Online data sheet



TIM310-1030000S02

TiM3xx

2D LASER SCANNERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
TIM310-1030000S02	1062221

Other models and accessories → www.sick.com/TiM3xx

Detailed technical data

Features

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

Performance

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

[1)] Typical value; actual value depends on environmental conditions.

Interfaces

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

Mechanics/electronics

Electrical connection	1 x 15-pin D-sub HD male connector (0.9 m)
Operating voltage	9 V DC ... 28 V DC
Power consumption	3 W
Housing color	Light blue (RAL 5012)
Enclosure rating	IP 65 (EN 60529/A1:2000-02)
Protection class	III (EN 60950-1/A11 (2009-03))
Weight	150 g, without connecting cables
Dimensions (L x W x H)	60 mm x 60 mm x 79 mm

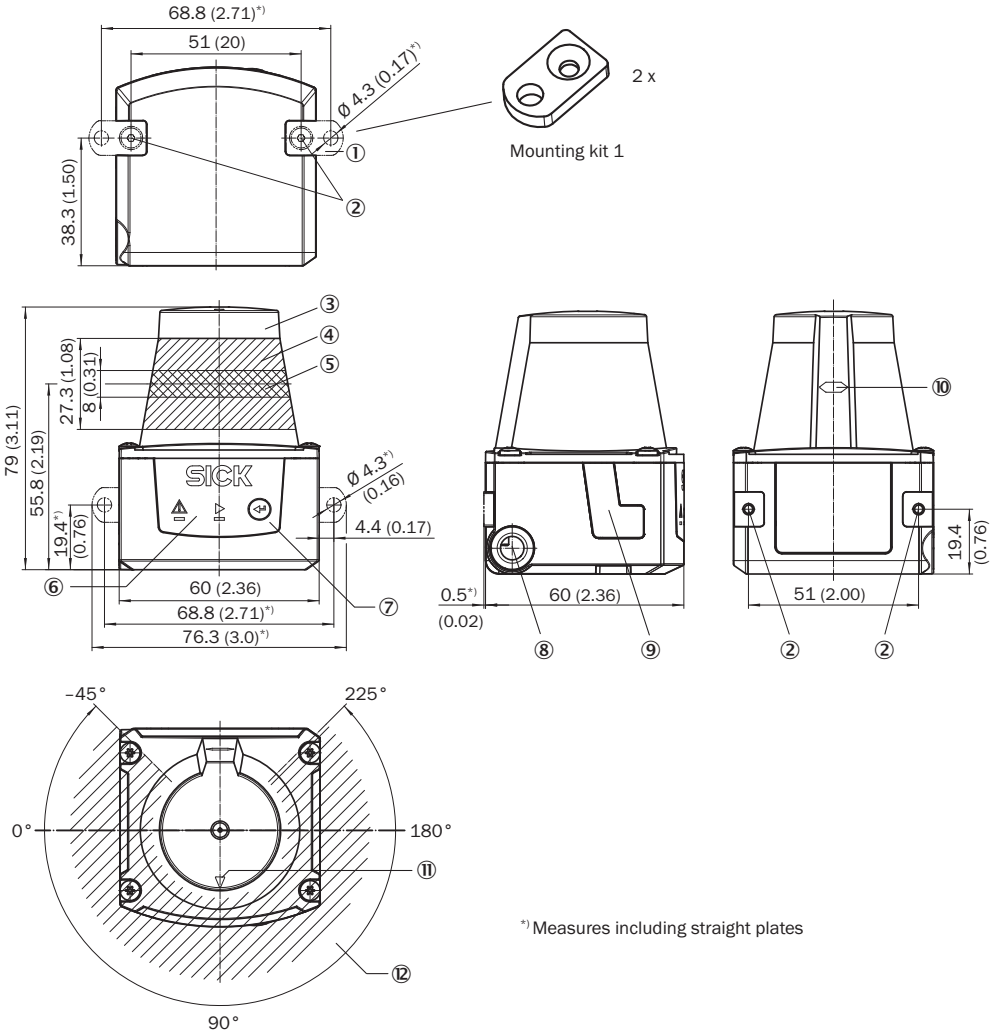
Ambient data

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

General notes

Note on use	Not suitable for personnel protection

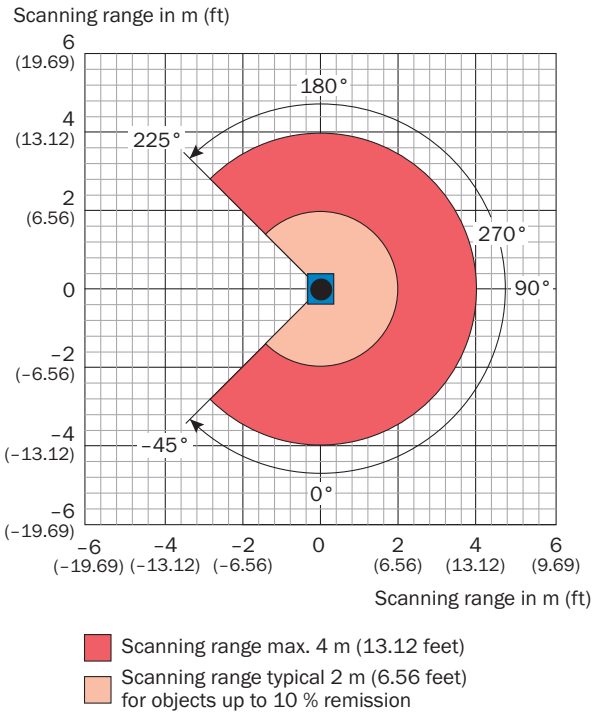
Dimensional drawing (Dimensions in mm (inch))



*) 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

Other models and accessories ➜ www.sick.com/TiM3xx

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	1 piece, mounting set 2, fender and alignment aid	Mounting kit 2	2061776
Modules			
	Small connection module for one sensor, 4 cable glands (only for TiM3xx-10xxxxx)	CDB730-001	1055981
Plug connectors and cables			
	Head A: female connector, D-Sub-HD, 15-pin, straight Head B: cable Cable: Power, serial, CAN, digital I/Os, shielded, 2 m	Extension cable, 2 m (female connector - open)	2043413
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106
Cleaning agent			
	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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com