



# LMS291-S14

LMS2xx

2D LASER SCANNERS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
LMS291-S14	1025329

Other models and accessories → [www.sick.com/LMS2xx](http://www.sick.com/LMS2xx)



### Detailed technical data

#### Features

<b>Version</b>	Mid Range
<b>Field of application</b>	Outdoor
<b>Light source</b>	Infrared (905 nm)
<b>MTBF</b>	50,000 h
<b>Laser class</b>	1, eye-safe (EN/IEC 60825-1, 21CFR 1040.10)
<b>Aperture angle</b>	90°
<b>Scanning frequency</b>	75 Hz
<b>Angular resolution</b>	0.5°
<b>Heating</b>	Optional via external heating plate
<b>Operating range</b>	0 m ... 80 m
<b>Max. range with 10 % reflectivity</b>	30 m
<b>Fog correction</b>	Yes

#### Performance

<b>Response time</b>	≥ 13 ms
<b>Detectable object shape</b>	Almost any
<b>Systematic error</b>	± 35 mm <sup>1)</sup>
<b>Statistical error</b>	± 10 mm <sup>1)</sup>

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

#### Interfaces

<b>Serial (RS-232, RS-422)</b>	✓
<b>Switching inputs</b>	1
<b>Switching outputs</b>	0
<b>Optical indicators</b>	3 LEDs

#### Mechanics/electronics

<b>Electrical connection</b>	2 x System plug with 9-pin D-SUB female connector (solder connection)
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<sup>1)</sup> Insulated.

<b>Operating voltage</b>	≥ 24 V DC, ± 15 %
<b>Power consumption</b>	30 W
<b>Housing</b>	Aluminum die cast
<b>Housing color</b>	Gray (RAL 7032)
<b>Enclosure rating</b>	IP 65
<b>Protection class</b>	II (VDE 0106/IEC 1010-1) <sup>1)</sup>
<b>Weight</b>	4.5 kg
<b>Dimensions (L x W x H)</b>	156 mm x 155 mm x 210 mm

<sup>1)</sup> Insulated.

#### Ambient data

<b>Object remission</b>	1.8 % ... 10,000 %
<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2 / EN 61000-6-3 / A11 (2004-07)
<b>Vibration resistance</b>	IEC 68
<b>Shock resistance</b>	IEC 68
<b>Ambient operating temperature</b>	0 °C ... +50 °C
<b>Storage temperature</b>	-30 °C ... +70 °C, with heating plate -12 ... +50 °C

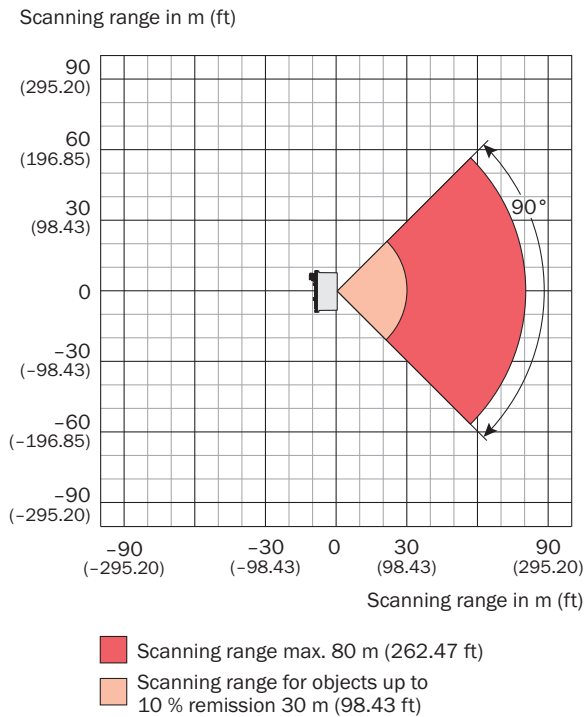
#### General notes

<b>Life cycle phase</b>	Discontinued
<b>Note on use</b>	Not suitable for personnel protection

#### Classifications





<b>ECl@ss 5.0</b>	27270990
<b>ECl@ss 5.1.4</b>	27270990
<b>ECl@ss 6.0</b>	27270913
<b>ECl@ss 6.2</b>	27270913
<b>ECl@ss 7.0</b>	27270913
<b>ECl@ss 8.0</b>	27270913
<b>ECl@ss 8.1</b>	27270913
<b>ECl@ss 9.0</b>	27270913
<b>ETIM 5.0</b>	EC002550
<b>ETIM 6.0</b>	EC002550
<b>UNSPSC 16.0901</b>	46171620

### Operating range diagram



### Recommended accessories

Other models and accessories → [www.sick.com/LMS2xx](http://www.sick.com/LMS2xx)

	Brief description	Type	Part no.
<b>Mounting brackets and mounting plates</b>			
	1 piece, mounting bracket for direct mounting, from the rear, on wall or machine, not adjustable	Mounting kit 1	2015623
<b>Modules and gateways</b>			
	Connection housing synchronization	Synchronization connector housing	2021520
<b>Plug connectors and cables</b>			
	Head A: female connector, D-Sub, 9-pin Head B: male connector, D-Sub, 9-pin Cable: RS-232, shielded, 3 m For the connection of PCs of LMS/LMI	Interface cable	2016401
	Cable: shielded, 2 LMS-connection plugs for voltage and data interfaces In-/Outputs, without cables	Connection set	2018963
<b>Test and monitoring tools</b>			
	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.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)