



# TLOC100-100

Triton Floor-LOC

LOCALIZATION SYSTEMS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
TLOC100-100	6087307

Other models and accessories → [www.sick.com/Triton\\_Floor-LOC](http://www.sick.com/Triton_Floor-LOC)



### Detailed technical data

#### Features

<b>Description</b>	Triton Floor-LOC is an image-based localization system for mobile robots which uses microstructures of a floor to determine the position of the vehicle.
<b>Application</b>	Localization of mobile robots in logistics and production
<b>Output data</b>	Absolute position (x, y, direction angle) Relative position (visual odometry)
<b>Localization accuracy</b>	< 1 mm, position (on mapped texture) < 0.3°, orientation
<b>Position output</b>	At up to 150 Hz
<b>Odometry support</b>	Wheel odometry must be integrated.
<b>Reading distance</b>	40 mm, ± 5 mm
<b>Speed</b>	Typ. 1.5 m/s, translatory (up to 3 m/s with upgrade)
<b>Optical indicators</b>	4 (LEDs) Multi-coloured for joint status display
<b>Lighting</b>	24 LEDs 850 nm, ± 30 nm, IR
<b>LED class</b>	0 - exempt risk group (IEC 62471:2006-07, EN 62471:2008-09)
<b>Map size</b>	Total length: 40 km Area (grid): approx. 40 000 m²
<b>Weight</b>	600 g
<b>Housing material</b>	Aluminum
<b>Housing dimensions (W x D x H)</b>	110 mm x 110 mm x 40 mm

#### Mechanics/electronics

<b>Supply voltage</b>	24 V DC, ± 15 %
<b>Power consumption</b>	Typ. 15 W (6 W standby mode)
<b>Electrical safety</b>	IEC 61010-1:2010-06+AMD1:2016
<b>Enclosure rating</b>	EN 60529, EN 60529/A2
<b>Protection class</b>	III (IEC 61140:2016-11)

#### Interfaces

<b>Ethernet</b>	✓
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	Type	TCP/IP
	Function	Data output, configuration
	Data transmission rate	10/100/1,000 Mbit/s
<b>Optical indicators</b>		4, LEDs, multi-coloured for joint status display
<b>Connection type</b>		1 x M12, 5-pin plug 1 x M12, 8-pin Ethernet socket
<b>Driver</b>		ROS, C++

#### Ambient data

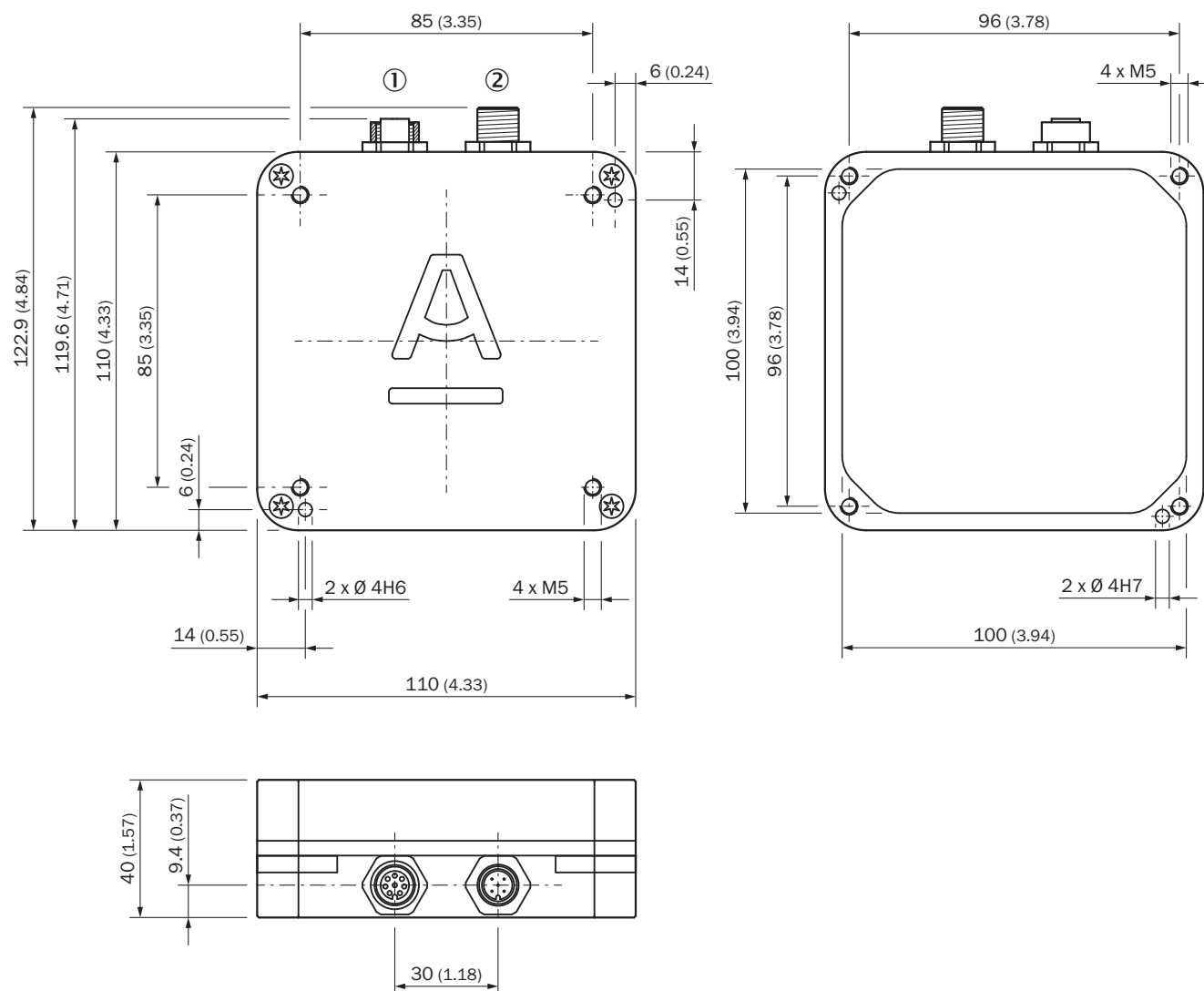
<b>Ambient operating temperature</b>	0 °C ... +40 °C, While taking account of the mounting requirements described, see operating instructions.
<b>Floor types</b>	All concrete floors and many other textured industrial floors. <sup>1)</sup>
<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-3:2007+A1:2011 / EN 61000-6-2:2019

<sup>1)</sup> Compatibility can be easily tested.

#### Certificates

<b>EU declaration of conformity</b>	✓
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## Dimensional drawing



Dimensions in mm (inch)

- ① M12, 8-pin Ethernet socket
- ② Plug, M12, 5-pin

## 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)