

SICK.COM



PRODUCT OVERVIEW

deTec

Safety light curtains

SICK

Sensor Intelligence



SAFETY LIGHT CURTAINS

deTec

Intelligent hazardous point and access protection

The smart deTec safety light curtain is ideal for protecting hazardous points and access means as well as for differentiating between man and material in automated material flows. To suit your application, deTec offers scalable function packages for more efficient processes and high plant availability. Based on modern technologies such as NFC and IO-Link, deTec simplifies diagnostics and provides comprehensive data for automating downstream processes. The flexible connection concept and consistent housing design also ensure low cabling, installation and configuration costs. Special variants are available for demanding applications with high hygiene standards, explosion hazards or the use of chemicals.

deTec AT A GLANCE

BENEFITS

- Increase process efficiency with object size-dependent smart restart interlock of the safety light curtain
- Rely on productivity and safety in human-material differentiation with muting or object pattern recognition
- Stationary objects do not trigger safety outputs thanks to numerous blanking options in defined protective field areas
- Benefit from innovative diagnostic options for greater productivity
- Increase the level of automation and process transparency of plants with IO-Link
- Save time and money thanks to simple, application-specific configuration and commissioning

FEATURES

- Smart functions such as smart restart interlock, blanking and Smart Box Detection
- Flexibly configurable 2-/4-signal muting with DMM4
- NFC diagnosis via app
- Diagnostics and automation via IO-Link
- Software Safety Designer
- Core variants for cost-efficient protection

TECHNICAL DATA OVERVIEW

Safety task	Finger detection (14 mm) Hand detection (20 mm ... 40 mm)
Safety level	PL e, SIL 3, Type 4
Functional principle	Sender/receiver
Resolution	14 mm 30 mm
Protective field height	300 mm ... 2,100 mm
Scanning range	≤ 30 m
Functions	The product can be used with different function packages.
Diagnosis	Alignment quality via diagnostic LEDs
Display elements	Status LEDs
Laser alignment aid	✓
Top LED	✓
Connection type	Depending on system plug (M12 male connector, 5-pin or 8-pin)
Supply voltage	24 V DC
Enclosure rating	IP65 / IP67
Ambient operating temperature	-30 °C ... +55 °C

ADVANTAGES



Productive all along the line

Whether in mechanical or automotive engineering, intralogistics or the packaging industry: with deTec, SICK has now gone one step further after the invention of the safety light curtain to intelligently protect machines and increase productivity. Thanks to its standardized platform with individually scalable, smart functions, deTec is the perfect solution for protecting hazardous points as well as access means and for differentiating between man and material in automated material flows.

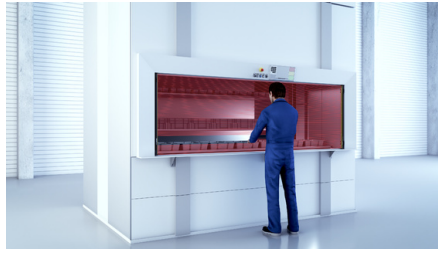
[Find the right variant now](#)



Productive thanks to muting

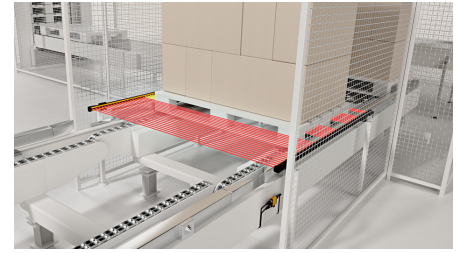
From 2-signal to flexibly configurable 4-signal muting: Safe differentiation of man and material ensures a productive material flow while also protecting the personnel.

[To the video "Flexibly configurable 2-/4-signal muting with DMM4"](#)



High process efficiency

After insertion processes in machines, the "smart restart interlock" function ensures that the machine restarts automatically and safely – for high machine availability.



Intelligent object pattern recognition

Pattern-based recognition of pallets, transfer cars and mobile robots. Enables a safe material flow with an active protective field – without interrupting production or logistics processes.

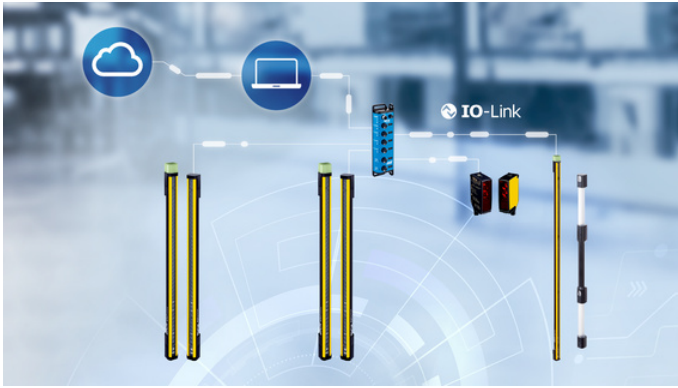


Increased efficiency thanks to smart functions



Secure your connection to the future

Remote or on-site diagnosis? You decide. IO-Link and NFC provide reliable support in all cases. You have direct access to service and process data for efficient error analysis and continuous process optimization. In this way you will be ready for the future when it comes to safety and automation.



Safety and automation combined

Increase system productivity with fast error analyses and process optimizations. Diagnostic data can be read out in real time and from any location via IO-Link. This provides you with comprehensive sensor data for improved maintenance and process optimization.



Diagnostics by smartphone

Using the NFC interface and the SICK Safety Assistant app, you can access data directly on the device via smartphone. No time-consuming connection facility is required. In combination with the DIP-switch wizard, you can quickly configure deTec and obtain information for diagnostic purposes.

[To the "SICK Safety Assistant App" video](#)



Fast troubleshooting, reduced maintenance effort and optimized processes



Quickly deployable

The profitability of an investment begins with quick commissioning. The deTec safety solutions are ready for use in no time at all – no matter what special features your application requires. Thanks to the smart column concept, even multi-sided protection can be implemented quickly.



Simple mounting

All deTec variants are equipped with standardized connections, brackets and accessories to ensure they are ready for use quickly. The wiring is standardized with M12 connectors.



Easy alignment

Simple alignment and ease of use directly on the light curtain: four blue LEDs indicate the signal strength. Thanks to the integrated laser alignment aid, the system is very quickly adjusted and ready for use.



Fast commissioning

The video shows you in five steps how to quickly mount and align the deTec. You also save valuable time during commissioning in muting applications thanks to pre-assembled muting arm kits.



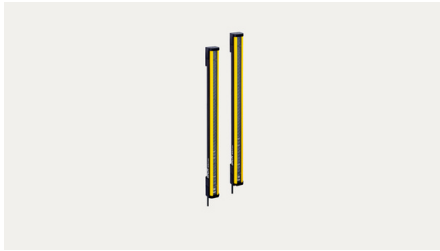
Low cabling and installation costs



Function packages for your application

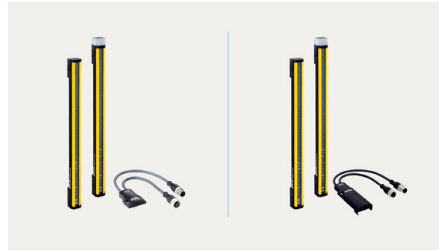
Whether finger and hand protection, access protection, or differentiation between man and material in automated material flows: the deTec portfolio offers the ideal protective device. Thanks to the standardized platform with many smart functions, you can adapt deTec individually to your application requirements. Choose the function package that suits you best.

[Configure different variants according to your requirements](#)



Economical protection: Core function package

The Core function package is included in deTec2 Core and deTec4 Core and is ideal for efficiently protecting simple applications.



Intelligent use: SP1 and SP2 function packages

With the deTec4 variants, you can quickly activate functions such as beam coding and Smart Box Detection using the SP1 and SP2 system plugs – without any software.



Smart extended: function packages DMM4 and DCM4

The DMM4 and DCM4 expansion modules add flexibly configurable muting and smart functions such as blanking and object pattern recognition to deTec4.



The right function package for your requirements



For rough environments

Water, lubricants, vibrating or explosive environments – in many areas of application, safety light curtains have to withstand drastic influences. That is why there are deTec variants for applications in challenging areas. This ensures high productivity even under adverse conditions.



For hygiene-sensitive areas

With its easy-to-clean housing made of food-safe plastic and stainless steel, the deTec IP69K is ideal for protecting wash-down zones.



In explosive environments

For explosion-hazardous areas, SICK offers deTec variants that meet the requirements of ATEX device categories 3GD and 2GD.

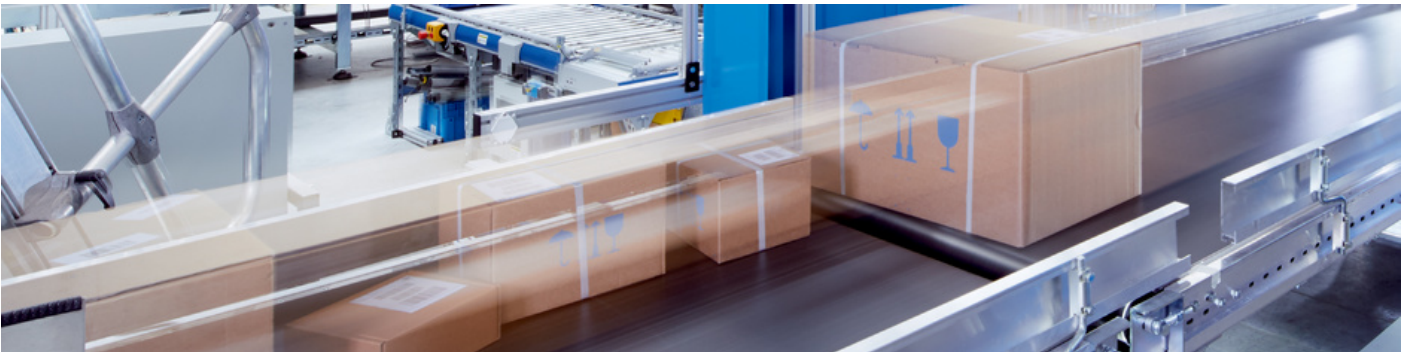


Resistant to chemicals

The deTec HG variants with a front screen made of chemically-hardened float glass is especially resistant to coolants, lubricants and cleaning agents.



High sensor availability even in harsh environments



Ordered today. Already on the way. With the QuickShip program from SICK.

Whether it be planning new machinery or shortening unplanned downtimes in existing plants – fast availability of products ensures your economic success. That is why many SICK sensors are included in our QuickShip program and can now be shipped to you even faster.



Faster delivery of many product variants thanks to QuickShip

Select the right product variant and accessories directly online. There you will also find example applications as well as downloads such as CAD dimensional models, operating instructions and software.

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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnership with our customers is more than just a promise: Together, we optimize productivity, elevate quality, protect health and safety, and sustain the future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions.

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