



AOS LiDAR

Advanced system reliability for area monitoring even in harsh conditions

SICK
Sensor Intelligence.



Technical data overview

Supply voltage	24 V DC
Ambient operating temperature	–40 °C ... +60 °C, Sensor, Control (depends on variant)
Ambient light immunity	40,000 lx / 70,000 lx (depends on variant)
Max. range with 10 % reflectivity	18 m / 40 m (depends on variant)
Scope of delivery	LMS111-10100S01 (4 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTIO84002 (2 x) USB configuration cable USB stick with configuration files Connection box LMS1xx (4x) Mounting kit for LMS1xx (4x) Ethernet connection cable Weather protection cover 270° (4 x) LMS111-10100S01 Flexi Soft I/O module FX3-XTIO84002 Connection box LMS1xx Mounting kit for LMS1xx LMS111-10100S01 (2 x) Connection box LMS1xx (2 x) Mounting kit for LMS1xx (2x) LMS111-10100S01 (3 x) Connection box LMS1xx (3x) Mounting kit for LMS1xx (3x) LMS511-12100S04 (2 x) Mounting bracket (2x) Mounting kit for laser scanner (2 x) Connection box LMS5xx Heavy Duty (2x) Weather protection cover 180° (2 x) LMS511-10100S02 (2 x) Mounting kit mast mount (2 x) Connection box LMS5xx (2 x) LMS511-12100S04 (4 x) Mounting bracket (4x) Mounting kit for laser scanner (4 x) Connection box LMS5xx Heavy Duty (4x) Weather protection cover 180° (4 x) LMS511-10100S02 LMS511 accessory set 1 LMS511 accessory set 1 (2 x) LMS511-10100S02 (3 x) LMS511 accessory set 1 (3 x) LMS511-10100S02 (4 x) LMS511 accessory set 1 (4 x) (depends on variant)

Product description

The AOS LiDAR (Advanced Object Detection System) helps to avoid the downtime and costs associated with accidents and vandalism. The system solution offers added value in applications where monitoring with a single sensor just isn't enough and maximum operational reliability is essential. The solution is based on a safety controller, which runs cyclical tests to check sensor detection behavior, sensor response to entry commands, and that output signals are switching correctly. Thanks to the preconfigured sensors and detection fields that can be adjusted with maximum accuracy, enables the AOS LiDAR to be integrated quickly and easily into a wide range of applications.

At a glance

- Non-contact detection due to LiDAR technology
- Adjustable, application-specific monitoring areas
- Automated self-test cycles
- Customized control configurations
- Easy implementation of new functions
- Optional gateways for remote diagnosis or data analyses

Your benefits

- Reliable detection in any environmental conditions and even at long distances
- Avoidance of downtime and costs associated with accidents or vandalism
- Flexible monitoring areas that can be adjusted precisely for a diverse range of applications
- Defined alarm outputs for predetermined objects helps to reduce false alarms
- Easy integration and wiring to a machine control
- Automated monitoring of sensors and connecting cables
- High degree of diagnostic coverage supports individual safety certifications for machinery
- Modular system construction gives flexible extension options
- Control function for peripheral devices as well as safety-related signals

Fields of application

- Container handling
- Train storage facilities or access areas on factory premises
- Railway tracks and track areas in metro stations
- Bridge and floodgate monitoring on waterways
- Area protection in the wood processing industry
- Mobile machinery and plants in outdoor areas

Ordering information

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

Control configuration	Number of sensors	Max. range with 10 % reflectivity	Items supplied	Type	Part no.
Area monitoring and collision avoidance	1	18 m	LMS111-10100S01 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 Mounting kit for LMS1xx Ethernet connection cable	AOS101	1064408
		40 m	LMS511-10100S02 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 Ethernet connection cable LMS511 accessory set 1	AOS501	1064409
	2	18 m	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	AOS102	1066127
		40 m	LMS511-10100S02 (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 Ethernet connection cable LMS511 accessory set 1 (2 x)	AOS502	1066130
	3	18 m	LMS111-10100S01 (3 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module	AOS103	1066128

Control configuration	Number of sensors	Max. range with 10 % reflectivity	Items supplied	Type	Part no.
			Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTI084002 (2 x) USB configuration cable USB stick with configuration files Ethernet connection cable LMS511 accessory set 1 (4 x)		
Collision avoidance for gantry cranes	4	18 m	LMS111-10100S01 (4 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTI084002 (2 x) USB configuration cable USB stick with configuration files Connection box LMS1xx (4x) Mounting kit for LMS1xx (4x) Ethernet connection cable Weather protection cover 270° (4 x)	AOS104 RTG	1064544
		40 m	LMS511-12100S04 (4 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTI084002 (2 x) USB configuration cable USB stick with configuration files Ethernet connection cable Mounting bracket (4x) Mounting kit for laser scanner (4 x) Connection box LMS5xx Heavy Duty (4x) Weather protection cover 180° (4 x)	AOS504 RMG	1116069
Collision avoidance for ship to shore cranes	2	40 m	LMS511-12100S04 (2 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTI084002 (2 x) USB configuration cable USB stick with configuration files	AOS502 STS	1064545

Control configuration	Number of sensors	Max. range with 10 % reflectivity	Items supplied	Type	Part no.
			Ethernet connection cable Mounting bracket (2x) Mounting kit for laser scanner (2 x) Connection box LMS5xx Heavy Duty (2x) Weather protection cover 180° (2 x)		
Monitoring of rail entry points incl. differentiation between entering objects	2	40 m	LMS511-10100S02 (2 x) Flexi Soft main module FX3-CPU000000 Flexi Soft system plug FX3-MPL000001 Flexi Soft I/O module FX3-XTIO84002 (2 x) USB configuration cable USB stick with configuration files Ethernet connection cable Mounting kit mast mount (2 x) Connection box LMS5xx (2 x) Weather protection cover 180° (2 x)	AOS502 TAM	1099436

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