

SGS4-S108P7PS1T07 SLG

SWITCHING AUTOMATION LIGHT GRIDS





Ordering information

| Туре | Part no. |
|-------------------|----------|
| SGS4-S108P7PS1T07 | 1212304 |

Other models and accessories → www.sick.com/SLG

Illustration may differ



Detailed technical data

Features

| Sensor principle | Sender/receiver |
|---------------------------------|--|
| Minimum detectable object (MDO) | Cross beam, 25 mm ¹⁾ |
| Beam separation | 40 mm |
| Optical light exit | Slim |
| Number of beams | 28 |
| Detection height | 1,080 mm |
| Parameterization | Teach-in button |
| Cross beam/parallel beam | Cross beam active |
| Output 1 | Output 1 inactive, if light beam interrupted |
| Muting function | Muting function deactivated |
| Automatic teach | Automatic teach active |
| Alignment aid | Without alignment aid |

 $^{^{1)}}$ 25 mm MD0 limited detection area.

Mechanics/electronics

| Light source | Infrared light |
|----------------------------------|---------------------------|
| Wave length | 950 nm |
| Supply voltage V _s | DC24 V, ± 20 % |
| Power consumption receiver | ≤ 70 mA |
| Output current I _{max.} | 100 mA |
| Output load, capacitive | 100 nF |
| Output load, Inductive | 1 H |
| Initialization time | 1 s |
| Switching output | PNP |
| Inputs | Teach-in input (receiver) |

 $^{^{1\!\!1\!\!1}}$ Operating in outdoor condition only with a external protection housing.

| | Test input (sender) HIGH = 10 V 30 V / LOW = < 5 V |
|------------------------|--|
| Dimensions (W x H x D) | 25 mm x 1,152.4 mm x 8.2 mm |
| Connection type | Cable with M8 male connector, 4-pin |
| Housing material | PMMA |
| Indication | LED |
| Synchronization | Optical |
| Enclosure rating | IP65 1) |
| Circuit protection | U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression |
| Protection class | III |
| Weight | 140 g |
| Pulse frequency | 500 kHz |
| Aluminum stabilizer | Without stabilizer |

 $^{^{1)}}$ Operating in outdoor condition only with a external protection housing.

Performance

| Maximum range | 10 m ¹⁾ |
|-----------------|-----------------------------------|
| Minimum range | Cross beam: ≥ 0.3 m ²⁾ |
| Operating range | 7 m |
| Response time | Cross beam, 57 ms |

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

Ambient data

| Shock resistance | 10 g / DIN EN 60068-2-29 / 16 ms |
|-------------------------------|---|
| Vibration resistance | 5 g, 10 Hz 55 Hz (IEC 68-2-6) |
| EMC | EN 60947-5-2 |
| Ambient light immunity | Direct: 100,000 lx ¹⁾ Indirect: 150,000 lx |
| Ambient operating temperature | -25 °C +55 °C |
| Ambient temperature, storage | -25 °C +70 °C |

¹⁾ Sunlight.

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 |

²⁾ Aperture ± 10°.

SGS4-S108P7PS1T07 | SLG

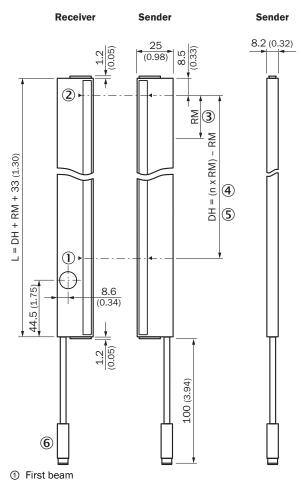
SWITCHING AUTOMATION LIGHT GRIDS

| ECLASS 10.0 | 27270910 |
|----------------|----------|
| ECLASS 11.0 | 27270910 |
| ECLASS 12.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |
| ETIM 8.0 | EC002549 |
| UNSPSC 16.0901 | 39121528 |

Dimensional drawing (Dimensions in mm (inch))

Sxx-Sxxxxxxx1xxx

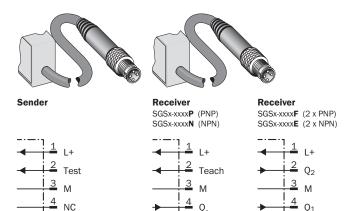
Slim, without stabilizer



- ② Last beam
- 3 Beam separation (RM)
- ④ Number of beams (n)
- ⑤ Detection height (DH)
- © Connection

Connection type and diagram

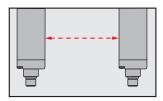
Connection type and diagram



Concept of operation

Specific features

Optical synchronization



The light grid communicates via the light beams. A cable is not necessary for the optical synchronization.

Functional principle

Slim & Flat



- ① Slim model = light emission on narrow side
- ② Flat model = light emission on broad side

Recommended accessories

Other models and accessories → www.sick.com/SLG

| | Brief description | Туре | Part no. | |
|--------------|--|------------------------|----------|--|
| Mounting bra | Mounting brackets and plates | | | |
| BBOC | Mounting bracket for light grids from a detection height of 600 mm (with slot, recommended for compensation of material extension caused by temperature), mounting position: front, 2x BEF-SLG1, 2x BEF-SLG2 | BEF-SLG-SET1 | 2055427 | |
| Others | | | | |
| | Connection type head A: Female connector, M8, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF8U14- 020VA3XLEAX | 2095888 | |

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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.

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For us, that is "Sensor Intelligence."

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