



TICx02

Reliable vehicle classification with optional axle counting

SICK
Sensor Intelligence.

Contact-free axle counting over several lanes



Additional module: Axle Counter

With electronic toll collection systems, along with the toll route, the vehicle type is the decisive factor for calculating the toll. The vehicle type can be determined using different criteria: In addition to the vehicle size and vehicle profile, the number of axles is used as a reliable variable for accurate specification of vehicle classes, and therefore calculation of the appropriate toll.

The Axle Counter, an additional module for the TICx02 and Free Flow Profiler profiling systems from SICK, is perfectly suited to this task. It enables the precise detection and counting of vehicle axles, even on multi-lane roads and in free-flowing traffic.

Find out more



Technical data overview

Application	Traffic management Toll collection
System components	LMS111 (2 x) LMS511 SE (2 x) (depending on type)
Scanner design	2-scanner solution
Installation position	Overhead
Integrated application	Vehicle classification Vehicle counting Axle counting Speed monitoring (depending on type)
Axle counting option	Yes, by means of additional LMS511 SE
Number of covered lanes	1
System extension	Up to 4 lanes
Trigger lines	Max. 20 m
Counting accuracy	> 99.8 % / > 99.85 % (depending on type)
Classification accuracy	Typ. 98 % (For TLS8+1 classes)
Weight	16.1 kg 15 kg 12.8 kg 12 kg
Ambient operating temperature	-40 °C ... +60 °C, Protection against direct sunlight is required to prevent overheating. (depending on type)

Product description

The TICx02 (traffic information controller) profiling system accurately classifies vehicles in free-flowing traffic. The vehicles are scanned up to 100 times a second using eye-safe 2D LiDAR sensors. The measurement data can be used to generate a 3D model of each vehicle. The system can also be expanded to include axle counting functionality. The TICx02 uses the recorded database for classifying vehicles in up to 30 classes. The identification of vehicle speed and direction of movement rounds out the detection of traffic data.

At a glance

- High-precision vehicle classification
- Additional axle counting
- Data output as a point cloud
- Data history of the last 50 vehicles detected in the user interface
- TCP/IP interface for data transmission
- Event logging and monitoring of system status

Your benefits

- Reliable vehicle detection and classification in free-flowing and stop-and-go traffic
- Flexible output of up to 30 vehicle classes, e.g. TLS 8+1, TLS 5+1, TLS 2+1 or Swiss 10
- Optional non-contact axle counting in multi-lane traffic sites
- ANPR, WIM and RFID transponders can also be integrated
- Can be used in all climate zones from -40 °C to +60 °C thanks to the expanded temperature range
- Quick data access due to storage directly in the customer system via FTP or UNC transmission
- Easy commissioning and operation thanks to an intuitive configuration wizard
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Fields of application

- Basis for toll systems
- Traffic analysis
- Traffic jam detection

Ordering information

Other models and accessories → www.sick.com/TICx02

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com