



# LD-OEM1000

LD-OEM

2D LIDAR SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
LD-OEM1000	1028698

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



### Detailed technical data

#### Features

<b>Application</b>	Indoor
<b>Light source</b>	Infrared (905 nm)
<b>Laser class</b>	1 (IEC 60825-1:2014, EN 60825-1:2014)
<b>Aperture angle</b>	Horizontal 360°
<b>Scanning frequency</b>	5 Hz ... 15 Hz
<b>Angular resolution</b>	Horizontal 0.125° 0.25° 0.5° 1° 1.5°
<b>Working range</b>	0.5 m ... 250 m
<b>Scanning range</b>	At 10% remission factor 35 m
<b>Fog correction</b>	No

#### Mechanics/electronics

<b>Connection type</b>	1 x 6-pin terminal block 1 x 15-pin D-Sub HD male connector
<b>Supply voltage</b>	24 V DC, ± 15 %
<b>Power consumption</b>	36 W
<b>Housing material</b>	Aluminum die cast
<b>Housing color</b>	Light blue (RAL 5012)
<b>Enclosure rating</b>	IP65
<b>Protection class</b>	III
<b>Weight</b>	+ 2.4 kg
<b>Dimensions (L x W x H)</b>	115 mm x 120 mm x 222 mm
<b>MTBF</b>	86 years

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	> 100 years
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### Performance

<b>Response time</b>	≥ 66 ms
<b>Detectable object shape</b>	Almost any
<b>Systematic error</b>	± 38 mm <sup>1)</sup>
<b>Statistical error</b>	± 25 mm <sup>1)</sup>
<b>Integrated application</b>	Field evaluation
<b>Number of field sets</b>	4 fields
<b>Simultaneous evaluation cases</b>	4

<sup>1)</sup> Typical value; actual value depends on environmental conditions.

### Interfaces

<b>Ethernet</b>	✓, TCP/IP
Data transmission rate	≤ 10 Mbit/s
<b>Serial</b>	✓, RS-232, RS-422
Data transmission rate	4,800 Baud ... 115,200 Baud
<b>CAN</b>	✓
Remark	Standard 2.0.A
Data transmission rate	10 kbit/s ... 1 Mbit/s
<b>Digital outputs</b>	4 (digital)
<b>Optical indicators</b>	4 LEDs (Status display)

### Ambient data

<b>Ambient operating temperature</b>	0 °C ... +50 °C
<b>Storage temperature</b>	-20 °C ... +80 °C
<b>Permissible relative humidity</b>	+ 85 %, Non-condensing

### General notes

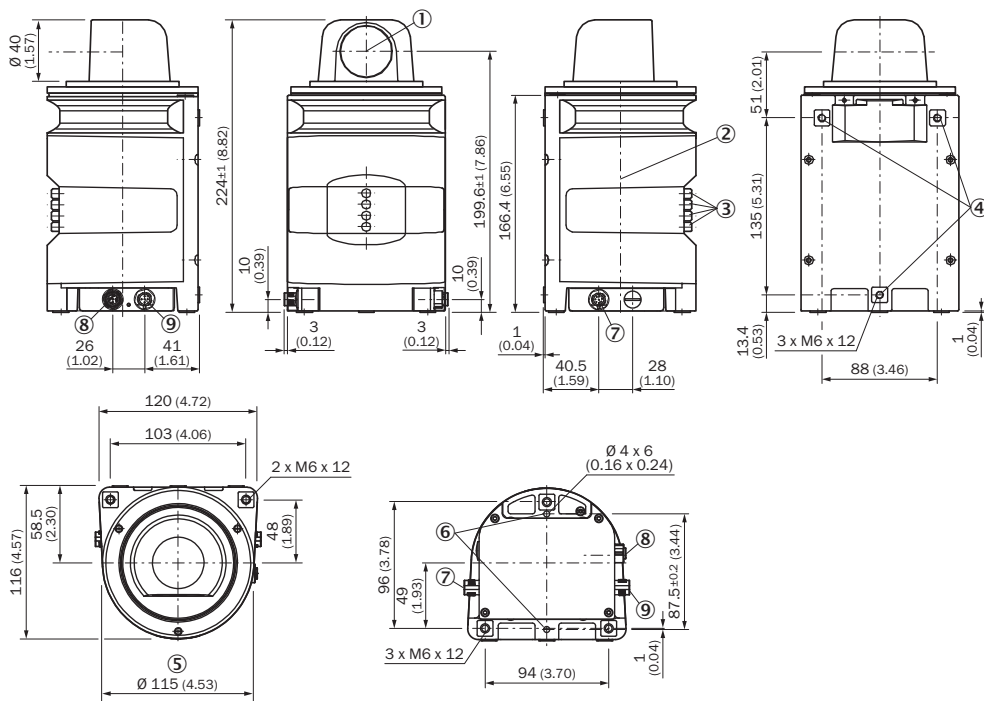
<b>Note on use</b>	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.
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### Classifications

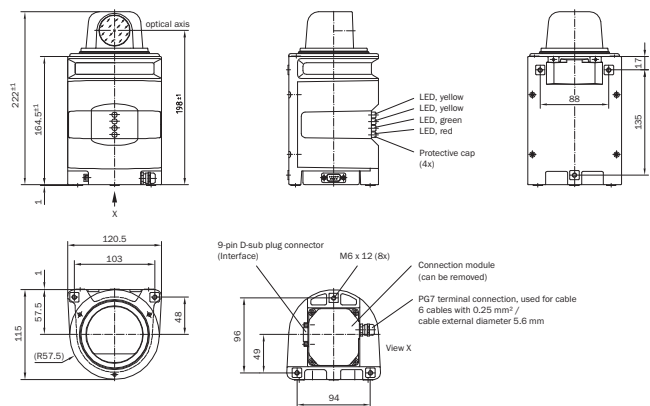
<b>ECLASS 5.0</b>	27270990
<b>ECLASS 5.1.4</b>	27270990
<b>ECLASS 6.0</b>	27270913
<b>ECLASS 6.2</b>	27270913
<b>ECLASS 7.0</b>	27270913
<b>ECLASS 8.0</b>	27270913
<b>ECLASS 8.1</b>	27270913
<b>ECLASS 9.0</b>	27270913
<b>ECLASS 10.0</b>	27270913
<b>ECLASS 11.0</b>	27270913
<b>ECLASS 12.0</b>	27270913
<b>ETIM 5.0</b>	EC002550

<b>ETIM 6.0</b>	EC002550
<b>ETIM 7.0</b>	EC002550
<b>ETIM 8.0</b>	EC002550
<b>UNSPSC 16.0901</b>	41111615

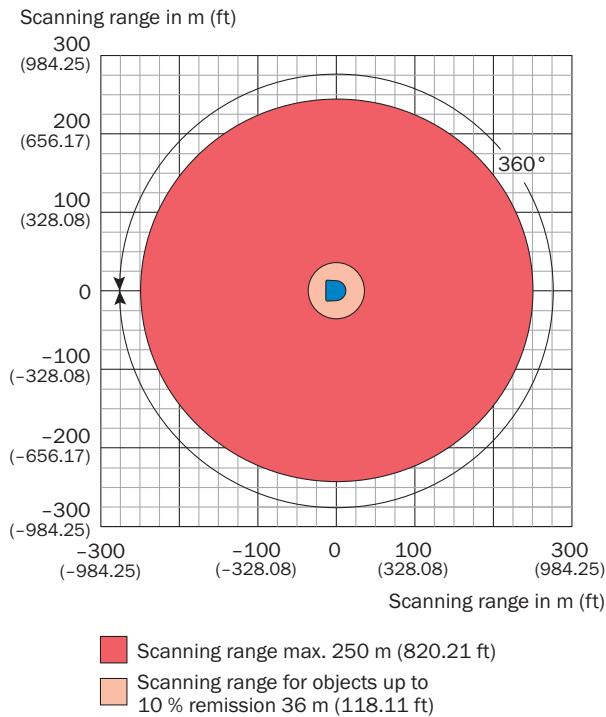
### Dimensional drawing (Dimensions in mm (inch))



- ① Optical axis
- ② Zero level
- ③ LED (from top: yellow, yellow, green, red)
- ④ Mounting hole M6 x 12
- ⑤ Rotating diameter
- ⑥ Aligning pin
- ⑦ RS-232 connection (M12 x 8, male connector)
- ⑧ Ethernet connection (M12 x 4, female connector)
- ⑨ Power supply connection (M12 x 5, male connector)






## Working range diagram



## Recommended accessories

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

	Brief description	Type	Part no.
Terminal and alignment brackets			
	Assembly support, mounting hardware included	Assembly support	5311055
Others			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, D-Sub-HD, 15-pin, straight</li> <li><b>Connection type head B:</b> Female connector, D-Sub, 9-pin, straight</li> <li><b>Signal type:</b> CAN</li> <li><b>Cable:</b> 3 m</li> <li><b>Description:</b> CAN, shielded</li> </ul>	Connection cable (female connector-female connector)	6032845
	Power supply DC 24 V / 10 A	Power supply	6020875

### Recommended services

Additional services → [www.sick.com/LD-OEM](http://www.sick.com/LD-OEM)

	Type	Part no.
Extended warranty		
<ul style="list-style-type: none"><li>• <b>Product area:</b> Machine vision, LiDAR sensors, safety camera sensors, Safety laser scanners, Safety radar sensors, Radar sensors, Fixed mount barcode scanners, Image-based code readers, RFID, Mobile handheld scanners</li><li>• <b>Range of services:</b> The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery).</li><li>• <b>Duration:</b> Five-year warranty from delivery date.</li></ul>	Extended warranty for a total of five years from delivery date	1680671

## 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)