TIM551-2050001

TiM5xx

2D LASER SCANNERS

SICK
Sensor Intelligence.

TIM551-2050001 | TiM5xx
2D LASER SCANNERS

Ordering information

Type	Part no.
TIM551-2050001	1060445

Other models and accessories ➜ www.sick.com/TiM5xx

Detailed technical data

Features

Field of application	Outdoor
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 ... 10 m
Max. range with 10 % reflectivity	8 m

Performance

Response time	Typ. 67 ms
Detectable object shape	Almost any
Systematic error	± 60 mm
Statistical error	20 mm

Interfaces

Ethernet		✓
USB		✓, micro USB
	Function	AUX, parameterization
Switching inputs		0 (PNP)
Switching outputs		1 (PNP, "SYNC"/"device ready")
Optical indicators		2 LEDs (ON, "device ready")

Mechanics/electronics

Electrical connection	1 x "Ethernet" connection, 4-pin M12 female connector 1 x connection "Power/Synchronization output" 5-pin, M12 male connector 1 x Micro USB female connector, type B
Operating voltage	9 V DC ... 28 V DC
Power consumption	4 W

Housing color	Gray (RAL 7032)
Enclosure rating	IP 67 (EN 60529/A1:2000-02)
Protection class	III (EN 60950-1/A11 (2009-03))
Weight	250 g, without connecting cables
Dimensions (L x W x H)	60 mm x 60 mm x 86 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	−25 °C ... +50 °C
Storage temperature	−40 °C ... +75 °C
Ambient light immunity	80,000 lx

General notes

Note on use	Not suitable for personnel protection

Classifications

ECl@ss 5.0	27270990
ECl@ss 5.1.4	27270990
ECl@ss 6.0	27270913
ECl@ss 6.2	27270913
ECl@ss 7.0	27270913
ECl@ss 8.0	27270913
ECl@ss 8.1	27270913
ECl@ss 9.0	27270913
ETIM 5.0	EC002550
ETIM 6.0	EC002550
UNSPSC 16.0901	46171620

Dimensional drawing (Dimensions in mm (inch))
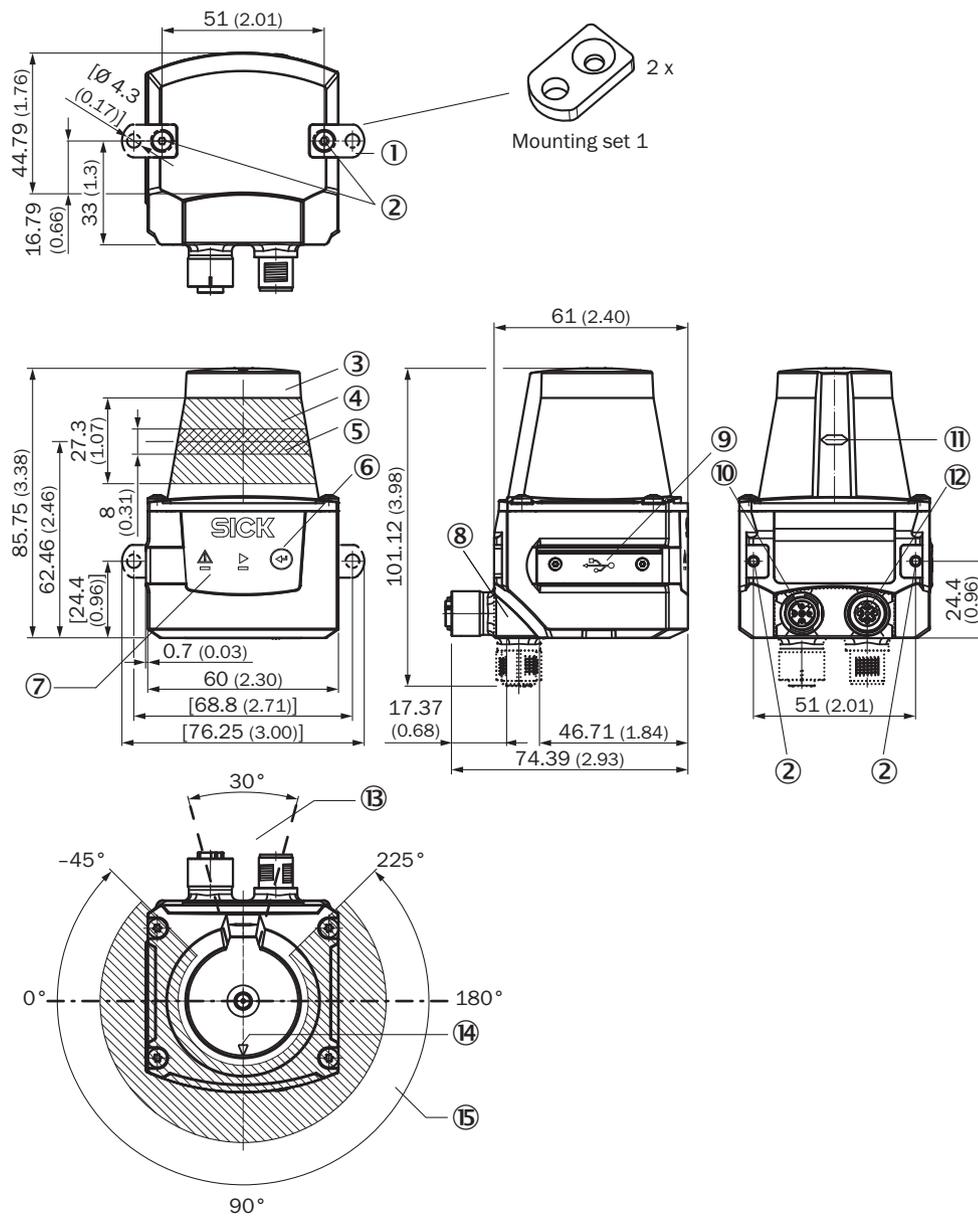
① 2 x straight plates with M3 x 4 mm screw (included in delivery)
② M3 threaded mounting hole, 2.8 mm deep (blind hole thread)
③ Optical hood
④ Receiving range (light inlet)
⑤ Transmission range (light emission)
⑥ Push-button (no function)
⑦ Red and green LED (status displays)
⑧ Swivel connector unit
⑨ Micro USB female connector, type B
⑩ Connection "Power/Synchronization output" 5-pin, M12 male connector
⑪ Marking for the position of the light emission level
⑫ "Ethernet" connection, 4-pin M12 female connector
⑬ Area in which no reflective surfaces are allowed for mounted devices
⑭ Bearing marking to support alignment (90° axis)
⑮ Aperture angle 270° (scanning angle)

Operating range diagram

Scanning range in m (feet)

Scanning range in m (feet)

■ Scanning range max. 10 m (32.81 feet)

■ Scanning range typical 8 m (26.25 feet)
for objects up to 10 % remission
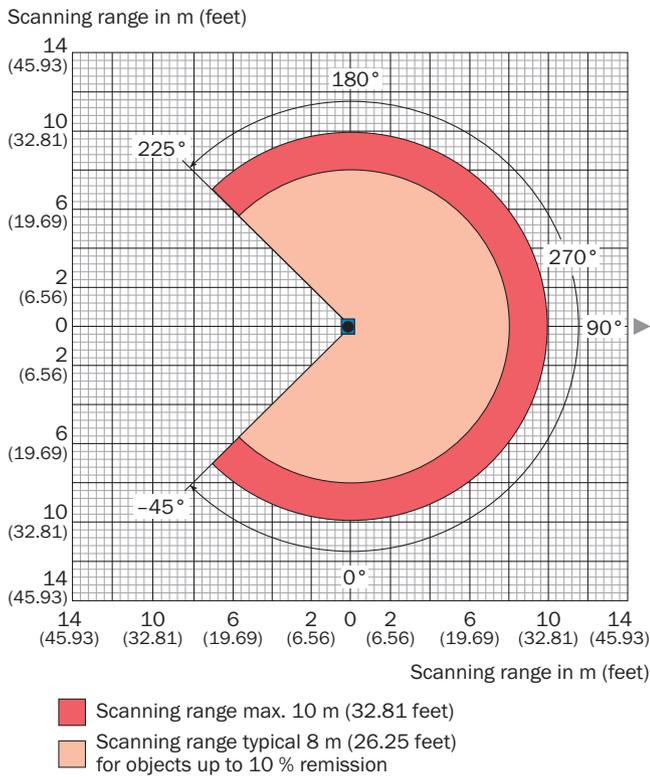
Recommended accessories

Other models and accessories ➜ www.sick.com/TiM5xx

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting kit with sun shade/weather protection	Mounting kit	2068398
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: cable Cable: Power, shielded, 5 m	Connecting cable (female connector - open)	6036159
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, suitable for refrigeration, shielded, 5 m	Connection cable (male connector-male connector)	6050200
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, drag chain use, PUR, shielded, 5 m	SSL-2J04-G05ME	6034415

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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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