



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



Detailed technical data

Features

Description	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.
Application	Localization of mobile robots in logistics and production
Output data	Absolute position (x, y, direction angle) Relative position (visual odometry)
Localization accuracy	< 1 mm, position (on mapped texture) < 0.3°, orientation
Position output	At up to 150 Hz
Odometry support	Wheel odometry must be integrated.
Reading distance	40 mm, ± 5 mm
Speed	Up to 2.5 m/s with Clock Syncing
Optical indicators	4 (LEDs) Multi-coloured for joint status display
Lighting	24 LEDs 850 nm, ± 30 nm, IR
LED class	0 - exempt risk group (IEC 62471:2006-07, EN 62471:2008-09)
Map size	Total length: 40 km Area (1x1 m grid): approx. 20 000 m ²
Weight	600 g
Housing material	Aluminum
Dimensions, system (L x W x H)	110 mm x 110 mm x 40 mm

Mechanics/electronics

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

Interfaces

Ethernet	✓
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Type	TCP/IP
Function	Data output, configuration
Data transmission rate	10/100/1,000 Mbit/s
Optical indicators	4, LEDs, multi-coloured for joint status display
Connection type	1 x M12, 5-pin plug 1 x M12, 8-pin Ethernet socket
Driver	ROS, ROS2, C++

Ambient data

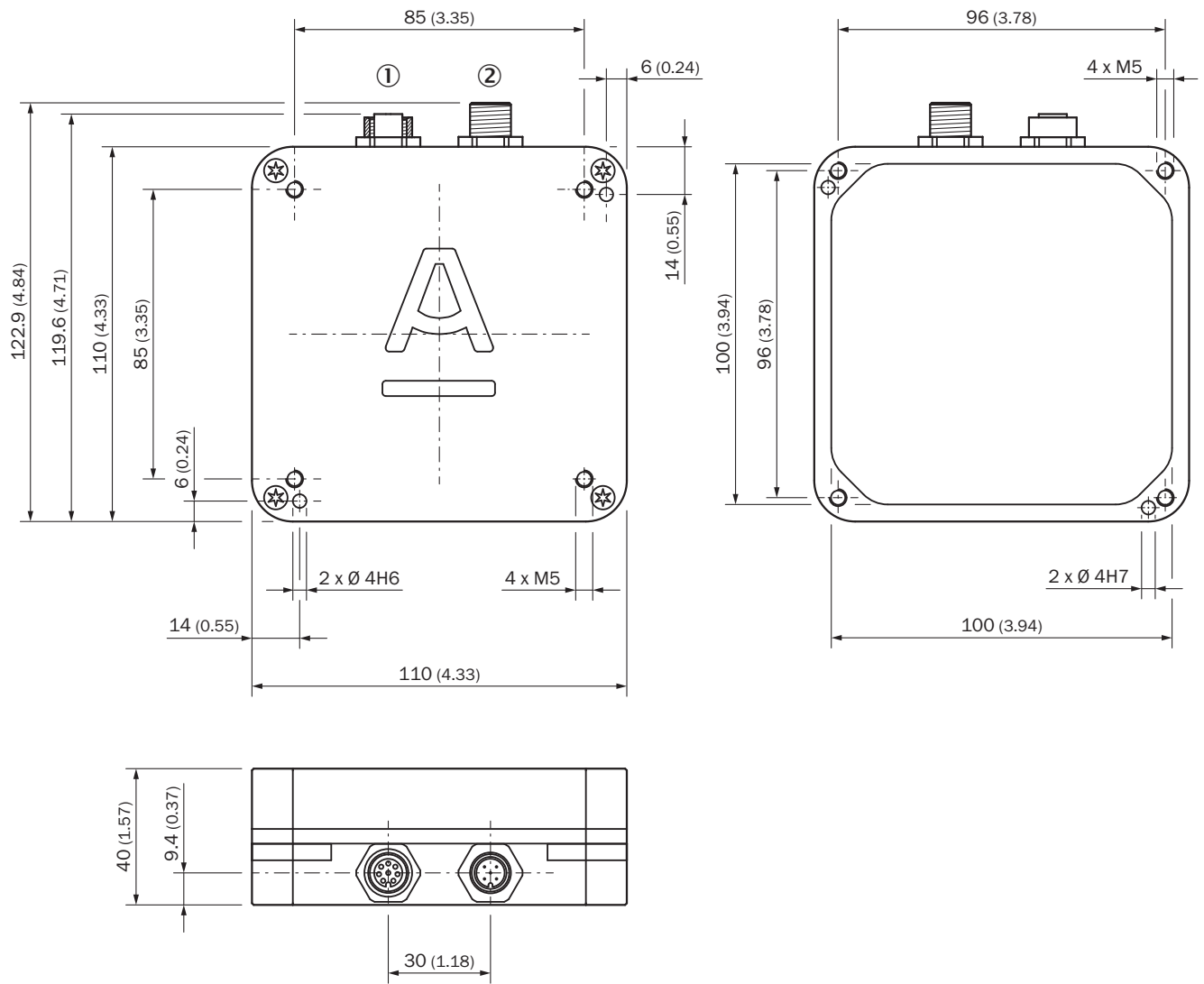
Ambient operating temperature	0 °C ... +40 °C, While taking account of the mounting requirements described, see operating instructions.
Floor types	All concrete floors and many other textured industrial floors. ¹⁾
Electromagnetic compatibility (EMC)	EN 61000-6-3:2007+A1:2011 / EN 61000-6-2:2019

¹⁾ Compatibility can be easily tested.

Certificates

EU declaration of conformity	✓
KC Mark certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

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