



LD-OEM

2D LiDAR sensor with a large scanning range

SICK
Sensor Intelligence.



Technical data overview

Application	Indoor / Outdoor (depending on type)
Integrated application	Field evaluation
Aperture angle	
Horizontal	360°
Angular resolution	0.125° 0.25° 0.5° 1° 1.5°
Working range	0.5 m ... 250 m (depending on type)
Scanning range	
At 10% remission	35 m
Scanning frequency	5 Hz ... 20 Hz (depending on type)
Heating	Yes
Ambient operating temperature	-25 °C ... +50 °C (depending on type)
Ethernet	✓
Serial	✓
CAN	✓
Digital outputs	4 (digital)
Weight	+ 2.4 kg / 7.4 kg (depending on type)

Product description

The LD-OEM 2D LiDAR sensor has been designed for use in harsh ambient conditions, such as those found in the steel and port automation industries. The LD-OEM features a high resolution that can measure small objects or provide the exact position of larger objects. The LD-OEM is based on a hardware structure having a high-performance DSP (digital signal processor) for laser measurement and for the I/O data stream. Field monitoring is also integrated into the scanner. This makes it possible to monitor both horizontal and vertical surfaces for intrusions by people or objects. Using simple configuration software, the user can define the shape and size of the area to be monitored, taking into account all fixed on-site features and objects. External user-programmed applications such as profile recognition applications for robots are then able to use the output scan data.

At a glance

- Long sensing range even when detecting dark surfaces
- Eye-safe laser technology
- High angular resolution of up to 0.125 degrees
- High level of immunity to solar radiation and other infrared light sources
- Synchronous monitoring of up to four freely definable fields
- Real-time output of measurement data via Ethernet interface
- Gap-free scanning with uniform laser spot over the full 360-degree angle

Your benefits

- Reliable operation even in harsh ambient conditions
- Reduce ownership costs by using one device type for several different applications
- Reliable detection of small objects at long distances
- Easy adaptation to existing customer-specific systems

Fields of application

- Monitoring and ingress protection of restricted areas (plant engineering)
- Detection and measurement of red glowing objects, for example, in the steel industry
- Determination of position (warehouse, container handling)
- Collision prevention

Ordering information

Other models and accessories → www.sick.com/LD-OEM

- **Integrated application:** Field evaluation

Working range	Enclosure rating	Color	Connection type	Scanning frequency	Type	Part no.
0.5 m ... 250 m	IP65	Light blue (RAL 5012)	1 x 6-pin terminal block 1 x 15-pin D-Sub HD male connector	5 Hz ... 15 Hz	LD-OEM1000	1028698
2.5 m ... 250 m	IP67	Gray (RAL 7032)	1 x 20-pin Harting plug	5 Hz ... 20 Hz	LD-OEM2100	1029035
					LD-OEM3100	1029036

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