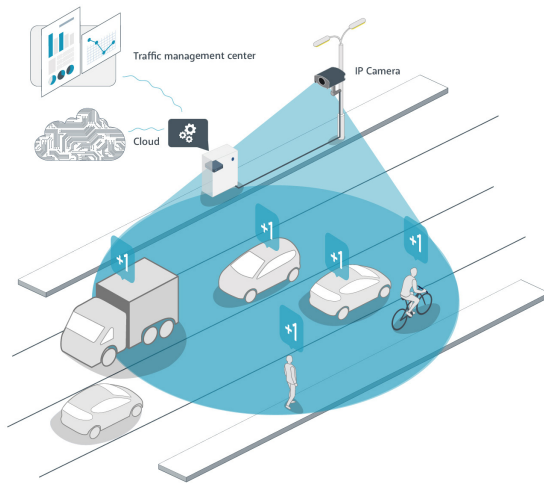


# Traffic Statistics Deep Learning

DATASHEET

## A deep learning algorithm



### KEY BENEFITS

- ▶ Real-time automatic counting and classification
- ▶ Based on AI and Deep Learning technology
- ▶ Multimodal counts in a single system
- ▶ Flexible and non-intrusive solutions
- ▶ Camera agnostic

### Application areas

Common situations where the Traffic Statistics Deep Learning solution is used are:

- Traffic data collection and monitoring
- Reports based on aggregated or individual data
- Urban planning
- Reports and actionable insights to help evaluate the effectiveness
- Pedestrian and bicycle traffic studies
- Temporary traffic studies
- Potential integration in open data platform

### A deep-learning algorithm

The Traffic Statistics Deep Learning solution provides real-time automatic counting and classification of pedestrians and vehicles.

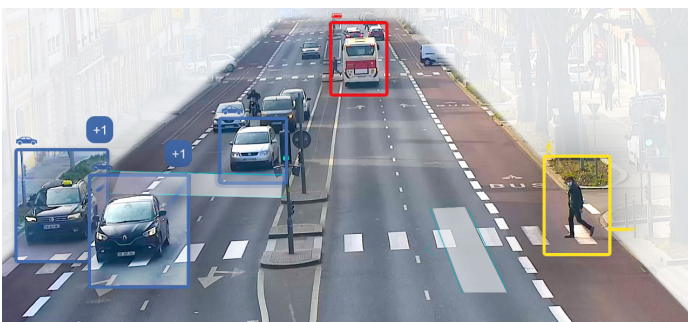
This innovative algorithm relies on Artificial Intelligence and Deep Learning technology and so provides outstanding performance and accuracy in terms of object detection. This approach is perfect in situations with challenging contexts, such as multiple types of road users and different movement patterns.

The solution can categorise many sorts of vehicles, even if they have similar dimensions and shape, without being disturbed by sources of false detection. It provides verifiable, statistical data and offers the possibility to, in real time, watch the trajectories of passing vehicles.

### Flexibility and scalability

The Traffic Statistics Deep Learning solution is able to manage a diversity of contexts, including complex situations.

It is an easy to maintain and non-intrusive solution. The configuration does not require any specific calibration and it is ready to use as soon as it is deployed. It can be easily reconfigured if the traffic lane scheme is altered. No additional maintenance is required in comparison to video-surveillance cameras, and there is no need for road closure to manage it.



## TECHNICAL INFORMATION

<b>Contexts</b>	:	Fluid and congested traffic Bidirectional and monodirectional Dedicated and mixed lanes for all the managed classes
<b>Type of zone</b>	:	Traffic Vulnerable Bicycle Pedestrian
<b>Classification</b>	:	Car Truck Bus Motorcycle Bicycle Pedestrian
<b>Availability</b>	:	24/7 functioning
<b>Camera Compatibility</b>	:	Any camera with Real Time Streaming Protocol (RTSP) support New cameras or existing CCTV-systems
<b>Frame Rate</b>	:	Up to 25/30 fps
<b>Resolution</b>	:	1920*1080 to 800*450 (16:9)
<b>Communication</b>	:	XML TMU Communications protocol (for TagMaster VDA-net platform)
<b>System Architecture</b>	:	Centralised and on-site light architecture
<b>Approval</b>	:	GDPR compliant

Due to TagMaster's continuous effort to develop the products in response to customer needs, the above specifications are subject to change.