



Laser Measurement Technology
LMS1xx / LMS151 / Outdoor / Short Range

LMS151-10100



Model Name > [LMS151-10100](#)
Part No. > [1047607](#)



At a glance

- Economical measurement sensor
- Real-time output of measurement data via Ethernet interface
- Field evaluation using intelligent algorithms and programmable applications
- Number of switching outputs can be expanded via external CAN modules
- Parameter setting interface is accessible from the front while the device is mounted
- Rugged IP 67-rated housing
- Extended scanning range up to 50 m (with reflectors)

Your benefits

- Lightweight housing makes it easy to mount
- No wiring between sender and receiver
- Advanced filtering technology rigorously reduces false trips caused by outdoor environmental factors like fog, rain and snow
- Optional external CAN I/O module increases number of switching outputs for greater application flexibility
- Fast, easy commissioning due to SOPAS software



Features

Field of application:	Outdoor
Version:	Short Range
Light source:	Infrared (905 nm)
Laser class:	1 (IEC 60825-1 (2007-3))
Field of view:	270 °
Scanning frequency:	25 Hz/50 Hz
Angular resolution:	0.25 ° 0.5 °
Heating:	yes
Operating range:	0.5 m ... 50 m
Max. range with 10 % reflectivity:	18 m
Amount of evaluated echoes:	2
Fog correction:	yes

Performance

Response time:	≥ 20 ms
Detectable object shape:	Almost any

Systematic error:	± 30 mm
Statistical error:	± 12 mm
Integrated application:	Field evaluation
Number of field sets:	10 fields
Simultaneous processing cases:	10

Interfaces

Serial (RS-232):	✓
Function (Serial (RS-232)):	Host, AUX
Data transmission rate (Serial (RS-232)):	9.6 kBaud ... 115.2 kBaud
Ethernet:	✓
Function (Ethernet):	Host
Data transmission rate (Ethernet):	10/100 Mbit
Protocol (Ethernet):	TCP/IP, OPC
CAN bus:	✓
Function (CAN bus):	Outputs extension
PROFIBUS:	-
PROFINET:	-
DeviceNet:	-
Switching inputs:	2
Switching outputs:	3
Optical indicators:	1 7-segment display (plus 5 LEDs showing device status, contamination warning and initial condition)

Mechanics/electronics

Electrical connection:	M12 circular plug-in connector
Operating voltage:	10.8 V DC ... 30 V DC
Power consumption:	60 W
Housing color:	gray (RAL 7032)
Enclosure rating:	IP 67 (EN 60529, Section 14.2.7)
Protection class:	III (EN 50178 (1997;10))
Weight:	1.1 kg, without connecting cables
Dimensions:	105 mm x 102 mm x 162 mm

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:	-30 °C ... 50 °C
Storage temperature:	-30 °C ... 70 °C
Ambient light safety:	40,000 lx

Operating range diagram

