

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

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Product data sheet



LMS100-10000

LMS1xx

2D LIDAR SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LMS100-10000	1041113

Other models and accessories ➜ www.sick.com/LMS1xx

Detailed technical data

Features

Application	Indoor
Light source	Infrared (905 nm)
Laser class	1 (IEC 60825-1:2014, EN 60825-1:2014)
Aperture angle	
Horizontal	270°
Scanning frequency	25 Hz 50 Hz
Angular resolution	0.25° 0.5°
Heating	No
Working range	0.5 m ... 20 m
Scanning range	
At 10% remission	18 m
At 90% remission	20 m
Amount of evaluated echoes	2
Fog correction	Yes

Mechanics/electronics

Connection type	1 x system plug with screw terminal block
Supply voltage	10.8 V DC ... 30 V DC
Power consumption	Typ. 8 W
Housing color	Light blue (RAL 5012)
Enclosure rating	IP65 (EN 60529, Section 14.2.5)
Protection class	III (EN 50178 (1997;10))
Weight	1.1 kg
Dimensions (L x W x H)	105 mm x 102 mm x 152 mm

Safety-related parameters

MTBF	> 100 years
MTTFd	> 100 years

Performance

Response time	≥ 20 ms
Detectable object shape	Almost any
Systematic error	± 30 mm [1)]
Statistical error	12 mm [1)]
Integrated application	Field evaluation with flexible fields
Number of field sets	10 fields
Simultaneous evaluation cases	10

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

Interfaces

Ethernet	✓, TCP/IP
Remark	OPC DA
Function	Host
Data transmission rate	10/100 MBit/s
Serial	✓, RS-232
Function	Host, AUX
Data transmission rate	9.6 kBaud ... 115.2 kBaud
CAN	✓
Function	Extension of outputs
Digital inputs	2 digital and 2 encoder inputs
Digital outputs	3
Optical indicators	7-segment display (plus 5 LEDs showing device status, contamination warning and initial condition)

Ambient data

Object remission	2 % ... > 1,000 % (reflectors)
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005 / EN 61000-6-3:2007+A1:2011
Vibration resistance	EN 60068-2-6 (1995-04)
Shock resistance	EN 60068-2-27 (1993-03)
Ambient operating temperature	0 °C ... +50 °C
Storage temperature	–30 °C ... +70 °C
Ambient light immunity	40,000 lx

General notes

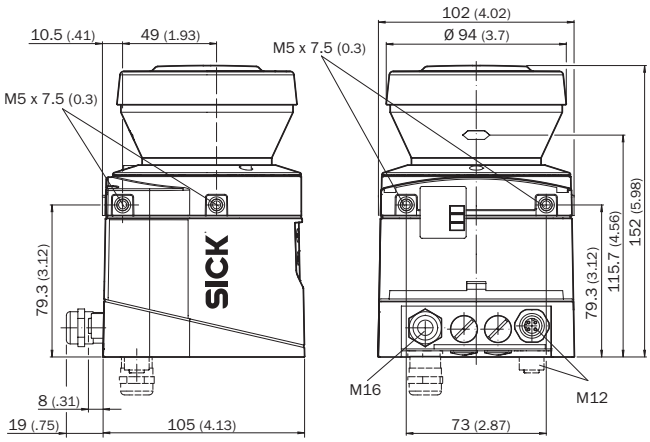
Note on use	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.

Classifications

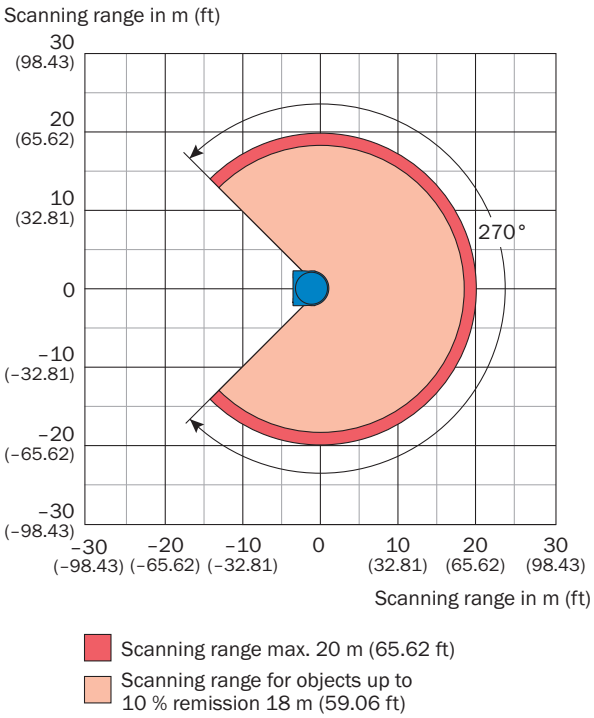
eCl@ss 5.0	27270990
eCl@ss 5.1.4	27270990
eCl@ss 6.0	27270913

eCl@ss 6.2	27270913
eCl@ss 7.0	27270913
eCl@ss 8.0	27270913
eCl@ss 8.1	27270913
eCl@ss 9.0	27270913
eCl@ss 10.0	27270913
eCl@ss 11.0	27270913
eCl@ss 12.0	27270913
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	41111615

Dimensional drawing (Dimensions in mm (inch))

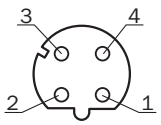


Working range diagram



Connection type

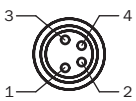
Ethernet



M12 female connector, 4-pin, D-coded
① TX+
② RX+
③ TX-
④ RX-

PIN assignment

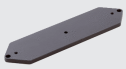
AUX



Female connector M8, 4-pin
① Reserved
② RxD AUX
③ GND RS
④ TxD AUX

Recommended accessories

Other models and accessories ➜ www.sick.com/LMS1xx

	Brief description	Type	Part no.
Mounting brackets and plates			
	1 piece, mounting bracket for rear mounting on wall or machine	Mounting kit 1a	2034324
	1 piece, mounting bracket for rear mounting on wall or machine with protection of optics hood	Mounting kit 1b	2034325
	1 piece, mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)	Mounting kit 2	2039302
	1 piece, mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)	Mounting kit 3	2039303
Plug connectors and cables			
	Head A: Flying leads Head B: Flying leads Cable: PVC, unshielded On 100 m reel	Connecting cable	6030795
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 4-pin, straight Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 5 m	YM2D24-050PN1MRJA4	2106184

Recommended services

Additional services ➜ www.sick.com/LMS1xx

	Type	Part no.
Maintenance		
• **Product area:** 2D LiDAR sensors, 3D LiDAR sensors • **Range of services:** Inspection, analysis and restoring of defined functions, Inspection and adaptation of basic settings, parameters of field application, filters for raw data output, and product-specific configuration • **Duration:** Additional work will be invoiced separately • **Travel expenses:** The prices do not include travel costs such as hotel, flight, travel time and expenses.	Maintenance LMS/MRS/NAV/TiM/LRS/multiScan	1682593
Commissioning		
• **Product area:** 2D LiDAR sensors, 3D LiDAR sensors • **Range of services:** Inspection of connection, fine adjustment, configuration of monitored areas, configuration and optimization of parameters as well as tests, Setup of previously defined functions of basic settings, parameters of field application, filters for raw data output and product-specific configuration • **Travel expenses:** The prices do not include travel costs such as hotel, flight, travel time and expenses. • **Duration:** Additional work will be invoiced separately	Commissioning LMS/MRS/NAV/TiM/LRS/multiScan (Prime package)	1680672
Extended warranty		
• **Product area:** Identification solutions, machine vision, Distance sensors, Detection and ranging solutions • **Range of services:** The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery). • **Duration:** Five-year warranty from delivery date.	Extended warranty for a total of five years from delivery date	1680671

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

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

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