



TIM310-1130000

TiM3xx

2D LASER SCANNERS

**SICK**  
Sensor Intelligence.



Ordering information

Type	Part no.
TIM310-1130000	1056550

Other models and accessories → [www.sick.com/TiM3xx](http://www.sick.com/TiM3xx)



Detailed technical data

Features

<b>Field of application</b>	Indoor
<b>Light source</b>	Infrared (850 nm)
<b>Laser class</b>	1, eye-safe (EN 60825-1 (2007-10))
<b>Aperture angle</b>	270°
<b>Scanning frequency</b>	15 Hz
<b>Angular resolution</b>	1°
<b>Operating range</b>	0.05 m ... 4 m
<b>Max. range with 10 % reflectivity</b>	2 m

Performance

<b>Response time</b>	Typ. 134 ms
<b>Detectable object shape</b>	Almost any
<b>Systematic error</b>	± 40 mm <sup>1)</sup>
<b>Statistical error</b>	± 30 mm <sup>1)</sup>
<b>Integrated application</b>	Field evaluation
<b>Number of field sets</b>	16 field triples (48 fields, 1 triple (3 fields) programmable directly at the scanner)
<b>Simultaneous evaluation cases</b>	1 (3 fields)

<sup>1)</sup> Typical value; actual value depends on environmental conditions.

Interfaces

<b>USB</b>	✓, micro USB
Function	AUX, parameterization
<b>Switching inputs</b>	4 (PNP)
<b>Switching outputs</b>	3 (PNP, Additional 1 x "Device Ready")
<b>Delay time</b>	134 ms ... 30,000 ms (programmable)
<b>Dwell time</b>	67 ms ... 10,000 ms (programmable)
<b>Optical indicators</b>	2 LEDs (ON, switching status)

## Mechanics/electronics

<b>Electrical connection</b>	1 x M12 12-pin male connector (0.8 m)
<b>Operating voltage</b>	9 V DC ... 28 V DC
<b>Power consumption</b>	3 W
<b>Housing color</b>	Light blue (RAL 5012)
<b>Enclosure rating</b>	IP 65 (EN 60529/A1:2000-02)
<b>Protection class</b>	III (EN 60950-1/A11 (2009-03))
<b>Weight</b>	150 g, without connecting cables
<b>Dimensions (L x W x H)</b>	60 mm x 60 mm x 79 mm

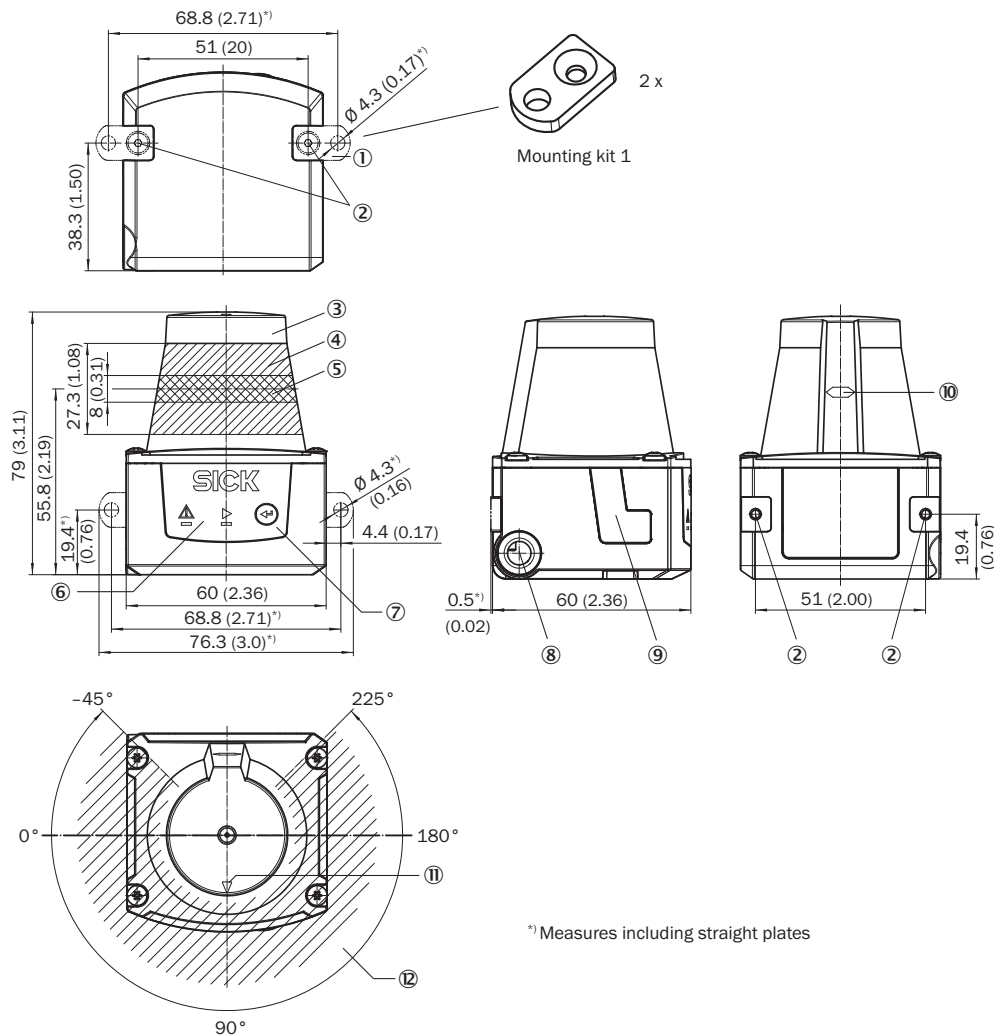
## Ambient data

<b>Object remission</b>	4 % ... > 1,000 % (reflectors)
<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-3 (2007-01) / EN 61000-6-2 (2005-08)
<b>Vibration resistance</b>	EN 60068-2-6 (2008-02)
<b>Shock resistance</b>	EN 60068-2-27 (2009-05)
<b>Ambient operating temperature</b>	-10 °C ... +50 °C
<b>Storage temperature</b>	-30 °C ... +70 °C
<b>Ambient light immunity</b>	15,000 lx

## General notes

<b>Note on use</b>	Not suitable for personnel protection
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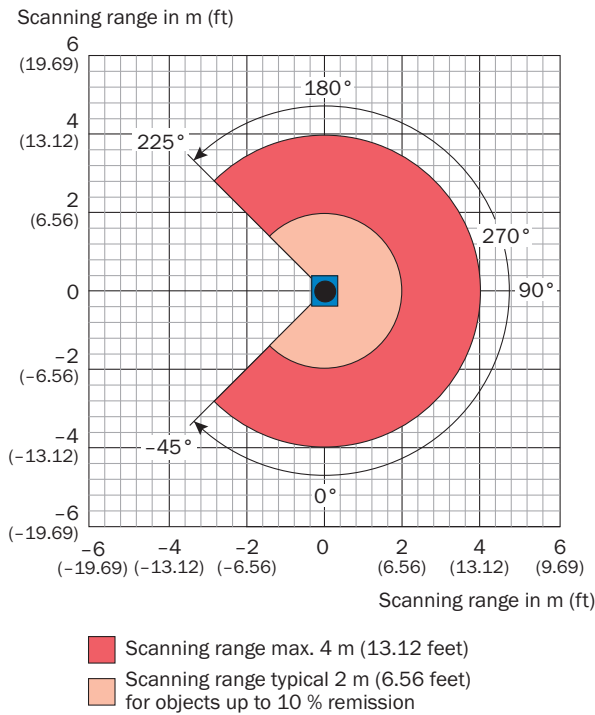
Dimensional drawing (Dimensions in mm (inch))



<sup>\*)</sup> Measures including straight plates




- ① 2 x straight plates with M3 x 4 mm screw (included in delivery)
- ② M3 threaded mounting hole, 2.8 mm deep (blind hole thread)
- ③ Optical hood
- ④ Receiving range (light inlet)
- ⑤ Transmission range (light emission)
- ⑥ Red and green LED (status displays)
- ⑦ Function button for teach-in
- ⑧ Connecting cable exit ("power/switching inputs/outputs" connection)
- ⑨ Micro USB female connector, type B
- ⑩ Marking for the position of the light emission level
- ⑪ Bearing marking to support alignment (90° axis)
- ⑫ Aperture angle 270° (scanning angle)

## Operating range diagram



## Recommended accessories

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	Brief description	Type	Part no.
<b>Mounting brackets and mounting plates</b>			
	1 piece, mounting set 2, fender and alignment aid	Mounting kit 2	2061776
<b>Plug connectors and cables</b>			
	Head A: female connector, M12, 12-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (female connector - open)	6054974
		Connecting cable (female connector - open)	6042735
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106
<b>Cleaning agent</b>			
	Plastic cleaner and care product, anti-static, 0.5 liter	Plastic cleaner	5600006

## 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.”

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Contacts and other locations –[www.sick.com](http://www.sick.com)