



LD-MRS400102S01 HD

LD-MRS

3D LIDAR SENSORS

SICK
Sensor Intelligence.





Ordering information

Type	Part no.
LD-MRS400102S01 HD	1052961



Detailed technical data

Features

Application	Outdoor				
Laser class	1 (IEC 60825-1:2014, EN 60825-1:2014)				
Aperture angle	<table border="0"> <tr> <td>Horizontal</td> <td>85° (Working range with 4 measuring planes, 25° extension of working range with 2 measuring planes to a total of 110°)</td> </tr> <tr> <td>Vertical</td> <td>3.2°</td> </tr> </table>	Horizontal	85° (Working range with 4 measuring planes, 25° extension of working range with 2 measuring planes to a total of 110°)	Vertical	3.2°
Horizontal	85° (Working range with 4 measuring planes, 25° extension of working range with 2 measuring planes to a total of 110°)				
Vertical	3.2°				
Scanning frequency	12.5 Hz ... 50 Hz, object tracking at 12.5 Hz				
Angular resolution	0.125° 0.25° 0.5°				
Working range	0.5 m ... 300 m				
Scanning range	<table border="0"> <tr> <td>At 10% remission</td> <td>30 m</td> </tr> <tr> <td>At 90% remission</td> <td>150 m</td> </tr> </table>	At 10% remission	30 m	At 90% remission	150 m
At 10% remission	30 m				
At 90% remission	150 m				
Amount of evaluated echoes	3				

Mechanics/electronics

Electrical connection	Circular plug-in connector
Supply voltage	9 V ... 27 V
Power consumption	8 W
Housing	Al
Housing color	Gray (RAL 7032), black (RAL 9005)
Enclosure rating	IP69K
Protection class	III
Weight	1 kg
Dimensions (L x W x H)	94 mm x 165 mm x 88 mm

Performance

Detectable object shape	Almost any
Systematic error	± 300 mm ¹⁾
Statistical error	100 mm ¹⁾

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

Integrated application	Object tracking
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Interfaces

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

Ambient data

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

Note on use	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.
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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
ETIM 5.0	EC002550
ETIM 6.0	EC002550
UNSPSC 16.0901	46171620

Recommended accessories

	Brief description	Type	Part no.
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: Flying leads 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-80L	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.”



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