



Laser scanners  
TiM5xx / TiM55x

TiM551-2050001



**Model Name** > [TIM551-2050001](#)  
**Part No.** > [1060445](#)



#### At a glance

- Monitoring area of up to 235 m<sup>2</sup> with just one sensor
- High ambient light tolerance due to HDDM technology
- Rugged housing with up to an IP 67 enclosure rating
- Low power consumption of just 3 W
- Compact design with a housing height of just 86 mm maximum
- Integrated Ethernet interface
- Long sensing range of up to max. 10 m
- Industry-standard design and M12 male connector

#### Your benefits

- Reliable object detection independent of the surface and ambient light
- Rugged IP 67 housing withstands both indoor and outdoor conditions
- Easy integration into compact automated guided vehicles (AGV) due to small size
- Ethernet interface makes easy implementation and remote maintenance possible
- Can determine additional information such as object size, shape, etc. due to measured data output
- Low implementation costs due to scalability: Sensor telegram is identical to sensor telegrams for laser measurement sensors in the SICK portfolio



#### Features

Light source:	Infrared (850 nm)
Laser class:	1 (EN 60825-1 (2007-10)), eye-safe
Field of view:	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

---

Serial (RS-232):	-
Ethernet:	✓
CAN bus:	-
PROFIBUS DP:	-
PROFINET:	-
DeviceNet:	-
USB:	✓
Function (USB):	AUX, parameterization
Remark (USB):	Micro USB
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:	3 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:	60 mm x 60 mm x 86 mm

## Ambient data

---

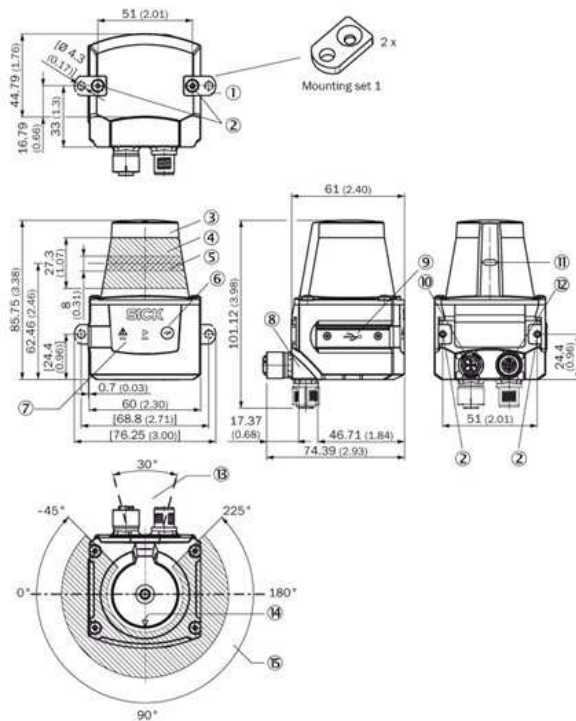
Object remission:	4 % ... > 1,000 % (reflectors)
Electromagnetic compatibility (EMC):	EN 61000-6-3 (2007-01)/EN 61000-6-2 (2005-08)
Vibration resistance:	EN 60068-2-6 (2008-02)
Shock resistance:	EN 60068-2-27 (2009-05)
Ambient operating temperature:	-25 °C ... +50 °C
Storage temperature:	-40 °C ... +75 °C
Ambient light immunity:	80,000 lx

## General notes

---

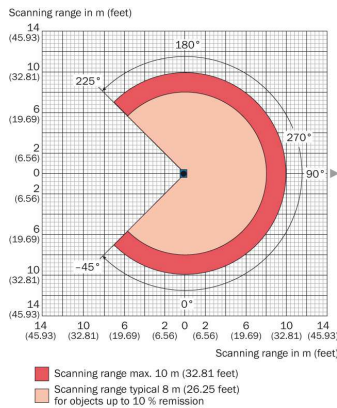
Note on use:	Not suitable for personnel protection
--------------	---------------------------------------

## Dimensional drawing



- [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



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)