SICK.COM



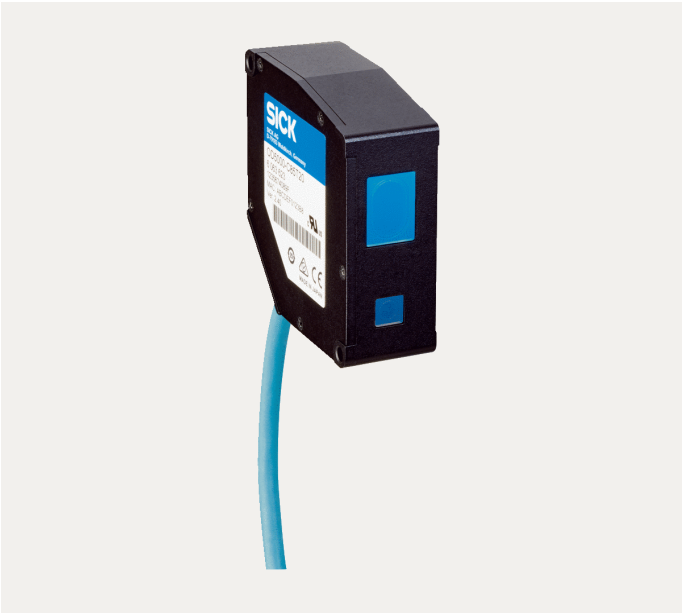


PRODUCT OVERVIEW

# OD5000

Laser distance sensors

SICK Sensor Intelligence



## DISPLACEMENT SENSORS

# OD5000

### The expert for high performance measurement

The OD5000 displacement measurement sensor specializes in high-precision measuring tasks, offering solutions in a wide range of applications. With a measuring frequency of up to 80 kHz, the OD5000 also measures quick and rotating measuring objects with µm-precision. The innovative analysis algorithm allows stable measurements with the highest level of repeatability on a wide range of surfaces. What's more, the OD5000 measures the thickness of transparent material with minimal effort with just a sensor head. The Ethernet interface integrated directly in the sensor head ensures quick communication and therefore maximum productivity.

## OD5000 AT A GLANCE

### BENEFITS

- Very good measurement performance, even with quick or rotating objects thanks to high measuring frequency
- Simple and cost-effective solution with Ethernet interface and evaluation unit integrated directly in the sensor head
- Sensor is easy to configure via a web server interface
- Reliable edge detection thanks to innovative analysis algorithm
- Increase in product quality due to maximum repeatability
- Reliable detection, even of very small indentations, thanks to precise light spot

### FEATURES

- Measuring frequency up to 80 kHz
- Ethernet interface with TCP/IP protocol directly in the sensor head
- Web server interface for configuration
- Innovative analysis algorithm
- Maximum repeatability for positioning tasks
- Detection and measurement of the smallest indentations or holes

### TECHNICAL DATA OVERVIEW

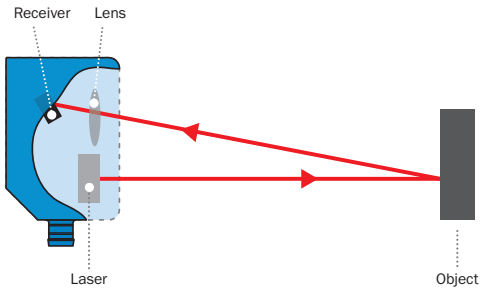
| | |
|---|---|
| Communication interface | Ethernet |
| Sensing distance | 190 mm 14 mm |
| Measuring range | 190 mm 14 mm |
| Laser class | 1 |
| Typ. light spot size (distance) | 30 µm x 1.000 µm<br>Ø 30 µm<br>Ø 120 µm |
| Connection type | Cable with plug M12, 8-pin |
| Housing material | Metal |

# ADVANTAGES

**Precision meets quality**

With expert-developed intelligent measurement technology which proves its worth in industrial applications time and time again, SICK offers the solution to any challenge which demands maximum measurement accuracy and quality. A pioneering spirit founded on our years of experience and our own innovations in optical sensor technology. We ensure efficient processes while fulfilling the demands of even complex measuring tasks – regardless of surface, diameter, thickness, or width, and regardless of whether an object is to be positioned or measured. This is how we ensure that your products are every bit as perfect as you want them to be. Moreover, SICK's measurement technology supports quality assurance processes and delivers cost-saving benefits. Have a look on <a href=https://www.sick.com/measurement-sensors target="_blank">www.sick.com/measurement-sensors

A point of light is projected onto the measuring object. The light reflected is captured by a light-sensitive receiver at a specific angle. Based on the angle between the send and receive direction, the position of the object is then triangulated (from the Latin "triangulum" = triangle).






**Simple and cost-effective solution with Ethernet interface directly in the sensor head**

Thanks to the Ethernet interface installed in the sensor head, quick and direct communication is possible via TCP/IP and UPD/IP protocols. The integration of an external amplifier or evaluation unit is not necessary. However, the OD5000 can be connected to the AOD1 evaluation unit as an option to make thickness measurements with two sensor heads.

**OD5000 – displacement measurement sensor**




Measuring frequencies of up to 80 kHz for increased measurement performance even at high speeds



Easy parameterization and commissioning via web server interface

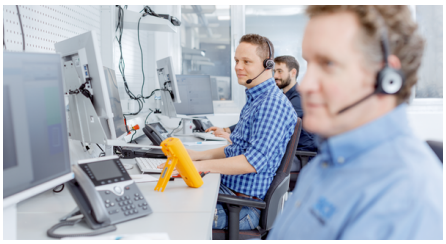



Small light beam diameter for measurement of the smallest objects and recesses

→ Quick communication for maximum productivity and product quality

**SICK LifeTime Services**

SICK's services increase machine and plant productivity, enhance the safety of people all over the world, provide a solid foundation for a sustainable business operation, and protect investment goods. In addition to its usual consulting services, SICK provides direct on-site support during the conceptual design and commissioning phases as well as during operation.
The range of services not only covers aspects like maintenance and inspection, but also includes performance checks as well as upgrades and retrofits. Modular or customized service contracts extend the service life of plants and therefore increase their availability. If faults occur or limit values are exceeded, these are detected at all times by the corresponding sensors and systems.



**Consulting and design**
Application-specific advice on the product, its integration and the application itself.




**Commissioning and maintenance**
Application-optimized and sustainable – thanks to professional commissioning and maintenance by a trained SICK service technician.




**Service contracts**
Extended warranty, SICK Remote Service, 24-hour helpdesk, maintenance, availability guarantees and other modular components can be individually combined on request.

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.
www.sick.com/OD5000

SICK AG
WALDKIRCH
GERMANY
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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.

SICK

Sensor Intelligence