



# LD-MRS400001

LD-MRS

3D LASER SCANNERS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
LD-MRS400001	1045046

Other models and accessories → [www.sick.com/LD-MRS](http://www.sick.com/LD-MRS)



### Detailed technical data

#### Features

<b>Version</b>	Long Range
<b>Field of application</b>	Outdoor
<b>Laser class</b>	1
<b>Aperture angle</b>	85°, Working range with 4 measuring planes, 25° extension of working range with 2 measuring planes to a total of 110°
<b>Scanning frequency</b>	12.5 Hz ... 50 Hz
<b>Angular resolution</b>	0.125° 0.25° 0.5°
<b>Operating range</b>	0.5 m ... 250 m
<b>Max. range with 10 % reflectivity</b>	50 m
<b>Amount of evaluated echoes</b>	3

#### Performance

<b>Detectable object shape</b>	Almost any
<b>Systematic error</b>	± 300 mm <sup>1)</sup>
<b>Statistical error</b>	100 mm <sup>1)</sup>
<b>Integrated application</b>	Field evaluation
<b>Number of field sets</b>	16 fields
<b>Simultaneous evaluation cases</b>	16

<sup>1)</sup> Typical value; actual value depends on environmental conditions.

#### Interfaces

<b>Serial (RS-232)</b>	Function	✓ Auxiliary interface
	Data transmission rate	57,600 Baud
<b>Ethernet</b>	Function	✓ Raw data interface/parameterization
	Data transmission rate	100 Mbit/s
	Protocol	TCP/IP
<b>CAN bus</b>	Function	✓ Auxiliary interface

Mechanics/electronics

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

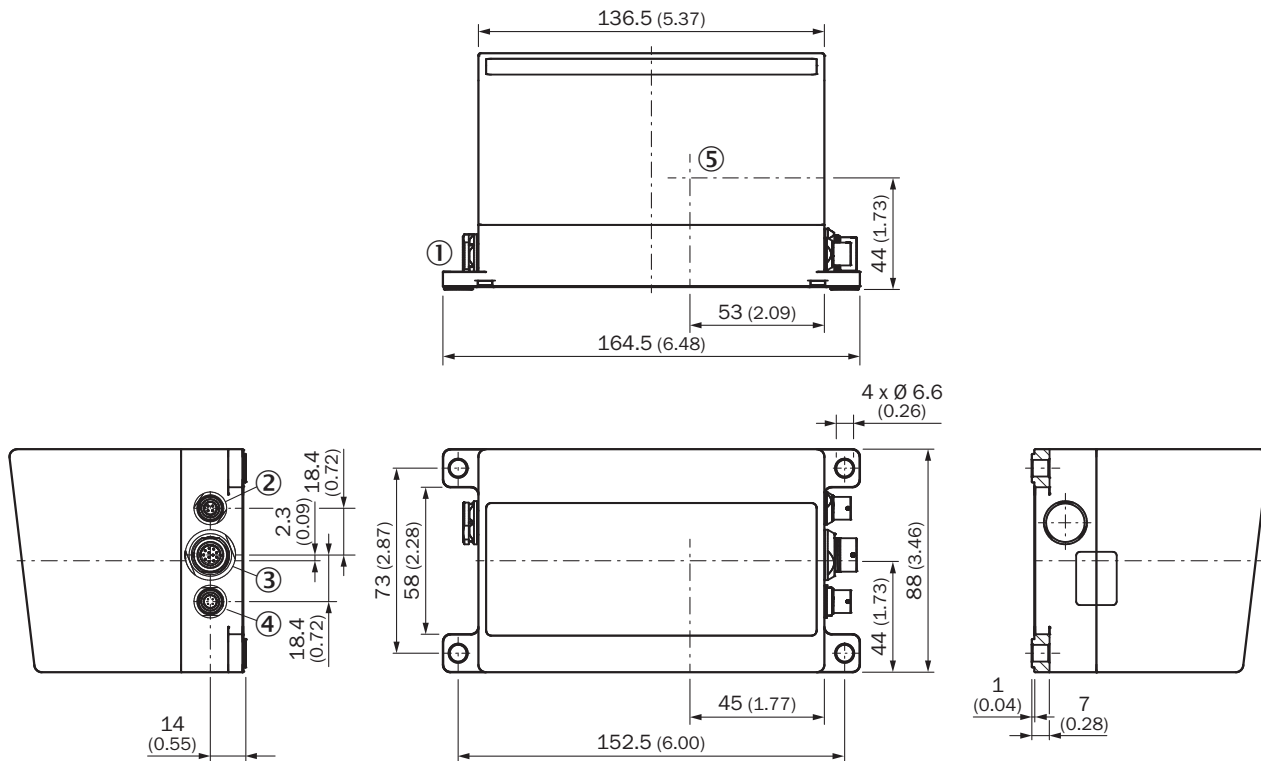
Ambient data

<b>Ambient operating temperature</b>	-40 °C ... +70 °C
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General notes

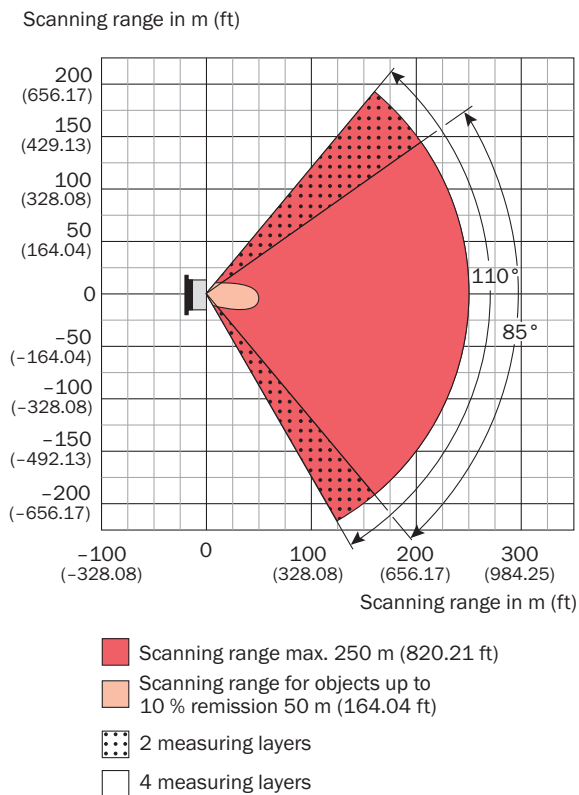
<b>Note on use</b>	Not suitable for personnel protection
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Dimensional drawing (Dimensions in mm (inch))








- 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



## Recommended accessories

Other models and accessories → [www.sick.com/LD-MRS](http://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

	Brief description	Type	Part no.
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](http://www.sick.com)