



LD-MRS800001S01

LD-MRS

3D LASER SCANNERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LD-MRS800001S01	1069408

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



Detailed technical data

Features

Version	Long Range
Field of application	Outdoor
Laser class	1
Aperture angle	85°, operating angle with 8 measurement layers, 25° work area expansion with 4 measurement layers (total 110°)
Scanning frequency	12.5 Hz ... 50 Hz, object tracking at 12.5 Hz
Angular resolution	0.125° 0.25° 0.5°
Operating range	0.5 m ... 300 m
Max. range with 10 % reflectivity	50 m
Amount of evaluated echoes	3

Performance

Detectable object shape	Almost any
Systematic error	± 300 mm ¹⁾
Statistical error	100 mm ¹⁾
Integrated application	Object tracking

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

Interfaces

Serial (RS-232)	Function	✓ Auxiliary interface
	Data transmission rate	57,600 Baud
Ethernet	Function	✓ Raw data interface/parameterization
	Data transmission rate	100 Mbit/s
	Protocol	TCP/IP
CAN bus	Function	✓ Output: Objects, Input: Vehicle ego motion data

Mechanics/electronics

Electrical connection	Circular plug-in connector
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Operating voltage	9 V ... 27 V
Power consumption	8 W
Housing	Al
Housing color	Gray (RAL 7032), black (RAL 9005)
Enclosure rating	IP 69K
Protection class	III
Weight	1 kg
Dimensions (L x W x H)	94 mm x 165 mm x 88 mm

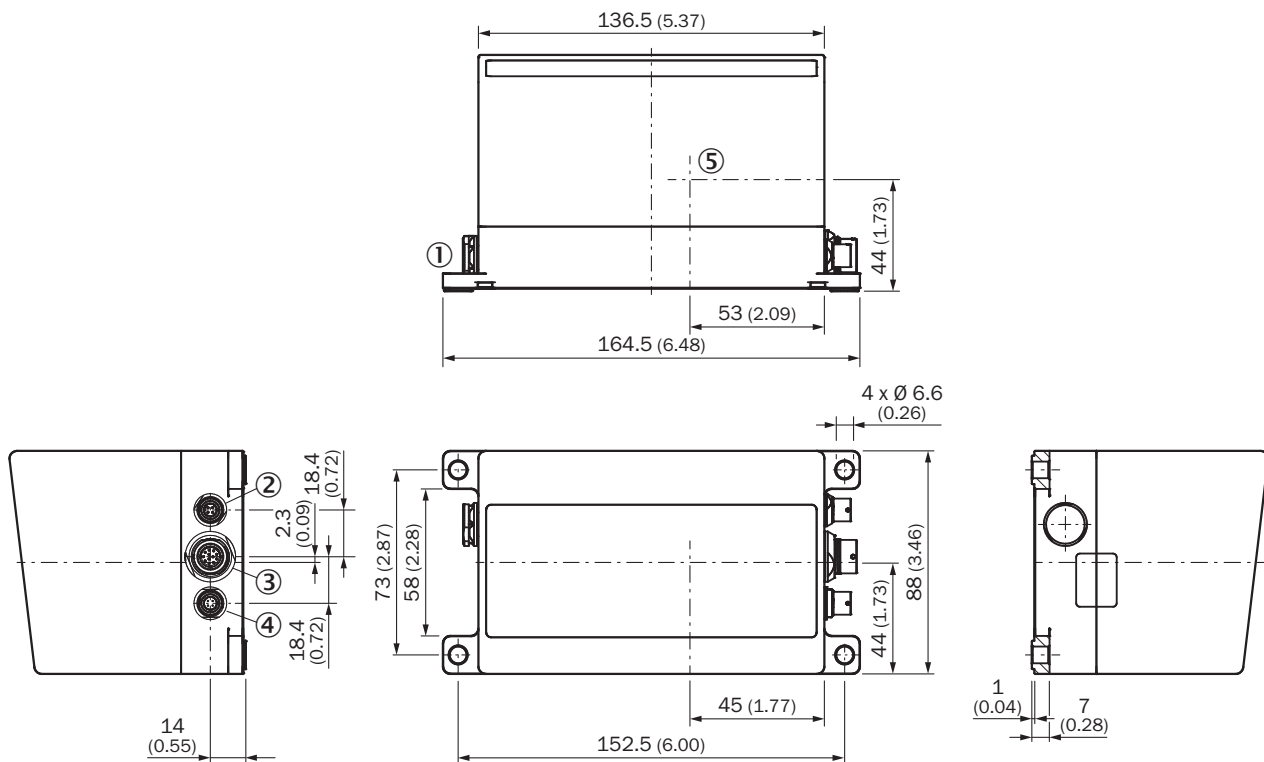
Ambient data

Ambient operating temperature	-40 °C ... +70 °C
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General notes

Note on use	Not suitable for personnel protection
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Dimensional drawing (Dimensions in mm (inch))

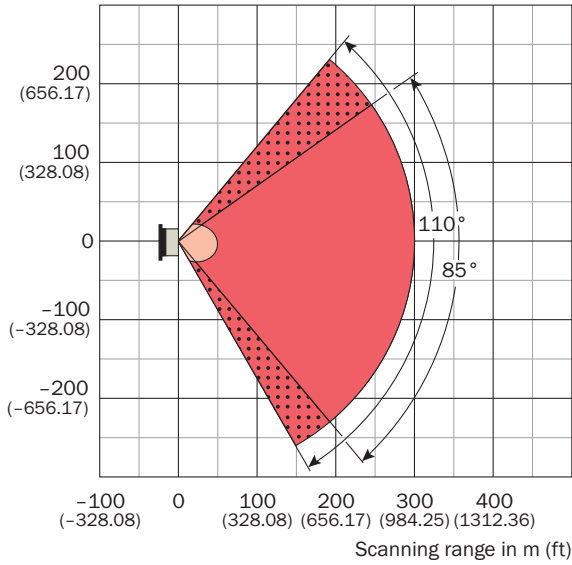


- ① Venting element
- ② "Ethernet" connection, 4-pin female connector
- ③ Connection data interface / synchronisation, 12-pin female connector
- ④ Connection "Power", 4-pin female connector

Operating range diagram

Operating range diagram 50 m

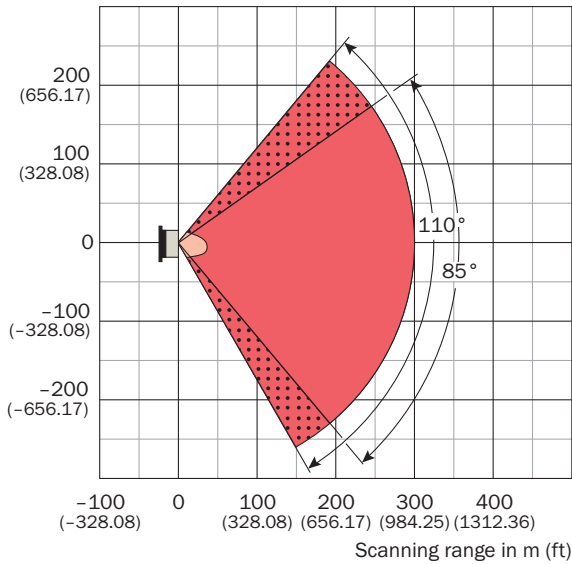
Scanning range in m (ft)



- Scanning range max. 300 m (984.25 ft)
- Scanning range for objects up to 10 % remission 50 m (164.04 ft)
- 2 measuring layers
- 4 measuring layers

Operating range diagram 30 m


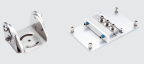




Scanning range in m (ft)



- Scanning range max. 300 m (984.25 ft)
- Scanning range for objects up to 10 % remission 30 m (98.43 ft)
- 2 measuring layers
- 4 measuring layers

Recommended accessories

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

	Brief description	Type	Part no.
Device protection (mechanical)			
	Weather hood	Weather hood	2058033
Terminal and alignment brackets			
	Bracket for LD-MRS, alignment adjustable in 2 axes	Alignment bracket	1047429
Plug connectors and cables			
	Head A: male connector, round plug, 12-pin, straight Head B: female connector, D-Sub, 9-pin, straight Cable: CAN/CANopen, shielded, 2 m For LD-MRS	Connection cable (male connector-male connector)	2054647
	Head A: female connector, round socket, 4-pin, straight Head B: cable Cable: shielded, 2 m	Connection cable (male connector-male connector)	2049823
	Head A: male connector, round plug, straight Head B: male connector, RJ45, straight Cable: Ethernet, shielded, 2 m Connects the Ethernet interface of the LD-MRS to the Ethernet interface of the PC	Connection cable (male connector-male connector)	2049826
Test and monitoring tools			
	Scan finder, receiver to localize infrared scans	Scan-Finder LS-80A	6020756

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