



TIM310-1030000

TiM3xx

2D LIDAR SENSORS

SICK
Sensor Intelligence.





Ordering information

Type	Part no.
TIM310-1030000	1052627



Detailed technical data

Features

Measurement principle	HDDM ⁺
Application	Indoor
Light source	Infrared (850 nm)
Laser class	1 (IEC 60825-1:2014, EN 60825-1:2014)
Aperture angle	Horizontal 270°
Scanning frequency	15 Hz
Angular resolution	1°
Working range	0.05 m ... 4 m
Scanning range	At 10% remission 2 m

Mechanics/electronics

Electrical connection	1 x 15-pin D-sub HD male connector (0.9 m)
Supply voltage	9 V DC ... 28 V DC
Power consumption	16 W, With 4 max. loaded switching outputs
Housing color	Light blue (RAL 5012)
Enclosure rating	IP65 (IEC 60529:1989+AMD1:1999+AMD2:2013)
Protection class	III (IEC 61140:2016-1)
Weight	150 g, without connecting cables
Dimensions (L x W x H)	60 mm x 60 mm x 79 mm

Performance

Response time	Typ. 67 ms
Detectable object shape	Almost any
Systematic error	± 40 mm ¹⁾
Statistical error	30 mm ¹⁾

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

Integrated application	Field evaluation
Number of field sets	16 field triples (48 fields, 1 triple (3 fields) can be configured directly at the scanner)
Simultaneous evaluation cases	1 (3 fields)

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

Interfaces

USB	✓
Remark	Micro USB
Function	AUX, parameterization
Digital inputs	4
Digital outputs	3 (PNP, additional 1 x "Device Ready")
Delay time	67 ms ... 30,000 ms (configurable)
Dwell time	67 ms ... 10,000 ms (configurable)
Optical indicators	2 LEDs (ON, switching status)

Ambient data

Object remission	4 % ... > 1,000 % (reflectors)
Electromagnetic compatibility (EMC)	IEC 61000-6-3:2006+AMD1:2010 / IEC 61000-6-2:2005
Vibration resistance	IEC 60068-2-6:2007
Shock resistance	IEC 60068-2-27:2008
Ambient operating temperature	-10 °C ... +50 °C
Storage temperature	-30 °C ... +70 °C
Ambient light immunity	80,000 lx

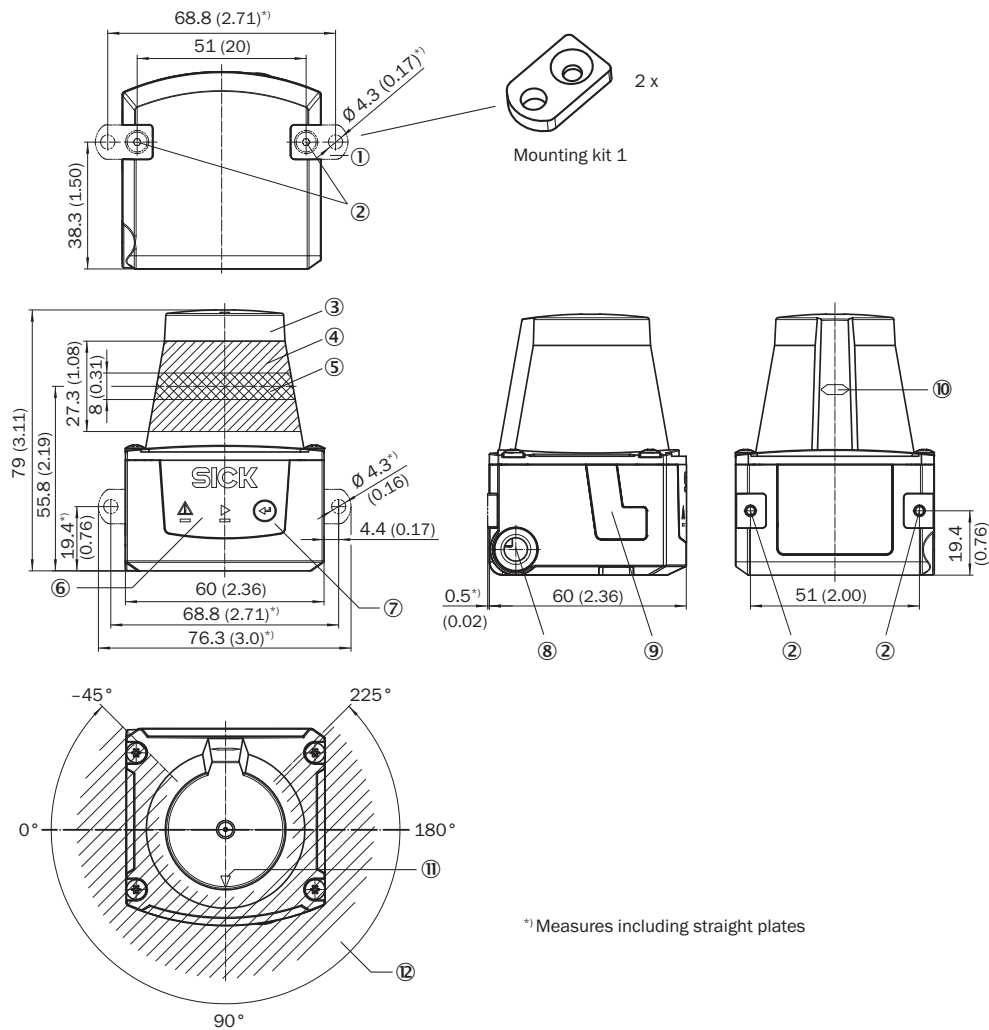
General notes

Note on use	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.
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Classifications

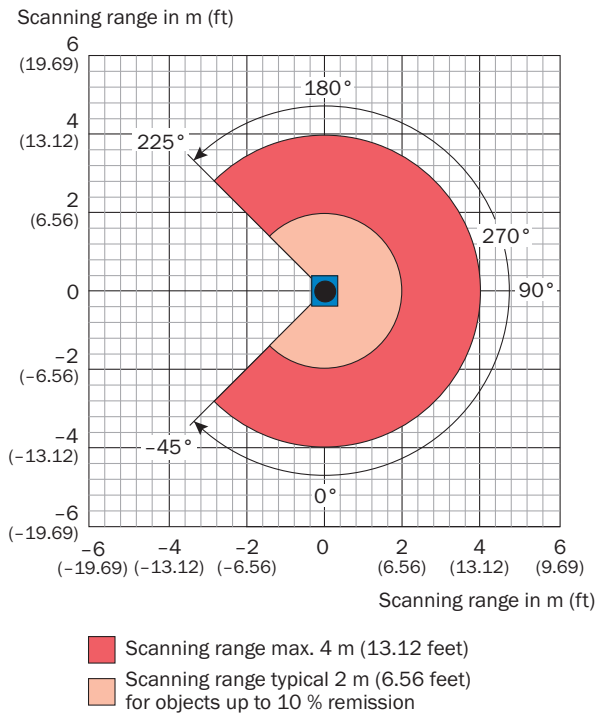
ECl@ss 5.0	27270990
ECl@ss 5.1.4	27270990
ECl@ss 6.0	27270913
ECl@ss 6.2	27270913
ECl@ss 7.0	27270913
ECl@ss 8.0	27270913
ECl@ss 8.1	27270913
ECl@ss 9.0	27270913
ETIM 5.0	EC002550
ETIM 6.0	EC002550
UNSPSC 16.0901	46171620

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 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)

Working range diagram



Recommended accessories

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting set 2, fender and alignment aid	Mounting kit 2	2061776
Plug connectors and cables			
	Head A: female connector, D-Sub-HD, 15-pin, straight Head B: Flying leads Cable: Power, serial, CANopen, 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
Modules			
	Small connection module for one sensor, 4 cable glands (only for TiM3xx-10xxxxx)	CDB730-001	1055981

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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