Online data sheet



LMS500-21000 Lite

LMS5xx

2D LASER SCANNERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LMS500-21000 Lite	1054153

Other models and accessories → www.sick.com/LMS5xx

Detailed technical data

Features

Version	Mid Range
Variant	Lite
Field of application	Indoor
Resolution power	High Resolution
Light source	Infrared (905 nm)
Laser class	1, eye-safe (IEC 60825-1 (2007-6))
Aperture angle	190°
Scanning frequency	25 Hz / 35 Hz / 50 Hz / 75 Hz
Angular resolution	0.25° 0.5° 1°
Operating range	0 m ... 80 m
Max. range with 10 % reflectivity	26 m
Spot size	4.7 mrad
Amount of evaluated echoes	2
Fog correction	No

Performance

Response time	≥ 13 ms
Detectable object shape	Almost any
Systematic error	± 25 mm (1 m ... 10 m) ± 35 mm (10 m ... 20 m) [1)]
Statistical error	± 7 mm (1 m ... 10 m) ± 9 mm (10 m ... 20 m) [1)]
Integrated application	Field evaluation
Number of field sets	4 fields
Simultaneous evaluation cases	4

[1)] Typical value; actual value depends on environmental conditions.

Interfaces

Serial (RS-232, RS-422)	✓
Function	Host
Data transmission rate	9.6 kBaud ... 500 kBaud
Ethernet	✓
Function	Host
Data transmission rate	10/100 MBit/s
Protocol	TCP/IP, OPC
USB	✓, Mini-USB
Function	AUX
Data transmission rate	9.6 kBaud ... 500 kBaud
Switching inputs	2
Switching outputs	3
Optical indicators	5 LEDs (Additional 7-segment display)

Mechanics/electronics

Electrical connection	1 x system plug with screw terminal block
Operating voltage	24 V DC
Power consumption	22 W
Housing color	Light blue (RAL 5012)
Enclosure rating	IP 65 (EN 60529, Section 14.2.7)
Protection class	III (EN 60529, Section 14.2.7)
Weight	3.7 kg
Dimensions (L x W x H)	160 mm x 155 mm x 185 mm

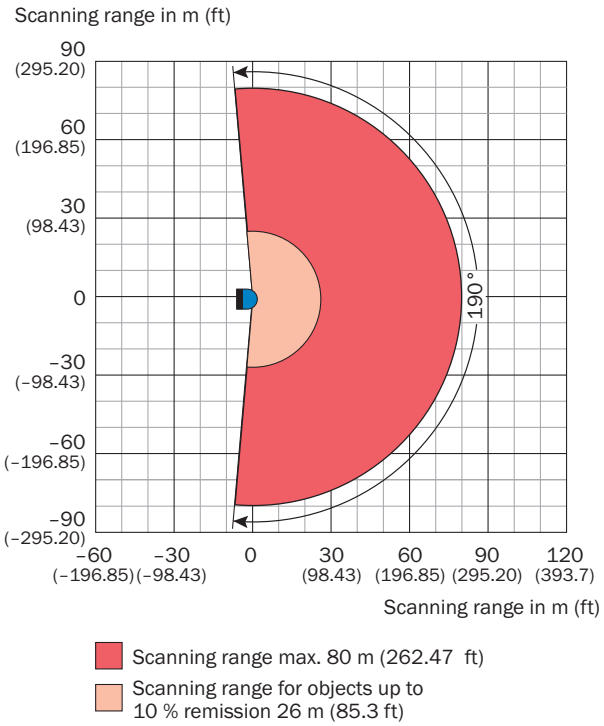
Ambient data

Object remission	2 % ... > 1,000 % (reflectors)
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005 / EN 61000-6-3 (2007-03)
Vibration resistance	EN 60068-2-6 (1995-04)
Shock resistance	EN 60068-2-27 (1993-03) EN 60068-2-29 (1993-04)
Ambient operating temperature	0 °C ... +50 °C
Storage temperature	–12 °C ... +50 °C
Ambient light immunity	70,000 lx

General notes

Note on use	Not suitable for personnel protection

Operating range diagram



Recommended accessories

Other models and accessories ➜ www.sick.com/LMS5xx

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	1 piece, mounting bracket for direct mounting, from the rear, on wall or machine, not adjustable	Mounting kit 1	2015623
Plug connectors and cables			
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, drag chain use, PUR, shielded, 5 m	SSL-2J04-G05ME	6034415

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