



S10B-9011DA s100

2D LIDAR SENSORS





Ordering information

| Туре | part no. |
|-------------|----------|
| S10B-9011DA | 1042267 |

Other models and accessories → www.sick.com/S100



Detailed technical data

Features

| Application | | Indoor |
|--------------------|-----------------|--|
| Light source | | Infrared (905 nm) |
| Laser class | | 1 (IEC 60825-1:2014, EN 60825-1:2014+A11:2021) |
| Aperture angle | | |
| | Horizontal | 270° |
| Scanning frequency | | 25 Hz |
| Angular resolution | | |
| | Horizontal | 0.5° |
| | | 1° |
| Working range | | 0 m 10 m |
| Scanning range | | |
| At 10% r | emission factor | 4.5 m |

Mechanics/electronics

| Connection type | 1 x system plug with screw terminal block (accessory) |
|------------------------|---|
| Supply voltage | 16.8 V DC 30 V DC |
| Power consumption | 8 W |
| Output current | 250 mA |
| Housing color | Black (RAL 9005) |
| Enclosure rating | IP65 (EN 60529, Section 14.2.5) |
| Protection class | II (VDE 0106, EN50178) |
| Weight | 1.2 kg, without connecting cables |
| Dimensions (L x W x H) | 105 mm x 102 mm x 152 mm |
| MTBF | > 100 years |

Safety-related parameters

| MTTFD | > 100 years |
|-------|-------------|

Performance

| Detectable object shape | Almost any (diameter: 30 mm, 40 mm, 50 mm, 70 mm, 150 mm (selectable)) |
|-------------------------------|--|
| Integrated application | Field evaluation |
| Number of field sets | 16 field pairs (32 fields) |
| Simultaneous evaluation cases | 1 (2 fields) |

Interfaces

| Serial | ✓ , RS-232 |
|------------------------|--|
| CANopen | ✓ |
| Digital inputs/outputs | |
| Inputs | 5 (4 x IN, standby) |
| Outputs | 5 (Q1, Q2, Q1, Q2, diagnosis) |
| Optical indicators | 1 7-segment display (contamination warning, initial condition) |

Ambient data

| Object remission | 1.8 % > 1,000 % (reflectors) |
|-------------------------------------|------------------------------|
| Electromagnetic compatibility (EMC) | EN 61000-6-2:2005-08 |
| Vibration resistance | IEC 60068-2-6:2007-12 |
| Shock resistance | IEC 60068-2-29:1987 |
| Ambient operating temperature | -10 °C +50 °C |
| Storage temperature | -30 °C +70 °C |

General notes

| Note on use | The sensor does not constitute a safety component as defined by relevant legislation on ma- |
|-------------|---|
| | chine safety. |

Certificates

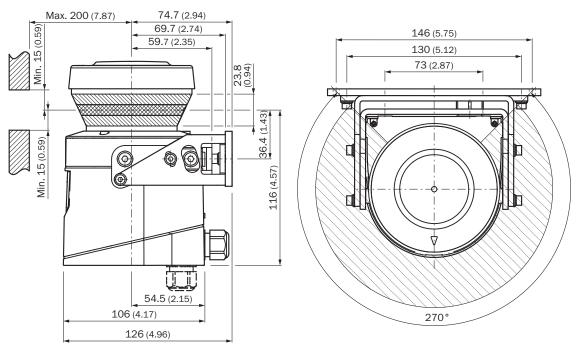
| EU declaration of conformity | ✓ |
|---|----------|
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China RoHS | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

Classifications

| ECLASS 5.0 | 27270990 |
|--------------|----------|
| ECLASS 5.1.4 | 27270990 |
| ECLASS 6.0 | 27270913 |
| ECLASS 6.2 | 27270913 |
| ECLASS 7.0 | 27270913 |
| ECLASS 8.0 | 27270913 |
| ECLASS 8.1 | 27270913 |
| ECLASS 9.0 | 27270913 |
| ECLASS 10.0 | 27270913 |
| ECLASS 11.0 | 27270913 |

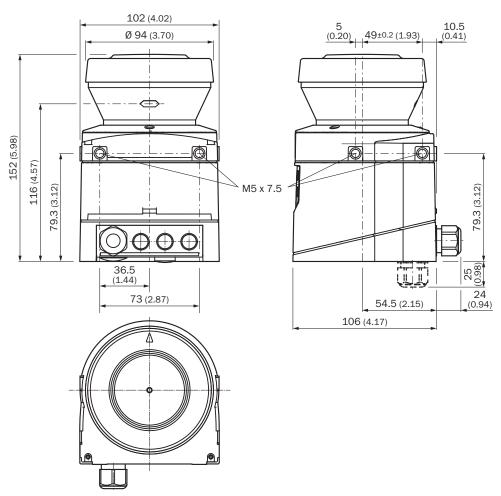
| ECLASS 12.0 | 27270913 |
|----------------|----------|
| ETIM 5.0 | EC002550 |
| ETIM 6.0 | EC002550 |
| ETIM 7.0 | EC002550 |
| ETIM 8.0 | EC002550 |
| UNSPSC 16.0901 | 41111615 |

Dimensional drawing Scan plane origin



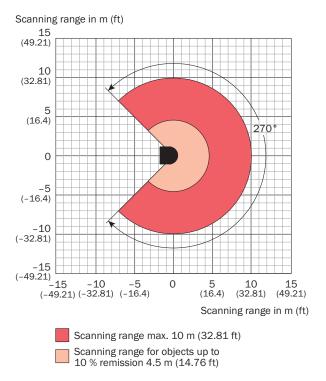
Dimensions in mm (inch)

Dimensional drawing Laser scanner



Dimensions in mm (inch)

Working range diagram



Recommended accessories

Other models and accessories → www.sick.com/S100

| | Brief description | Туре | part no. | |
|--|---|--------------------|----------|--|
| connectors an | connectors and cables | | | |
| The same of the sa | Connection type head A: Male connector, M8, 4-pin, straight Connection type head B: Male connector, USB-A, straight Cable: 2 m, 4-wire, PVC Description: Unshielded | OSL-8U04G02M025KM: | 6034574 | |
| Power supply to | units and power supply cables | | | |
| | Input voltage: 100 V AC 240 V AC Output voltage: 24 V DC Output current: 2.1 A | PS50W-24V | 7028789 | |

| | Brief description | Туре | part no. |
|------------------------------------|--|-----------------|----------|
| Mounting systems | | | |
| R | Description: Mounting bracket for rear mounting on wall or machine with protection of optics hood Packing unit: 1 piece | Mounting kit 1b | 2034325 |
| | Description: Mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325) Packing unit: 1 piece | Mounting kit 2 | 2039302 |
| | Description: Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302) Packing unit: 1 piece | Mounting kit 3 | 2039303 |
| system plugs and extension modules | | | |
| | Cable: 10 m, 15-wire, PVC Description: Pre-assembled, unshielded, For S300 Advanced, Expert and ProfessionalNot for use of incremental encoders, integrated configuration storage Connection systems: Flying leads | SX0B-B1510G | 2034265 |

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

