



## Measuring automation light grids RS-485 + 2 x I/O (IO-Link) , MLG-2 Pro

MLG05A-0295110501



**Model Name** > [MLG05A-0295I10501](#)  
**Part No.** > [1213793](#)



**At a glance**

- High-resolution light grid: Available with beam separation of 2.5 mm (coming soon), 5 mm, 10 mm, 25 mm, and 50 mm
- "High-speed scan" function with triple scanning speed
- "Transparent mode" function for detecting transparent materials
- Switchable to high-resolution evaluation
- Data compression: Run length coding
- Ethernet-based interfaces, including PROFINET, PROFIBUS, and CANopen (coming soon)
- Cloning function via IO-Link or clone plug
- SOPAS configuration software

**Your benefits**

- "High-speed scan" function offers short response times for safely detecting objects traveling at high speeds
- Modular concept offers the perfect solution every time from a single source
- "High measurement accuracy" function for detecting small objects reliably
- "Transparent mode" function for reliably detecting and measuring transparent objects
- Integrated bus interfaces and accompanying functional modules reduce the time and effort involved in the commissioning process
- SOPAS configuration software with menu-driven wizard saves time during the configuration process
- Simple maintenance without the need for specialist staff thanks to the cloning function with IO-Link
- High reliability due to ambient light immunity



**Features**

Technology:	Sender/receiver
Minimum detectable object (MDO) <sup>1)</sup> ; <sup>2)</sup> ; <sup>3)</sup> :	5 mm 9 mm
Beam separation:	5 mm
Number of beams:	60
Detection height:	295 mm
Version:	Pro
Software features:	Baud rate RS-485: 9,600, Interface RS-485: beam status, Q1: presence detection, Teach-in, Standard mode

<sup>1)</sup> MDO min. detectable object at high measurement accuracy <sup>2)</sup> MDO min. detectable object at standard measurement accuracy <sup>3)</sup> Dependent from beam separation without cross beam adjustment

## Performance

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Maximum range <sup>1)</sup> :	7 m
Minimum range:	≥0 mm
Response time <sup>2)</sup> , <sup>3)</sup> :	5.9 ms
Working range:	5 m

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode <sup>2)</sup> Without high speed <sup>3)</sup> With resistive load

## Interfaces

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Data interface:	RS-485 + 2 x I/O (IO-Link)
Electrical connection:	Male connector M12, 8-pin
IO-Link:	✓

## Mechanics/electronics

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Wave length:	850 nm
Supply voltage Vs <sup>1)</sup> :	DC 18 V ... 30 V
Power consumption sender <sup>2)</sup> :	58 mA
Power consumption receiver <sup>3)</sup> :	132 mA
Residual ripple:	< 5 Vpp
Output current I <sub>max</sub> :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	< 1 s
Dimensions (W x H x D):	34 mm x 373.3 mm x 30.6 mm
Housing material:	Aluminum
Indication:	LED
Enclosure rating:	IP 65, IP 67
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	0.847 kg
Front screen:	PMMA
Option:	Nonexistent

<sup>1)</sup> Without load <sup>2)</sup> <sup>3)</sup> Without load with 24 V

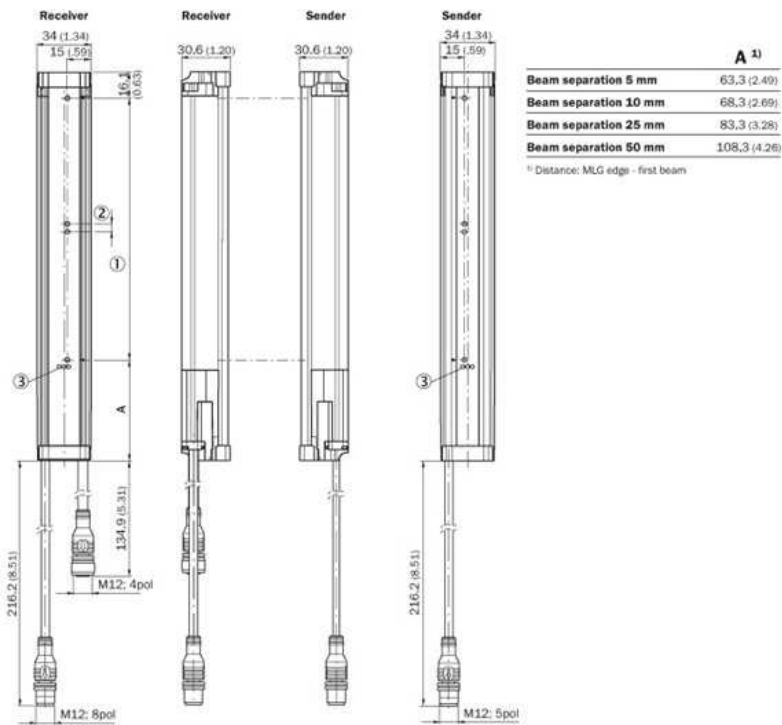
## Ambient data

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Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -30 ... +55 °C, Storage: -40 ... +70 °C
Vibration resistance:	5 g, 10 Hz ... 55 Hz (EN 60 068-2-64)
Shock load:	15 g/DIN EN 60 068-2-27/16 ms
Ambient light immunity::	Direct: 12,500 ... 150,000 lx, Indirect: ≥50,000 lx <sup>1)</sup> <sup>2)</sup>

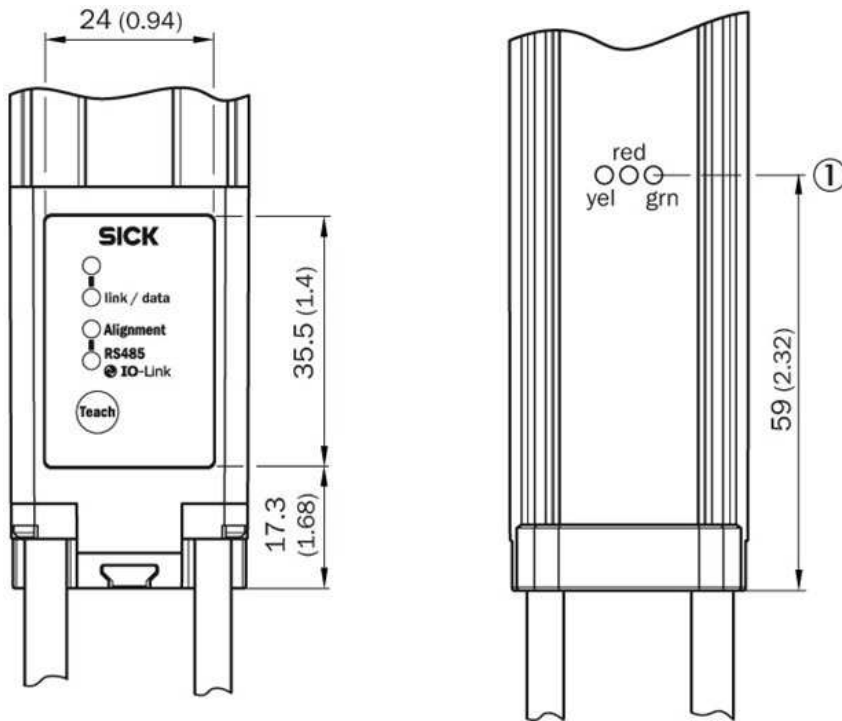
<sup>1)</sup> Outdoor mode <sup>2)</sup> Light resistance indirect

## Dimensional drawing



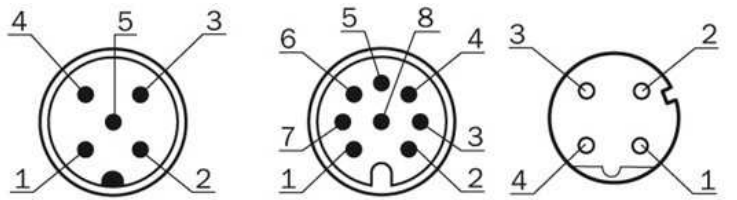
- |1| Detection height (see optical performance)
- |2| Beam separation RM
- |3| Status indicator: LEDs green, yellow, red

## Adjustments



- |1| Status indicator: LEDs green, yellow, red

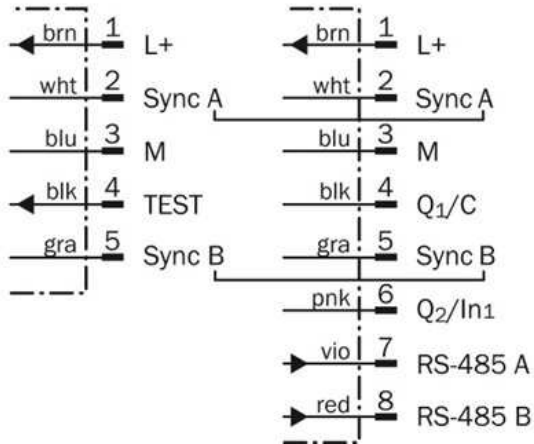
**Anschlussart und -schema**



**Sender**

**Receiver**

**Receiver Ethernet**



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