



AOS102

AOS LiDAR

OBJECT DETECTION SYSTEMS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|--------|----------|
| AOS102 | 1066127 |

Included in delivery: FX3-CPU000000 (1), FX3-XTI084002 (2), DSL-8U04G02M025KM1 (1), FX3-MPL000001 (1), Junction box (4), Mounting bracket (4), LMS111-10100S01 (4), YM2D24-100PN1MRJA4 (1)

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



Detailed technical data

Features

| | |
|--|-----------------|
| Sensor | LMS111-10100S01 |
| Number of sensors | 2 |
| Aperture angle | 270° |
| Max. range with 10 % reflectivity | 18 m |
| Version | Standard |

Mechanics/electronics

| | |
|---------------------------------------|--|
| Housing dimensions (W x D x H) | 105 mm x 102 mm x 162 mm (sensor) 45 mm x 96.5 mm x 120.6 mm (Control with two modules, 22.5 mm each) |
| Weight | 1.1 kg, Per LMS, without connection box |
| Supply voltage | 24 V DC ¹⁾ |
| Power consumption | 8 W, Per LMS111 (+ heating 35 W, per LMS) 4.7 W, Flexi Soft with 1 x I/O module (without load) |
| Fixing | Mounting kit (sensor), Mounting rail (control) |
| Enclosure rating | IP65/ IP67 ²⁾ IP20 ³⁾ |

¹⁾ Per LMS.

²⁾ Sensor.

³⁾ Control.

Performance

| | |
|--------------------------------|--------|
| Number of laserscanners | 2 |
| Response time | 240 ms |

Interfaces

| | |
|--------------------------------|---|
| Configuration interface | Ethernet (sensor), USB (control) |
| Output data | Alarm via control signal Warning field intrusion, stop field intrusion System test error Contamination warning |

Ambient data

| | |
|--------------------------------------|--|
| Ambient operating temperature | -30 °C ... +50 °C, Sensor -25 °C ... +55 °C, Control |
| Ambient temperature, storage | -30 °C ... +70 °C ¹⁾ -25 °C ... +70 °C ²⁾ |
| Ambient light immunity | 40,000 lx |
| Vibration resistance | |
| Standard | IEC 60068-2-6:2007-12 |
| Shock resistance | IEC 60068-2-27:2008-03 |

¹⁾ Sensor.

²⁾ Control.

General notes

| | |
|-----------------------|---|
| Items supplied | LMS111-10100S01 (2 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTI084002 USB configuration cable USB stick with configuration files Connection box LMS1xx (2 x) Mounting kit for LMS1xx (2x) Ethernet connection cable |
| Note on use | The AOS LiDAR object detection system is not a safety device for human protection and it therefore does not comply with any safety standards. For safety applications, please contact SICK AG. |

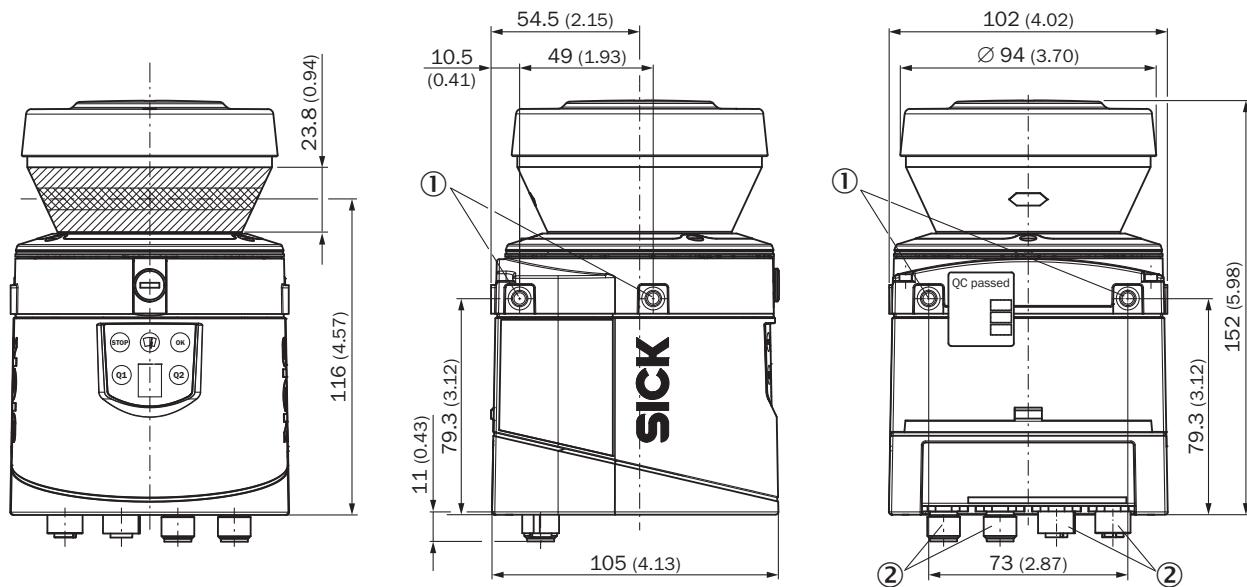
Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27281001 |
| ECLASS 5.1.4 | 27280190 |
| ECLASS 6.0 | 27280190 |
| ECLASS 6.2 | 27280190 |
| ECLASS 7.0 | 27280190 |
| ECLASS 8.0 | 27280190 |
| ECLASS 8.1 | 27280190 |
| ECLASS 9.0 | 27280190 |
| ECLASS 10.0 | 27280190 |
| ECLASS 11.0 | 27280190 |
| ECLASS 12.0 | 27280190 |
| UNSPSC 16.0901 | 43211701 |

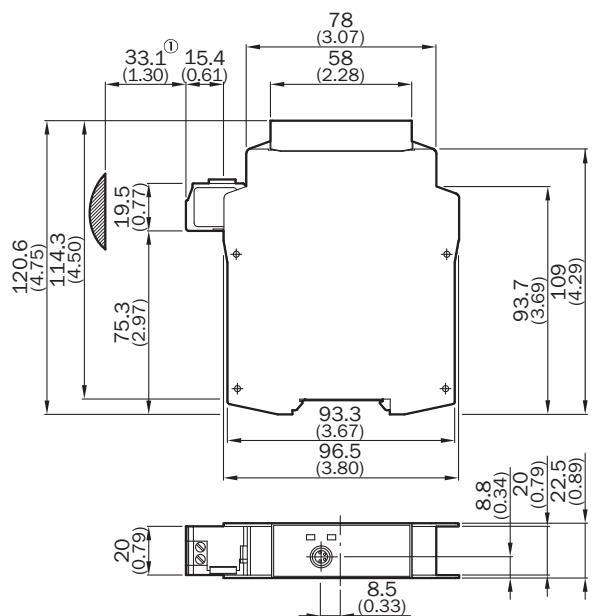
Certificates

| | |
|-------------------------------------|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| China RoHS | ✓ |

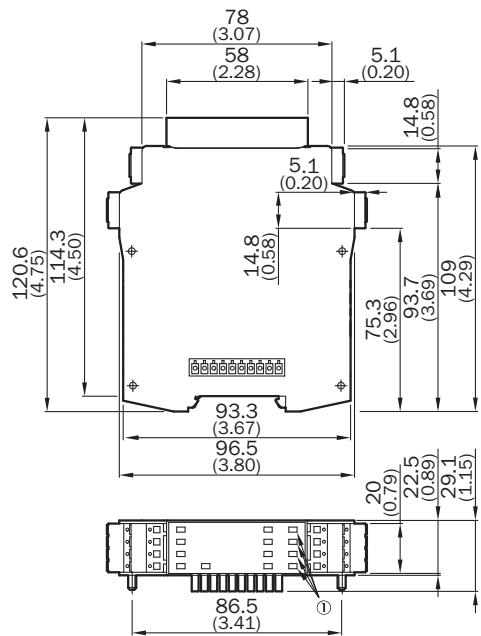
Dimensional drawing



Dimensional drawing FX3-CPUO



Dimensional drawing FX3-XTIO, FX3-XTDI



Dimensions in mm (inch)

① Only valid for FX3-XTIO

Recommended accessories

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

| | Brief description | Type | part no. |
|---------------------------------------|--|-------------------------------|----------|
| device protection and care | | | |
| | <ul style="list-style-type: none"> Description: Weather protection hood 270° Suitable for: LMS10x, LMS11x, LMS12x, LMS13x, LMS14x, LMS15x, S100 | Weather protection cover 270° | 2046458 |
| | <ul style="list-style-type: none"> Description: Weather hood, 190° Items supplied: Weather hood, 190°, 3 screws M5 x 12 Suitable for: LMS10x, LMS11x, LMS12x, LMS13x, LMS14x, LMS15x, S100 | Weather protection cover 190° | 2046459 |
| Commissioning aids and test equipment | | | |
| | <ul style="list-style-type: none"> Product: Alignment aids Description: Alignment aid for detecting the infrared light (wavelength 780 nm to 1050 nm) of SICK sensors | Alignment aid | 2101720 |

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