



TiM3xx

The safe and reliable detection solution

2D LIDAR SENSORS

SICK
Sensor Intelligence.



Technical data overview

Application	Indoor / Outdoor (depending on type)
Measurement principle	HDDM ⁺ / HDDM (depending on type)
Integrated application	Field evaluation, Field evaluation with flexible fields, Protective field evaluation with flexible fields (depending on type)
Aperture angle	Horizontal 270°
Angular resolution	1° 0.33°
Working range	0.05 m ... 10 m, > 90% remission (depending on type)
Scanning range	At 10% remission 2 m ... 8 m (depending on type)
Scanning frequency	15 Hz
Ambient operating temperature	-25 °C ... +50 °C ¹⁾ (depending on type)
USB	✓
Ethernet	✓
Digital inputs	4 4 (PNP, for field set switching)
Digital outputs	3 (NPN, additional 1 x "Device Ready") 3 (PNP, additional 1 x "Device Ready") 3 (PNP, to display a protective field violation, additional 1 x "Device Ready")
Weight	150 g / 250 g (depending on type)

¹⁾ IEC 60068-2-14:2009.

Product description

The TiM3xx 2D LiDAR sensor uses HDDM technology, which minimizes machine downtimes thanks to high measurement accuracy and ambient light immunity. Its monitoring field can reach up to 10 m. Commissioning is quick and easy thanks to 16 preconfigured field sets (each with 3 fields), which are selected via the input circuit. The TiM3xx is flexible, cost-effective, and user-friendly. It is particularly suitable for mobile and stationary applications in factory automation and logistics automation. A version certified for safety-related applications according to EN ISO 13849-1:2015 is also available (TiM3xxS). Low power consumption and a compact and rugged design makes the TiM3xx ideal for use on mobile platforms.

At a glance

- Incredibly compact, light, and economical sensor
- Field evaluation using intelligent software algorithms
- Configuration interface accessible from the side when the device is mounted
- Low power consumption (typically 4 W)
- TiM3xxS only: Certified to Machinery Directive 2006/42/EG and DIN EN ISO 13849-1:2015

Your benefits

- Low operating costs
- Flexible installation due to compact dimensions
- Low implementation and replacement costs due to M12 x 12 or D-Sub male connector
- Long battery service life when used in battery-operated vehicles
- Easy commissioning thanks to preconfigured field sets
- Low costs as a result of monitoring large fields (up to 235 m²) with just one scanner
- No cabling required between sender and receiver
- For TiM3xxS only: Can be used in safety-related applications

Fields of application

- Anti-collision for mobile vehicles and rail-mounted transportation systems
- Presence detection in automated warehouses
- Protection of sculptures and paintings

Ordering information

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

- **Application:** Indoor
- **Integrated application:** Field evaluation
- **Working range:** 0.05 m ... 4 m
- **Number of field sets:** 16
- **Angular resolution:** 1°
- **Measurement principle:** HDDM⁺

Digital outputs	Connection type	Type	Part no.
3 (NPN, additional 1 x "Device Ready")	1 x 15-pin D-sub HD male connector (0.9 m)	TIM310-103000S02	1062221
	Open wires (2.0 m) ¹⁾	TIM310-013000S02	1069932
3 (PNP, additional 1 x "Device Ready")	1 x 15-pin D-sub HD male connector (0.9 m)	TIM310-1030000	1052627
	1 x M12 12-pin male connector (0.8 m)	TIM310-1130000	1056550

¹⁾ Delivery in part with male connector, but it can be disconnected (see "Technical information").

- **Application:** Indoor
- **Integrated application:** Field evaluation with flexible fields
- **Working range:** 0.05 m ... 4 m
- **Number of field sets:** 16
- **Angular resolution:** 1°
- **Measurement principle:** HDDM⁺

Digital outputs	Connection type	Type	Part no.
3 (NPN, additional 1 x "Device Ready")	1 x M12 12-pin male connector (0.8 m)	TIM320-1131000S02	1067919
	Open wires (2.0 m) ¹⁾	TIM320-0131000S02	1069933
3 (PNP, additional 1 x "Device Ready")	1 x 15-pin D-sub HD male connector (0.9 m)	TIM320-1031000	1063467
	1 x M12 12-pin male connector (0.8 m)	TIM320-1131000	1062219

¹⁾ Delivery in part with male connector, but it can be disconnected (see "Technical information").

- **Application:** Outdoor
- **Integrated application:** Field evaluation with flexible fields
- **Working range:** 0.05 m ... 10 m
- **Number of field sets:** 16
- **Connection type:** 1 x "Ethernet" connection, 4-pin M12 female connector, 1 x connection "Power", 12-pin, M12 male connector, 1 x Micro USB female connector, type B
- **Measurement principle:** HDDM⁺

Angular resolution	Digital outputs	Type	Part no.
0.33°	3 (NPN, additional 1 x "Device Ready")	TIM361-2134101S02	1080182
	3 (PNP, additional 1 x "Device Ready")	TIM361-2134101	1071399
1°	3 (NPN, additional 1 x "Device Ready")	TIM351-2134001S02	1080181
	3 (PNP, additional 1 x "Device Ready")	TIM351-2134001	1067299

- **Application:** Indoor
- **Integrated application:** Protective field evaluation with flexible fields
- **Working range:** 0.05 m ... 10 m, > 90% remission
- **Number of field sets:** 16

Angular resolution	Digital outputs	Connection type	Measurement principle	Type	Part no.
0.33°	3 (PNP, to display a protective field violation, additional 1 x "Device Ready")	1 x "Ethernet" connection, 4-pin M12 female connector 1 x connection "Power", 12-pin, M12 male connector 1 x Micro USB female connector, type B	HDDM	TIM361S-2134101	1090608

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