

MLG30S-1320D10503

MLG-2

MEASURING AUTOMATION LIGHT GRIDS





Ordering information

Туре	Part no.
MLG30S-1320D10503	1221373

Other models and accessories → www.sick.com/MLG-2



Detailed technical data

Features

Device version	Prime - Standard functionality
Sensor principle	Sender/receiver
Minimum detectable object (MDO)	34 mm ¹⁾
Beam separation	30 mm
Type of synchronization	Optical
Number of beams	45
Detection height	1,320 mm
Software features (default)	
Q_1	Presence detection
Q2 / IN	Contamination warning
Q ₃	Auto-define height classification
inverted	_
Teach	_
key lock	off
Operating mode	
Standard	✓
Function	
Cross beam	✓
Beam blanking	✓
Applications	
Switching output	Object detection

 $^{^{1\!\!/}}$ Depending on beam separation without cross beam setting.

Data interface	Object recognition Height classification Object detection Object height measurement
Included with delivery	$1\times$ sender $1\times$ receiver $4/6$ x QuickFix brackets for monitoring heights above 2 m) $1\times$ Quick Start Guide

 $^{^{1)}}$ Depending on beam separation without cross beam setting.

Mechanics/electronics

Light source	LED, Infrared light
Wave length	850 nm
Supply voltage V _s	DC 19.2 V 28.8 V ¹⁾
Power consumption sender	57.25 mA ²⁾
Power consumption receiver	129 mA ²⁾
Ripple	< 5 V _{pp}
Output current I _{max.}	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1H
Initialization time	<1s
Switching output	Push-pull: PNP/NPN
Connection type	Male connector M12, 5-pin, 0.22 m Male connector M12, 5-pin, 0.22 m
Housing material	Aluminum
Indication	LED
Enclosure rating	IP65, IP67 3)
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	2.949 kg
Front screen	PMMA
Option	None
UL File No.	NRKH.E181493

¹⁾ Without load.

Performance

Maximum range	7 m ¹⁾
Minimum range	≥ 0.2 m
Operating range	5 m
Response time	6.7 ms

 $^{^{1)}}$ No reserve for environmental issue and deterioration of the diode.

²⁾ , Without load with 24 V.

³⁾ Operating in outdoor condition only with a external protection housing.

Communication interface

IO-Link	√ , IO-Link V1.1
Data transmission rate	38,4 kbit/s (COM2)
Maximum cable length	20 m
Cycle time	6 ms
VendorID	26
DeviceID HEX	800067
DeviceID DEC	8388711
Process data length	6 Byte (TYPE_2_V) 1)
Inputs/outputs	3 x Q (IO-Link)
Digital output	$Q_1 \dots Q_3$
Number	3
Digital input	ln_1
Number	1

¹⁾ With an IO-Link master with V1.0, fall back to interleaved mode (consisting of TYPE_1_1 (ProcessData) and TYPE_1_2 (On-request Data)).

Ambient data

Shock resistance	Continuous shocks 10 g, 16 ms, 1000 shocks Single shocks 15 g, 11 ms 3 per axle
Vibration resistance	Sinusoidal oscillation 10-150 Hz 5 g
EMC	EN 60947-5-2
Ambient light immunity	Direct: 12,000 lx ¹⁾ Indirect: 50,000 lx ²⁾
Ambient operating temperature	-30 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C

¹⁾ Outdoor mode.

Smart Task

Smart Task name	Base logics
Classifications	
ECLASS 5.0	27270910
ECLASS 5.1.4	27270910
ECLASS 6.0	27270910
ECLASS 6.2	27270910
ECLASS 7.0	27270910
ECLASS 8.0	27270910
ECLASS 8.1	27270910
ECLASS 9.0	27270910
ECLASS 10.0	27270910
ECLASS 11.0	27270910
ECLASS 12.0	27270910
ETIM 5.0	EC002549

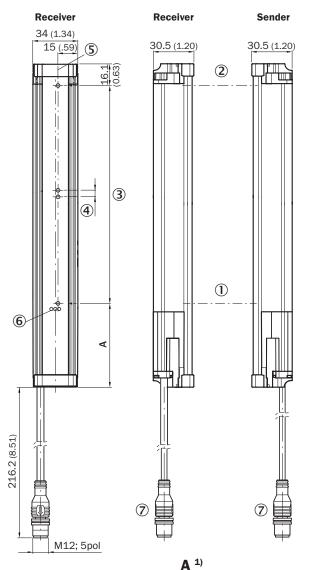
²⁾ Light resistance indirect.

MEASURING AUTOMATION LIGHT GRIDS

ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))

Dimensional drawing



(34 (1.34) 15 (.59)
	ф
216.2 (8.51)	M12; 5pol

Sender

	^
Beam separation 5 mm 63.3 (2.49)	
Beam separation 10 mm 68.3 (2.69)	
Beam separation 20 mm	68.3 (2.69)/78.3 (3.08) (2)
Beam separation 25 mm	83.3 (3.28)
Beam separation 30 mm	88.3 (3.48)
Beam separation 50 mm 108.3 (4.26)	

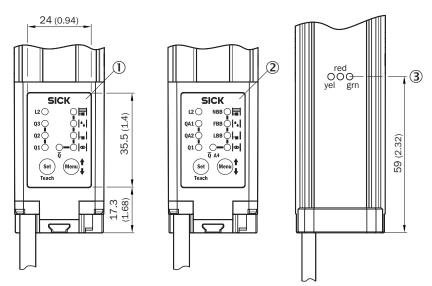
¹⁾ Distance: MLG edge - first beam ²⁾ MLG20x-xx**40**: 68.3 mm

- ① First beam
- ② Last beam
- 3 Detection height (see technical data)
- ④ Beam separation
- ⑤ Optical axis
- ⑥ Status indicator: green, yellow, red LEDs
- ⑦ Connection

²⁾ MLG20x-xx**40**: 68.3 mm MLG20x-xx**80**: 78.3 mm

Adjustments

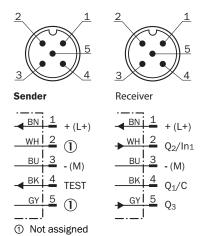
Adjustments



- ① MLG-2 with switching outputs Q
- ③ Status indicator: green, yellow, red LEDs

Connection type and diagram

Connector M12, 5-pin, switching outputs Q



MEASURING AUTOMATION LIGHT GRIDS

Recommended accessories

Other models and accessories → www.sick.com/MLG-2

	Brief description	Туре	Part no.	
Plug connectors and cables				
8 60	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A15- 050VB5XLEAX	2096240	
Sensor Integ	gration Gateway			
	 Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) Logic editor: yes Communication interface: IO-Link, USB, Ethernet, PROFINET, REST API Product category: IO-Link Master 	SIG200-0A0412200	1089794	
	Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) Logic editor: yes Communication interface: IO-Link, USB, Ethernet, REST API Product category: IO-Link Master	SIG200-0A0G12200	1102605	

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

