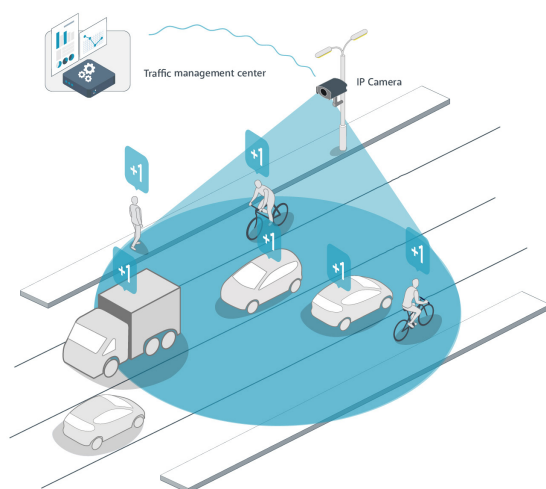


Traffic Statistics Video Detection

DATASHEET

A deep learning algorithm



KEY BENEFITS

- ▶ Real-time automatic counting and classification
- ▶ Based on Artificial Intelligence and Deep Learning technology
- ▶ Multimodal counts in a single system with a focus on vulnerable road users
- ▶ Flexible and non-intrusive solutions
- ▶ Camera agnostic

Application areas

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

- Traffic data collection and monitoring
- Traffic reports based on aggregated on 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.

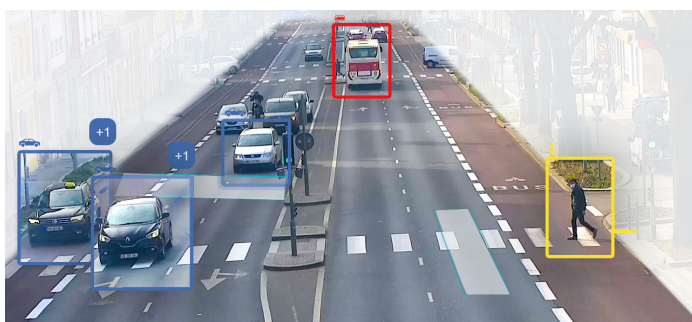
This innovative algorithm relies on Artificial Intelligence and Deep Learning technology and so provides outstanding performance and accuracy in terms of object detection. This approach is perfect in situations with challenging contexts, such as multiple types of road users and different movement patterns.

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

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

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