



LMS4000

Laser measurement without compromise - precise, fast and reliable

2D LIDAR SENSORS

SICK
Sensor Intelligence.



Technical data overview

Application	Indoor
Integrated application	Data output
Aperture angle	Horizontal 70°
Angular resolution	0.0833°
Working range	0.7 m ... 3 m
Scanning range	At 3,5% remission 3 m At 10% remission 3 m
Scanning frequency	600 Hz
Ambient operating temperature	-10 °C ... +50 °C ¹⁾
Ethernet	✓
Digital inputs	2
Digital outputs	3
Weight	2.4 kg / 3.7 kg (depending on type)

¹⁾ Initialization phase: 0 °C ... 50 °C.

Product description

The LMS4000 2D LiDAR sensor is particularly well-suited for use in intralogistics, material handling and in all areas in which goods must be quickly and systematically analyzed and moved. With the LMS4000, SICK is offering the ideal solution for measuring objects regarding their position, shape, volume or surface quality and evaluating and processing them correspondingly. Regardless of the object position in containers, cartons or on pallets, or whether they are free-standing or touching one another, the sensor measures precisely with high sampling density and a wide dynamic range. A high throughput with comprehensive process reliability and low maintenance needs is the result.

At a glance

- Precise measurement, even with very dark or glossy objects
- Fine angular resolution for high measurement point density
- High speed measurement with 600 Hz and fast data transmission with Gigabit Ethernet
- Synchronization of devices without mutual interference
- Industry-grade M12 connections

Your benefits

- Precise measurement of quickly moving objects, large and small, independent of their shape, color or surface quality
- Very detailed object scanning with a high depth of field and a wide range of dynamics without external illumination or additional line lasers
- Need-based extension of the measuring range as several devices can be mounted next to one another without mutual interference
- Quick installation, high availability, simple maintenance

Fields of application

- Measurement component in volume measurement systems in logistics centers and hubs
- Calculation of object dimensions and position for automated palletizing and depalletizing by robots
- Generation of 3D point clouds for any type of further processing
- Shape and contour adjustment of objects for quality control

Ordering information

Other models and accessories → www.sick.com/LMS4000

- **Working range:** 0.7 m ... 3 m
- **Integrated application:** Data output
- **Enclosure rating:** IP65
- **Color:** Light blue (RAL 5012)
- **Connection type:** 1 x M12, 5-pin plug (Power + I/O + Sync), 1 x M12, 8-pin female connector (Ethernet), 1 x M12, 5-pin female connector (Encoder + I/O)
- **Scanning frequency:** 600 Hz

Type	Part no.
LMS4111R-13000	1091423
LMS4121R-13000	1091393

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