



# APS-5101

APS

OBJECT DETECTION SYSTEMS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
APS-5101	1069176

Other models and accessories → [www.sick.com/APS](http://www.sick.com/APS)



## Detailed technical data

### Features

<b>Areas of application</b>	Airport
<b>Number of sensors</b>	1
<b>Scanning frequency</b>	25 Hz
<b>Aperture angle</b>	180°, horizontal
<b>Angular resolution</b>	0.25°
<b>Vehicles</b>	Pushback tractors without towbar
<b>Requirements for objects to be protected</b>	Aircraft properties: Aircraft fuselage height: > 80 cm Track: 4.5 m–15 m Wheelbase: 10 m–32 m
<b>Working range</b>	0.7 m ... 80 m
<b>Heating</b>	✓

### Mechanics/electronics

<b>Dimensions display (W x D x H)</b>	142 mm x 44 mm x 98 mm (with mounting 130 mm depth)
<b>Weight</b>	3.7 kg, 4.286 kg with brackets (LMS511) 360 g, 600 g with mounting (Display)
<b>Supply voltage</b>	24 V DC (19.2 V DC ... 28.8 V DC)
<b>Power consumption</b>	27 W (≤ 92 W), With heating
<b>Installation position</b>	Pushback tractor, rear side left or rear side right, 20 cm - 60 cm from ground (LMS511)
<b>Laser class</b>	1, eye-safe (IEC 60825-1:2014)

### Performance

<b>Working range</b>	0.7 m ... 80 m
<b>Display</b>	4.3" touch display
<b>Functions</b>	Audible and visual collision warning Maneuver assistant Aircraft type detection
<b>Number of laserscanners</b>	1
<b>Monitored area</b>	Area under the docked aircraft behind the aircraft tractor
<b>Warning zones</b>	3
<b>Self-diagnostics</b>	✓

### Interfaces

<b>Ethernet</b>	
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	Function	Software updates via web interface
	Electrical connection	M12, 4-pin
<b>Operator interface</b>		Touch display

#### Ambient data

<b>Ambient operating temperature</b>	-25 °C ... +50 °C
<b>Ambient temperature, storage</b>	-25 °C ... +60 °C

#### General notes

<b>Items supplied</b>	<p>LMS511 2D LiDAR sensor          Mounting kit 1 for mounting the LMS511          Mounting kit 2 for adjusting the LMS511 on mounting kit 1          Operator display          Mounting set for operator display          Ethernet switch          Buzzer          USB stick with operating instructions          Power supply cable (female connector open) for LMS511 (20m)          Connecting cables for operator display (5 m)          Connecting cables for operator display (10 m)          Ethernet connection cable (angled) for operator display (5 m)          Power supply cable (female connector open) for Ethernet switch (10 m)</p>
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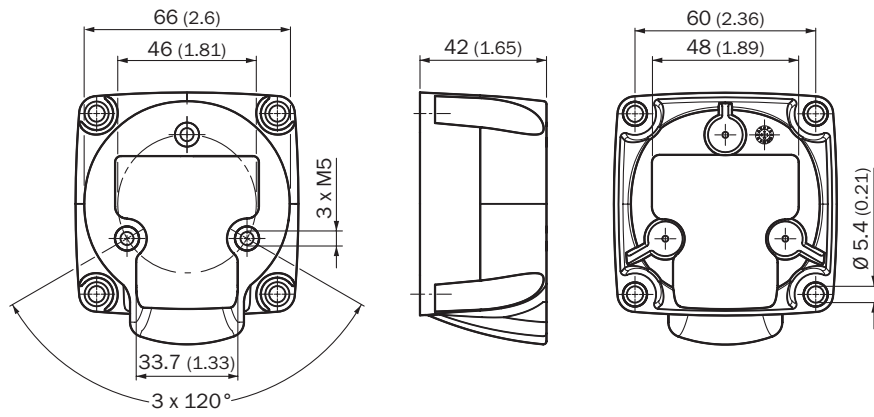
#### Classifications

<b>ECLASS 5.0</b>	27339090
<b>ECLASS 5.1.4</b>	27339090
<b>ECLASS 6.0</b>	27339090
<b>ECLASS 6.2</b>	27339090
<b>ECLASS 7.0</b>	27339090
<b>ECLASS 8.0</b>	27339090
<b>ECLASS 8.1</b>	27339090
<b>ECLASS 9.0</b>	27330190
<b>ECLASS 10.0</b>	27330190
<b>ECLASS 11.0</b>	27330190
<b>UNSPSC 16.0901</b>	25172105

#### Certificates

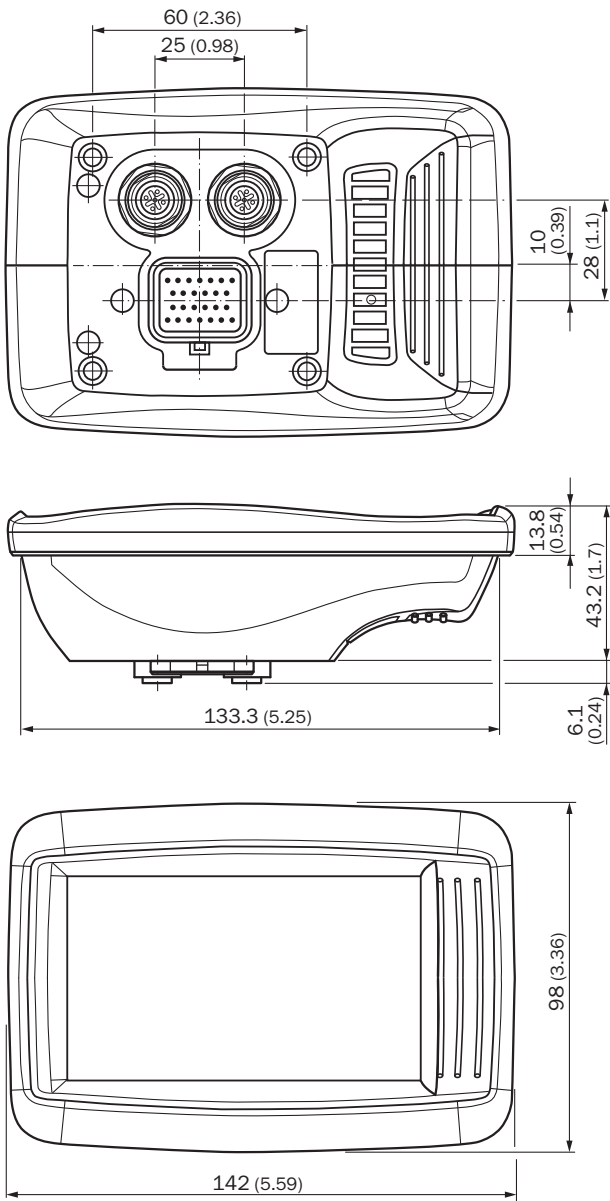
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>China RoHS</b>	✓

Dimensional drawing Mounting set for operator display



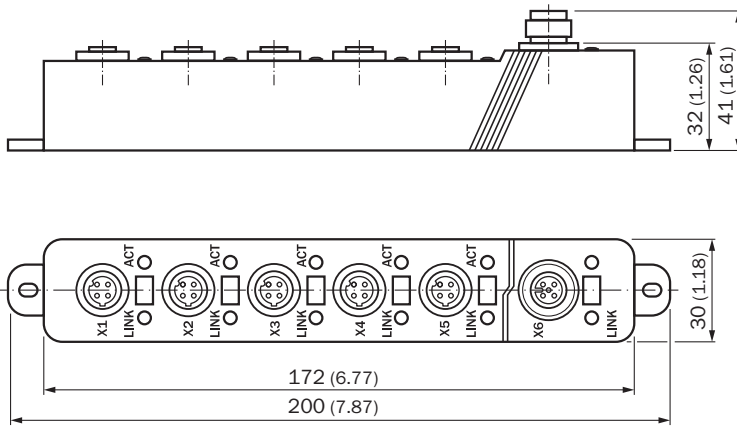
Dimensions in mm (inch)

### Dimensional drawing Operator display



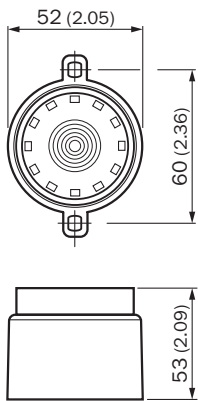
Dimensions in mm (inch)

Dimensional drawing Ethernet switch



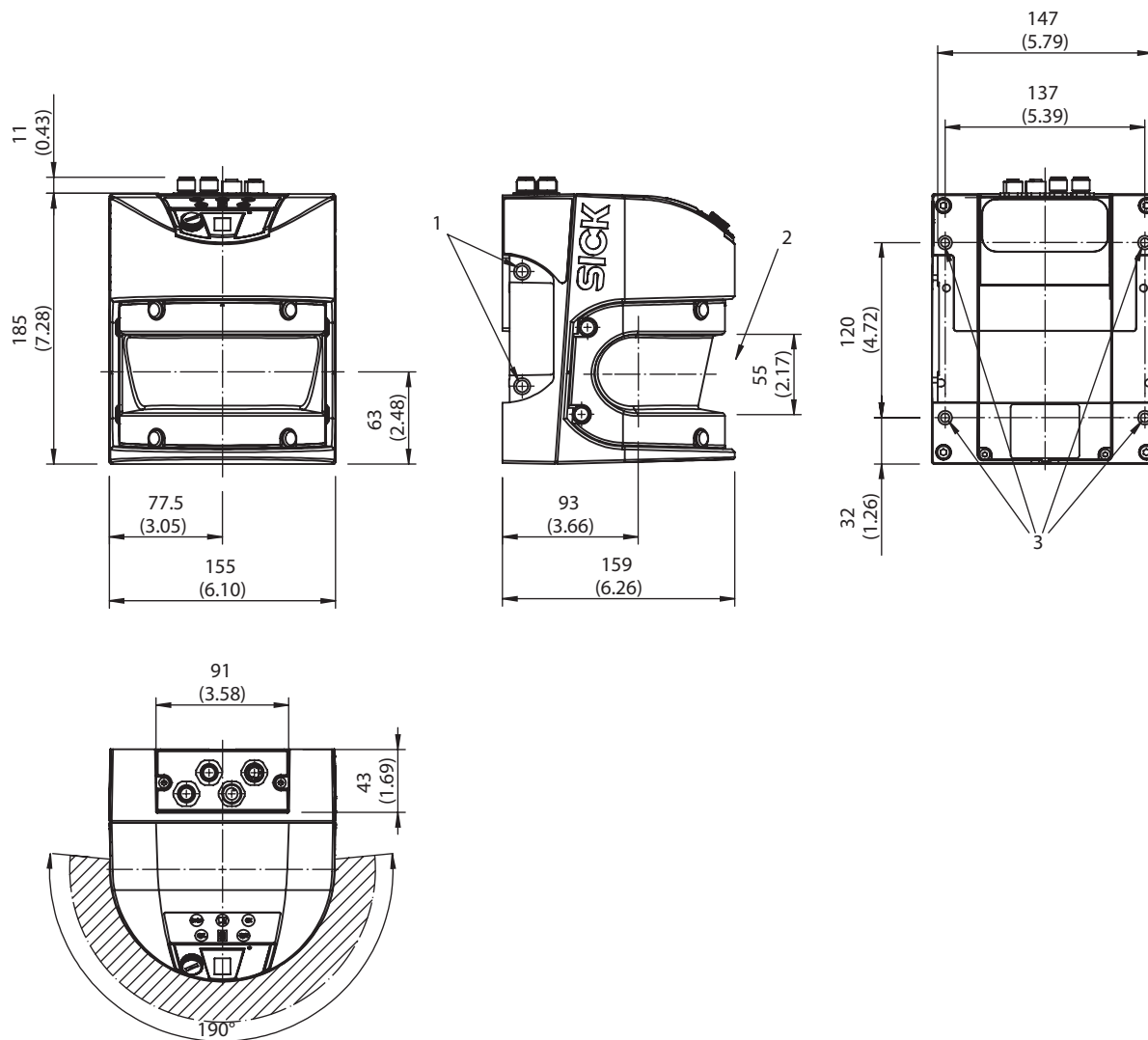
Dimensions in mm (inch)

Dimensional drawing Buzzer



Dimensions in mm (inch)

Dimensional drawing LMS511



- Dimensions in mm (inch)
- ① 4 screw holes M8 x 9
  - ② do not block front screen
  - ③ 4 screw holes M6 x 8

## 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](http://www.sick.com)