TiM-S

Safety-related sensors for mobile and stationary applications

SAFETY LASER SCANNERS

SICK
Sensor Intelligence.

TiM-S

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Technical data overview

Application	Indoor
Protective field range	4 m / 5 m (depending on type)
Scanning angle	270°
Number of fields	48
Response time	≤ 134 ms1 scan2 scans, ≤ 134 ms [1] 1 scan, typ. 67 ms (depending on type)
Integration in the control system	Local inputs and outputs (I/O)
Safety level	PL b

[1] At +45° to +225° of the working range; max. 150 ms at −45° to +45° of the working range.

Product description

To offer customers a complete, scalable 2D LiDAR sensor portfolio, SICK is supplementing the TiM series to include safety-related sensors which satisfy performance level b: TiM-S devices. They were developed, among other things, for mobile applications such as mobile platforms, automated guided vehicles (AGVs) and mobile service robots. The sensors support localization and collision avoidance in these applications. The TiM-S devices can also be used for safety tasks in stationary applications. Equipped with the HDDM/HDDM+ measurement process, the TiM-S devices are very resistant to ambient light and reliably detect people and objects. The small sensor size and the intuitive commissioning using the SOPAS configuration software enables customized, nearly invisible sensor integration.

At a glance

• Wide detection range: 0.05 m up to maximum 25 m
• Certified according to ISO 13849
• Low power consumption (typically: 4 W, maximum: 16 W)
• Immediate commissioning and configuration via USB interface
• Communication interface which combines intelligent field evaluation and measurement data output

Your benefits

• Coverage of large measuring ranges
• Safety-related dynamic field evaluation and raw data output combined with the newest ROS drivers enable the use of TiM-S devices in nearly any application, both mobile and stationary
• Easy commissioning with rotatable connections and accessories perfectly attuned to the sensors; only a few adjustable SOPAS software parameters are necessary for commissioning
• Certification according to ISO 13849 allows for the use of the safety-relevant 2D LiDAR sensors in personal protection applications in which performance level b is required, among others

Fields of application

• Collision avoidance (AGVs, mobile platforms and service robots)
• Access protection (stationary machines, doors, gates)
• Presence detection
• Applications in which 2D LiDAR sensors combined with safety laser scanners are required for functional, all-round safe solutions

Ordering information

Other models and accessories ➜ www.sick.com/TiM-S

- **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	Measure-ment 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

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- **Integrated application:** Protective field evaluation with flexible fields, output of measurement data
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- **Angular resolution:** 0.33°
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Measurement principle	Type	Part no.
HDDM	TIM771S-2174104	1105052
HDDM$^+$	TIM781S-2174104	1096363

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**

SICK AG | Waldkirch | Germany | www.sick.com

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