



# TIC502 Master

TICx02

PROFILING SYSTEMS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
TIC502 Master	1085137

**Included in delivery:** Traffic Controller TIC (1), LMS511 SE (2)

Other models and accessories → [www.sick.com/TICx02](http://www.sick.com/TICx02)



### Detailed technical data

#### Features

<b>Application</b>	Traffic management Toll collection
<b>System part</b>	TIC502 Master (With supplied Traffic Controller TIC)
<b>System components</b>	LMS511 SE (2 x)
<b>Number of covered lanes</b>	1
<b>System extension</b>	Up to 4 lanes
<b>Axle counting option</b>	Yes, by means of additional LMS511 SE
<b>Scanner design</b>	2-scanner solution
<b>Vehicle data</b>	Lane assignment Vehicle classes Speed monitoring Driving direction Confidence level for all vehicle datas Point cloud
<b>Amount of vehicle classes</b>	Up to 30 classes
<b>Recommended distance between max. vehicle height and sensor</b>	> 1.5 m,
<b>Stop-and-go functionality</b>	Yes
<b>Laser class</b>	1, eye-safe (IEC 60825-1:2014)
<b>Internal computer</b>	Traffic Controller TIC
<b>Trigger lines</b>	Max. 20 m
<b>Application</b>	Vehicle classification, vehicle counting, Speed monitoring, Axle counting

#### Mechanics/electronics

<b>Supply voltage</b>	24 V DC (22.8 V DC ... 25.2 V DC)
<b>Power consumption</b>	164 W, With heating 54 W, without heating
<b>Housing dimensions (W x D x H)</b>	498 mm x 411 mm x 191 mm (Only mounting plate with pre-installed LMS511 SE)
<b>Weight</b>	12.8 kg
<b>Installation position</b>	Overhead
<b>Installation height</b>	6 m: 5 m ... 8 m

## Performance

<b>Counting accuracy</b>	> 99.85 %
<b>Classification accuracy</b>	Typ. 98 % (For TLS8+1 classes)
<b>Speed accuracy</b>	± 3 km/h, at < 100 km/h, ± 3 %, At > 100 km/h <sup>1)</sup>

<sup>1)</sup> Only for vehicles with directional stability which pass under the LMS Length.

## Interfaces

<b>NTP synchronization</b>	✓
<b>Ethernet</b>	✓
Function	Operator interface, sensor interface
Data transmission rate	10/100 MBit/s
Protocol	TEMS Info Interface (TCP/IP Interface) TEMS Manager (HTTP configuration software)

## Ambient data

<b>Ambient operating temperature</b>	-40 °C ... +60 °C
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C

## General notes

<b>Items supplied</b>	LMS511 SE 2D LiDAR sensors pre-installed on a mounting plate Traffic Controller TIC with TIC software including USB Stick with TEMS info sample client, source code for TEMS info sample client, TEMS analyzer and operating instructions
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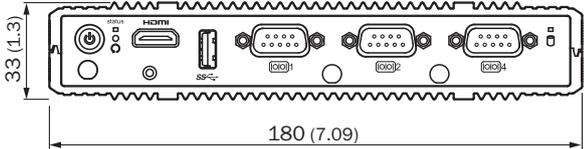
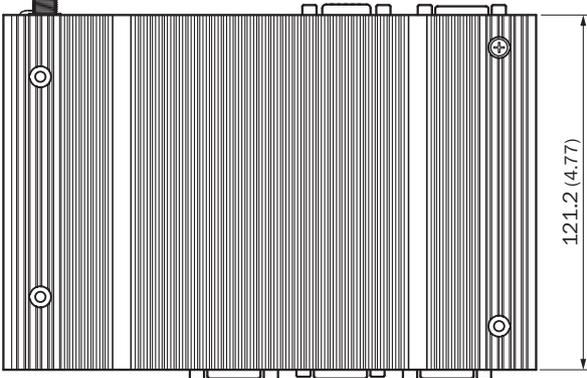
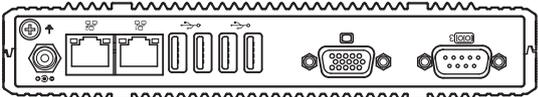
## Certificates

<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>China RoHS</b>	✓

## Classifications

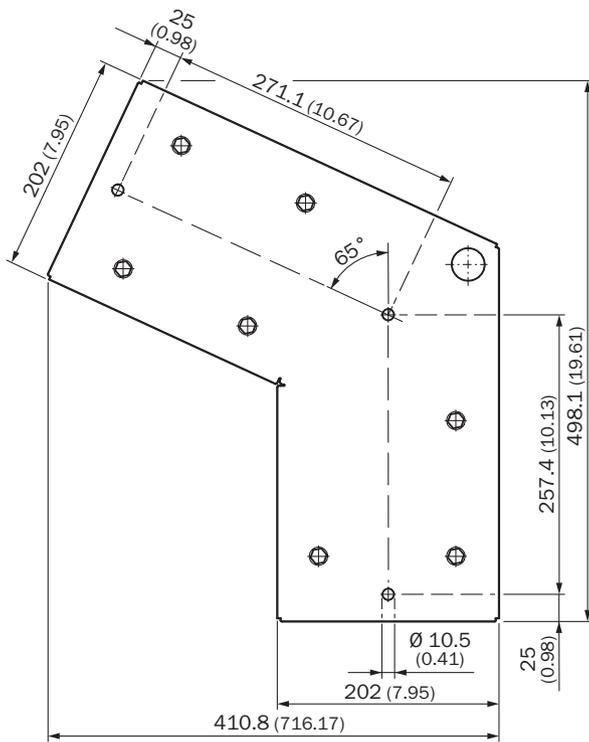
<b>ECLASS 5.0</b>	27281001
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<b>ECLASS 7.0</b>	27280190
<b>ECLASS 8.0</b>	27280190
<b>ECLASS 8.1</b>	27280190
<b>ECLASS 9.0</b>	27280190
<b>ECLASS 10.0</b>	27280190
<b>ECLASS 11.0</b>	27280190
<b>ECLASS 12.0</b>	27280190
<b>UNSPSC 16.0901</b>	41111615

Dimensional drawing Traffic Controller TIC



Dimensions in mm (inch)

## Dimensional drawing Mounting plate



Dimensions in mm (inch)

## Recommended accessories

Other models and accessories → [www.sick.com/TICx02](http://www.sick.com/TICx02)

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 20 m, 4-wire, CAT5, CAT5e, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Cold bending resistant, Outdoor, Zones with oils and lubricants, seawater resistant</li> </ul>	YM2D34-200P-N4MRJA4	6050685
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Cable:</b> 20 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Shielded</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A64-200UE1XLEAX	6050687

## 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](http://www.sick.com)