



Laser scanners LMS2xx / LMS221 / Outdoor / Mid Range

LMS221-S20



Model Name > [LMS221-S20](#)
Part No. > [1040434](#)



At a glance

- The large variety of versions available offer tailor-made solutions for indoor and outdoor tasks
- Non-contact optical measurement even over long distances
- Background or substrate has no effect on measurement
- Integrated field monitoring
- Rugged housing
- Various applications, e.g. object measurement, position measurement, navigation and area monitoring

Your benefits

- High target object speed possible
- Measurement objects require no special reflectivity properties
- Objects require no reflectors or marking
- Target object in any position
- Measurement data are available in real time and can be used for further calculation or control tasks
- No illumination of target object necessary
- Simple installation and commissioning
- Any mounting position

The product has been discontinued. Please follow the "replacement product" link for information about alternative products.



Features

Field of application:	Outdoor
Version:	Mid Range
Light source:	Infrared (905 nm)
MTBF:	50,000 h
Laser class:	1 (EN/IEC 60825-1), eye-safe
Field of view:	180 °
Scanning frequency:	75 Hz
Angular resolution:	0.25 ° 0.5 ° 1 °

Heating:	Yes
Operating range:	0 m ... 80 m
Max. range with 10 % reflectivity:	30 m
Fog correction:	Yes

Performance

Response time:	≥ 13 ms
Detectable object shape:	Almost any
Systematic error ¹⁾ :	± 35 mm
Statistical error ²⁾ :	± 10 mm
Integrated application:	Field evaluation
Number of field sets:	2 field triples (6 fields)
Simultaneous processing cases:	1 (3 fields)

^{1) 2)} Typical value; actual value depends on environmental conditions.

Interfaces

Serial (RS-232, RS-422):	✓
Function (Serial (RS-232, RS-422)):	Host, AUX
Data transmission rate (Serial (RS-232, RS-422)):	RS-232: 9.6/19.2 kBd and RS-422: 9.6/19.2/ 38.4/ 500 kBd
Ethernet:	-
CAN bus:	-
PROFIBUS DP:	-
PROFINET:	-
DeviceNet:	-
Switching inputs:	1
Switching outputs:	3
Optical indicators:	0

Mechanics/electronics

Electrical connection:	1 16-pin plug
Operating voltage:	≤ 24 V DC
Power consumption:	30 W, + 140 W heating
Housing:	Base plate aluminum diecast Covering PU
Housing color:	Gray (RAL 7032)
Enclosure rating:	IP 67
Protection class:	II (VDE 0106/IEC 1010-1) ¹⁾
Weight:	9 kg
Dimensions:	241 mm x 351 mm x 265 mm

¹⁾ Insulated

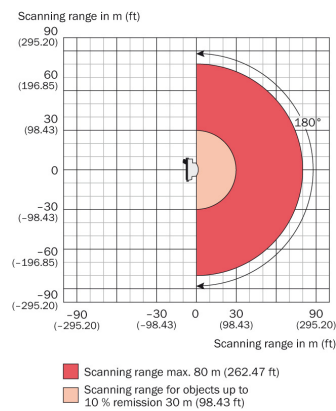
Ambient data

Object remission:	1.8 % ... 10,000 %
Electromagnetic compatibility (EMC):	(EN 61000-6-2) (EN 61000-6-3/A11 (2004-07))
Vibration resistance:	(IEC 68)
Shock resistance:	(IEC 68)
Ambient operating temperature:	-30 °C ... 50 °C
Storage temperature:	-30 °C ... 70 °C

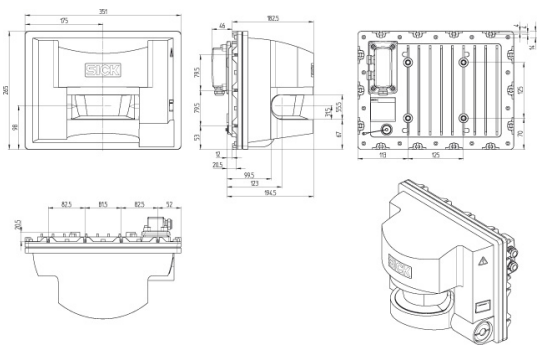
General notes

Note on use:	Not suitable for personnel protection
Life cycle phase:	Phased out

Operating range diagram



Dimensional drawing



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