



LMC121-11001 VdS

LMC1xx

2D LIDAR SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
LMC121-11001 VdS	1051314

Other models and accessories → www.sick.com/LMC1xx

Detailed technical data

Features

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

Mechanics/electronics

Connection type	1 x system plug with screw terminal block
Supply voltage	9 V DC ... 30 V DC
Power consumption	20 W, typ. 8 W
Housing color	Gray (RAL 7032)
Enclosure rating	IP65 (EN 60529, Section 14.2.5)
Protection class	III (EN 50178 (1997;10))
Weight	1.1 kg, without connecting cables
Dimensions (L x W x H)	105 mm x 102 mm x 152 mm
MTBF	> 100 years

Safety-related parameters

MTTF_D	> 100 years
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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 Security conform parameterization
Number of field sets	10 fields
Simultaneous evaluation cases	10

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

Interfaces

Ethernet	✓, TCP/IP, RS-232
Function	Data interface (read result output) Data interface (read result output), Service interface Extension of outputs
Data transmission rate	10/100 MBit/s 9.6 kBaud ... 115.2 kBaud
Digital inputs	4 digital
Digital outputs	3 (2 relay, 1 digital)
Optical indicators	1 7-segment display (plus 5 LEDs showing device status, contamination warning and initial condition, both can be activated)

Ambient data

Object remission	2 % ... > 1,000 % (reflectors)
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005 / EN 61000-6-4 (2007-01)
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

Items supplied	LMS12x VdS (Indoor)
Note on use	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.

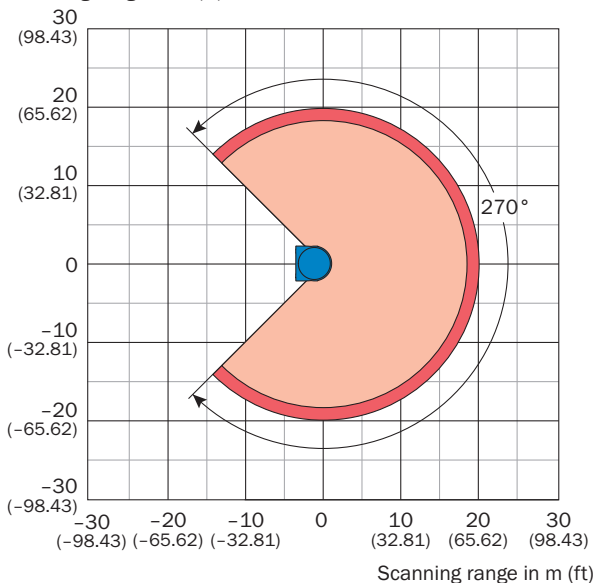
Classifications

ECLASS 5.0	27270990
ECLASS 5.1.4	27270990
ECLASS 6.0	27270913
ECLASS 6.2	27270913
ECLASS 7.0	27270913
ECLASS 8.0	27270913
ECLASS 8.1	27270913
ECLASS 9.0	27270913
ECLASS 10.0	27270913

ECLASS 11.0	27270913
ECLASS 12.0	27270913
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	41111615

Working range diagram

Scanning range in m (ft)



- Scanning range max. 20 m (65.62 ft)
- Scanning range for objects up to 10 % remission 18 m (59.06 ft)

Recommended services

Additional services → www.sick.com/LMC1xx

	Type	Part no.
Maintenance		
<ul style="list-style-type: none"> • 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 of LiDAR sensors	1682593

	Type	Part no.
Commissioning		
<ul style="list-style-type: none">• 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 LiDAR sensors	1680672
Extended warranty		
<ul style="list-style-type: none">• Product area: Identification solutions, machine vision, Detection and ranging solutions, safety camera sensors, Safety laser scanners, Safety radar sensors• 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