristic of this product is that all data is extracted in real time from the video stream. All data processing is handled within the camera. It automatically filters the relevant data which results in a small data file size. The end result is a high-quality counting, detection, classification and tracking of objects, completely in accordance with GDPR legislation.



GDPR-approved analysis



Information about objects in real time



A variety of applications



Centralized control of units



Plug & Playintegration





The use of cameras in traffic may have a preventive effect and enhance road safety. With camera solutions from SWARCO you can also carry out measurements of various vehicles and persons over specified distances, for example speed information, queues and congestions, as well as counting and tracking specific objects.

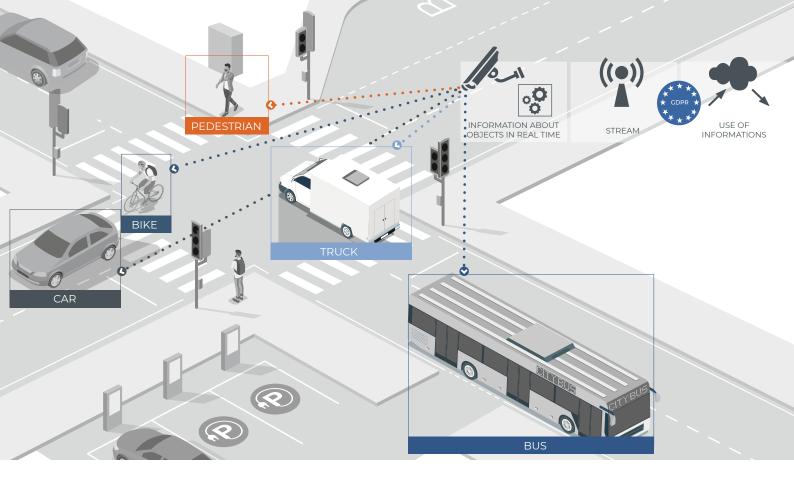
- ✓ Traffic counts and the classification of different types of objects, including for example cars, pedestrians, commercial vehicles, busses, bikes, motorcycles, trucks, and trucks + trailers
- ✓ Tracking objects in the camera scope
- ✓ Tracking objects over long distances, from camera to camera
- ✓ Speed information
- ✓ Start/Destination matrix
- ✓ Integration to SWARCO's traffic management system

#### **PARKING**



SWARCO's intelligent camera solution ensures full control of the car park for both on-street parking and off-street parking. It can simply help you optimise your business by delivering valuable real-time data.

- ✓ Identification of free and occupied parking spaces
- ✓ Measurement of free and occupied parking times (Heat maps)
- ✓ Identification and classification of different types of objects, e.g. cars, busses, commercial vehicles, and trucks
- ✓ Density factor
- ✓ Accurate measurements of car users' parking time
- ✓ Integration with SWARCO's P-reference system





#### **PUBLIC TRANSPORT**

Video monitoring is a standard function within public transportation. In many countries it is even a legal requirement. This solution offers the possibility of existing cameras delivering information that can even help you optimise and plan routes.

- ✓ Detecting and counting passengers
- ✓ Determination and status of capacity based on defined limit values
- ✓ Classification of objects (e.g. prams, bikes)
- ✓ Counting heads in the means of transport at stations
- ✓ Monitoring status of capacity
- ✓ Registration of waiting times
- ✓ Integration with Smart Priority



#### **SHOPPING CENTERS & LARGE GATHERINGS**

Most shopping centers have cameras installed. But in other public and semi-public buildings or open areas SWARCO's intelligent camera solutions are also chosen as a tool for carrying out different and relevant measurements.

- ✓ Flow of people and heat maps
- ✓ Measurement of queues and waiting times
- ✓ Counting of customers
- ✓ Counting of unique guests / visitors and identification of group sizes
- ✓ Start and destination matrix
- ✓ Measurement of average time spent in defined areas
- ✓ Measurement of the results /outcome of campaigns

### SWARCO | The better Way. Every Day.

SWARCO is a growing international group providing the complete range of products, systems, services and solutions for road safety and intelligent traffic management.

With five decades of experience in the industry, the corporation supports the growing mobility needs of society with turnkey systems and solutions in road marking, urban and interurban traffic control, parking, public transport, infomobility and street lighting. Cooperative systems, I2V communication, electromobility, and integrated software solutions for the Smart City are latest, future-oriented fields in the group's portfolio.

#### www.swarco.com



