



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

MLG05A-0145110501



Model Name > [MLG05A-0145I10501](#)
Part No. > [1213791](#)



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) ¹⁾ ; ²⁾ ; ³⁾ :	5 mm 9 mm
Beam separation:	5 mm
Number of beams:	30
Detection height:	145 mm
Version:	Pro
Software features:	Baud rate RS-485: 9,600, Interface RS-485: beam status, Q1: presence detection, Teach-in, Standard mode

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

Performance

Maximum range ¹⁾ :	7 m
Minimum range:	≥0 mm
Response time ²⁾ , ³⁾ :	3.6 ms
Working range:	5 m

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

Interfaces

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

Mechanics/electronics

Wave length:	850 nm
Supply voltage Vs ¹⁾ :	DC 18 V ... 30 V
Power consumption sender ²⁾ :	56.5 mA
Power consumption receiver ³⁾ :	126 mA
Residual ripple:	< 5 Vpp
Output current I _{max} :	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 223.3 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:	0.547 kg
Front screen:	PMMA
Option:	Nonexistent

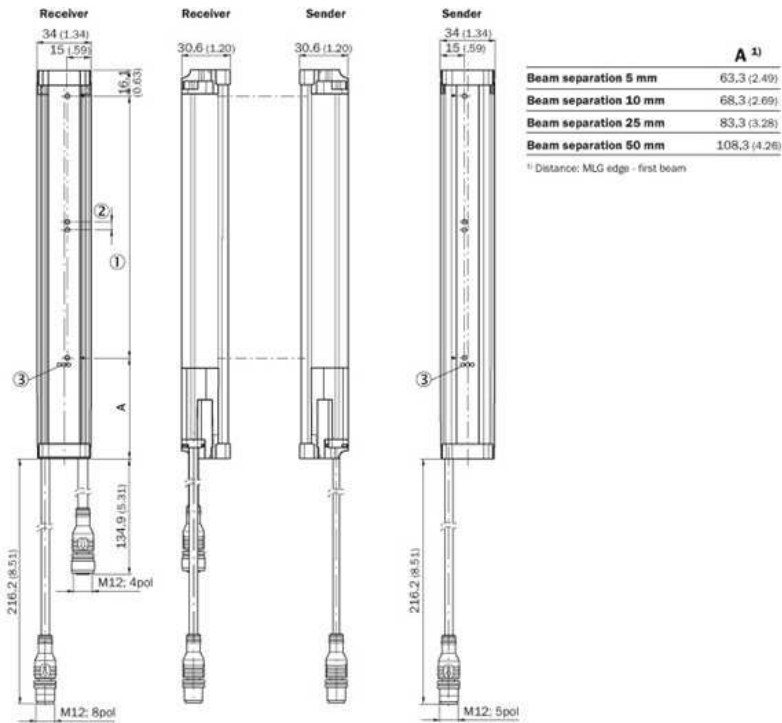
¹⁾ Without load ²⁾ ³⁾ Without load with 24 V

Ambient data

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 ¹⁾ ²⁾

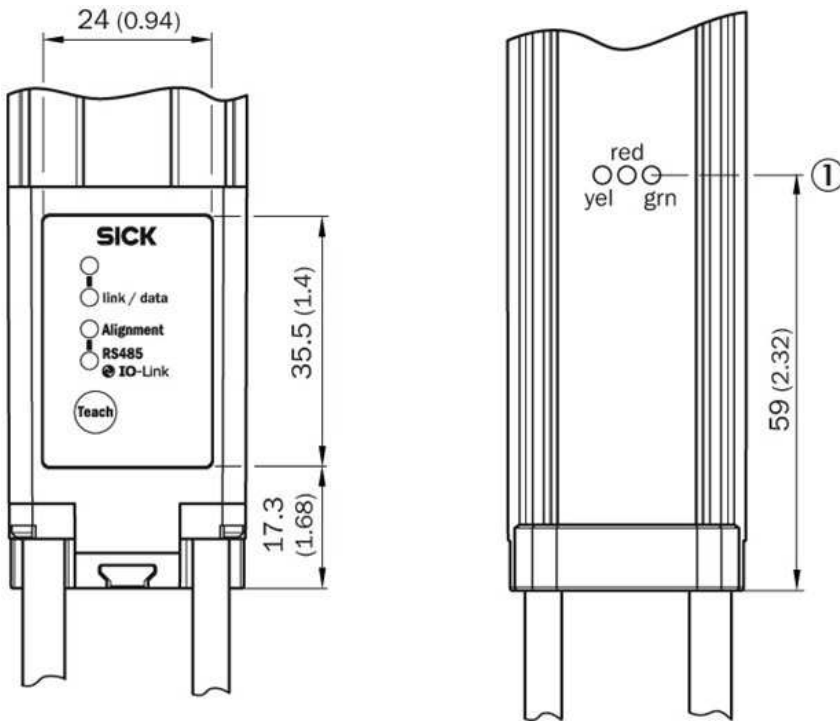
¹⁾ Outdoor mode ²⁾ Light resistance indirect

Dimensional drawing



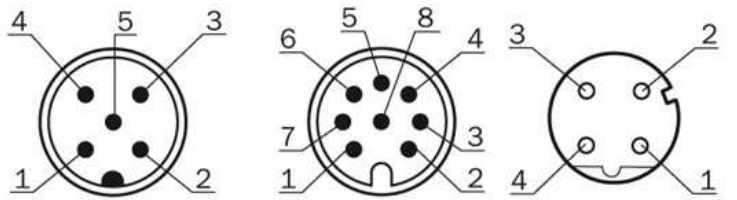
- |1| Detection height (see optical performance)
- |2| Beam separation RM
- |3| Status indicator: LEDs green, yellow, red

Adjustments



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

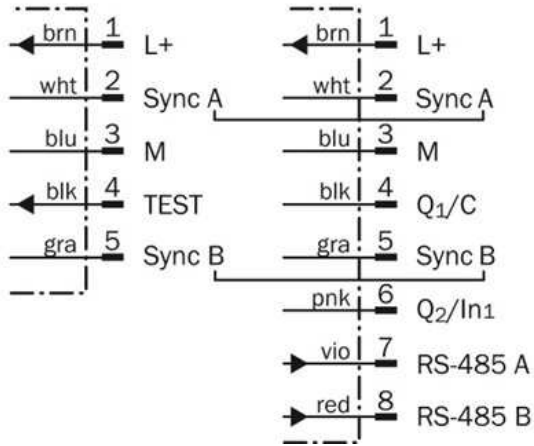
Anschlussart und -schema



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Receiver

Receiver Ethernet



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