



# TIC102 Master

TICx02

PROFILING SYSTEMS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
TIC102 Master	1055102

**Included in delivery:** Traffic Controller TIC (1), LMS111-10100S05 (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>	TIC102 Master (integrated control unit)
<b>System components</b>	LMS111 (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>	Vehicle class (selectable category systems with up to 30 classes) Lane assignment Confidence level for all vehicle datas Driving direction 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>Heating</b>	✓
<b>Internal computer</b>	Traffic Controller TIC
<b>Application</b>	Vehicle classification, vehicle counting, Axle counting, Axle counting

#### Mechanics/electronics

<b>Supply voltage</b>	24 V DC (22.8 V DC ... 25.2 V DC)
<b>Power consumption</b>	130 W, With heating 51 W, without heating
<b>Housing dimensions (W x D x H)</b>	355 mm x 482 mm x 373 mm
<b>Weight</b>	16.1 kg
<b>Installation position</b>	Overhead
<b>Installation height</b>	6 m: 5 m ... 8 m
<b>Enclosure rating</b>	IP66 (EN 60529)

## Performance

<b>Counting accuracy</b>	> 99.8 %
<b>Classification accuracy</b>	Typ. 98 % (For TLS8+1 classes)

## Interfaces

<b>NTP synchronization</b>	✓
<b>Ethernet</b>	✓ (3)
Function	Operator interface, sensor interface
Data transmission rate	1 Gbit/s, for each interface
Protocol	TEMS Info Interface (TCP/IP Interface) TEMS Manager (HTTP configuration software)
Electrical connection	1 x connector ETH_Host (M12) for operator interface, 2 x connector ETH_Internal (M12) for sensor interface

## Ambient data

<b>Ambient operating temperature</b>	-20 °C ... +50 °C, Protection against direct sunlight is required to prevent overheating.
<b>Ambient temperature, storage</b>	-40 °C ... +70 °C

## General notes

<b>Items supplied</b>	System housing including 2x 2D LiDAR sensors 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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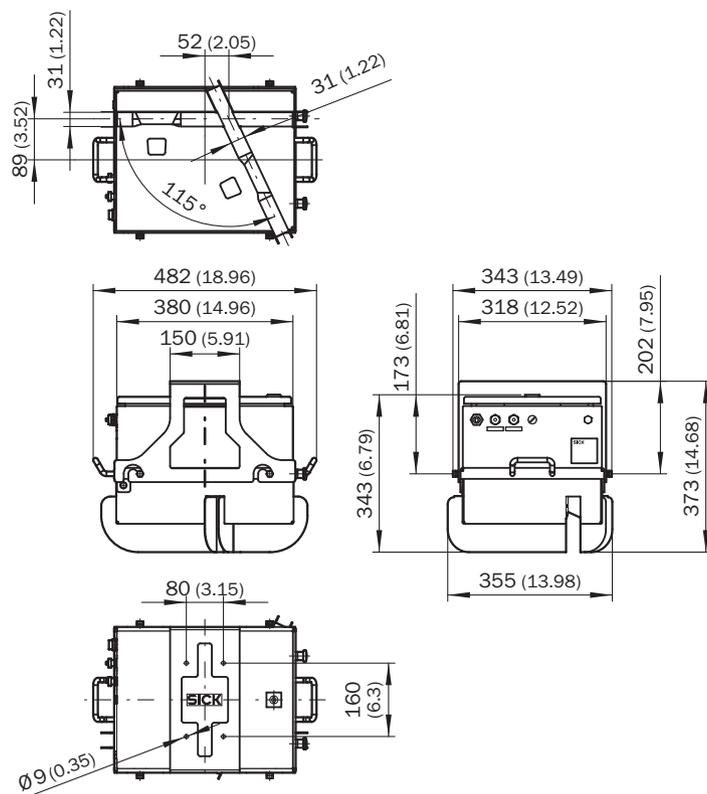
## Certificates

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

## Classifications

<b>ECLASS 5.0</b>	27281001
<b>ECLASS 5.1.4</b>	27280190
<b>ECLASS 6.0</b>	27280190
<b>ECLASS 6.2</b>	27280190
<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



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> Female connector, 7/8", 5-pin, straight</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Cable:</b> 30 m, 5-wire</li> <li><b>Description:</b> Shielded</li> <li><b>Connection systems:</b> Flying leads</li> </ul>	Connecting cable (female connector - open)	6045327
	<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> 30 m, 4-wire, AWG26, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> </ul>	YM2D24-300EA1M-RJA4	6045311
Mounting systems			
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting bracket</li> </ul>	Mounting bracket	4068061
device protection and care			
	<ul style="list-style-type: none"> <li><b>Description:</b> Weather hood for TIC102</li> </ul>	Weather protection hood	4068062

## 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)